

FINAL  
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

VOLUME I: DRAFT SEIR

OC DANA POINT HARBOR  
SCH NO. 2003101142

Prepared By

LSA

LSA ASSOCIATES, INC.

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REPORT

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**TABLE OF CONTENTS**  
**VOLUME I: DRAFT SEIR**

1.0	EXECUTIVE SUMMARY.....	1-1
2.0	INTRODUCTION .....	2-1
3.0	PROJECT DESCRIPTION.....	3-1
4.0	EXISTING SETTING, IMPACTS, AND MITIGATION MEASURES .....	4-1
4.1	LAND USE AND PLANNING.....	4.1-1
4.2	GEOLOGY AND SOILS.....	4.2-1
4.3	HYDROLOGY AND WATER QUALITY .....	4.3-1
4.4	TRANSPORTATION AND CIRCULATION .....	4.4-1
4.5	AIR QUALITY .....	4.5-1
4.6	NOISE.....	4.6-1
4.7	BIOLOGICAL RESOURCES .....	4.7-1
4.8	AESTHETICS.....	4.8-1
4.9	RECREATION .....	4.9-1
4.10	HAZARDS AND HAZARDOUS MATERIALS.....	4.10-1
4.11	GREENHOUSE GASES .....	4.11-1
5.0	ALTERNATIVES.....	5-1
6.0	LONG-TERM IMPLICATIONS OF THE PROJECT .....	6-1
7.0	MITIGATION MONITORING AND REPORTING PROGRAM .....	7-1
8.0	CERTIFIED FINAL PROGRAM EIR NO. 591 MITIGATION.....	8-1
9.0	REPORT PREPARERS.....	9-1
10.0	REFERENCES .....	10-1

**APPENDICES (CONTAINED IN VOLUME II)**

- A: INITIAL STUDY (IS), NOTICE OF PREPARATION (NOP), NOP COMMENTS, PROGRAM EIR EXECUTIVE SUMMARY
- B: GEOLOGICAL ENGINEERING REPORT, ADDENDUM TO GEOLOGICAL ENGINEERING REPORT AND GUIDE PILE MEMORANDUM
- C: DANA POINT HARBOR BOAT TRAFFIC STUDY
- D: AIR QUALITY ANALYSIS
- E: NOISE IMPACT ANALYSIS
- F: MARINE BIOLOGICAL RESOURCES REPORT, FOCUSED SURVEY REPORTS FOR EELGRASS AND INVASIVE ALGAE

## FIGURES AND TABLES

### FIGURES

Figure 3.1: Project Location .....	3-18
Figure 3.2: Existing Harbor Layout.....	3-19
Figure 3.3: Existing Dock and Slip Facilities.....	3-20
Figure 3.4: Typical Gangway and Dock Components .....	3-21
Figure 3.5: Proposed Harbor Layout .....	3-22
Figure 3.6: Embarcadero/Dry Boat Storage Staging Docks and Marine Services Docks.....	3-23
Figure 3.7a: Conceptual Plans – Dry Boat Storage Building .....	3-24
Figure 3.7b: Conceptual East Elevation – Dry Boat Storage Building .....	3-25
Figure 3.7c: Conceptual South Elevation – Dry Boat Storage Building .....	3-26
Figure 3.8: Sport Fishing Docks.....	3-27
Figure 3.9: Guest Slips and Dinghy Dock.....	3-28
Figure 3.10: Harbor Patrol and Commercial Fishing Slips .....	3-29
Figure 3.11: OC Sailing and Events Center Docks .....	3-30
Figure 3.12: Temporary Docks/Proposed Yacht Broker Docks.....	3-31
Figure 3.13: Proposed Channel Encroachment .....	3-32
Figure 3.14: Preliminary Phasing Plan.....	3-33
Figure 4.1-1: Dana Point Harbor Revitalization Plan and District Regulations Land Use Plan .....	4.1-24
Figure 4.2-1: Project Site Proximity to Surrounding Fault Systems .....	4.2-17
Figure 4.2-2: Seismic Hazards .....	4.2-18
Figure 4.7.1: Eelgrass Locations – OC Sailing and Event Center Docks.....	4.7-46
Figure 4.8-1: Key View Location Map .....	4.8-17
Figure 4.8-2: Key Views 1 and 2.....	4.8-18
Figure 4.8-3: Key View 3.....	4.8-19
Figure 4.8-4: Key Views 4 and 5.....	4.8-20
Figure 4.8-5: Key View 6 and 7 .....	4.8-21

### TABLES

Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance .....	1-3
Table 2.A: Lead Agency and Potential Responsible Agencies .....	4-3
Table 3.A: Boater Terminology Definitions .....	3-2
Table 3.B: Proposed Project Components.....	3-9
Table 3.C: Discretionary Permits and Approvals.....	3-17
Table 4.1.A: Consistency with Coastal Act Policies .....	4.1-12
Table 4.3.A: Existing Storm Drain Facilities .....	4.3-3
Table 4.3.B: 303(d) Impairments of Downstream Water Bodies.....	4.3-7
Table 4.3.C: Potential Pollutants Generated by Marinas.....	4.3-10
Table 4.3.D: Minimum Requirements for All Construction Sites.....	4.3-11
Table 4.3.E: Beneficial Water Uses in San Diego Water Basin.....	4.3-12

Table 4.3.F: Ocean Waters Water Quality Objectives .....	4.3-13
Table 4.4.A: Existing Slip Count and ADT Comparison .....	4.4-2
Table 4.4.B: Dana Point Harbor Existing Parking Requirements Summary .....	4.4-4
Table 4.4.C: Traffic Volumes With Project .....	4.4-10
Table 4.5.A: Attainment Status of Criteria Pollutants in the South Coast Air Basin .....	4.5-3
Table 4.5.B: Ambient Air Quality in the Project Vicinity.....	4.5-5
Table 4.5.C: Peak Day Construction Emissions by Sub-Phase .....	4.5-12
Table 4.5.D: Summary of Construction Emissions Localized Significance .....	4.5-13
Table 4.6.A: County of Orange Noise Standards for Residential Land Uses.....	4.6-5
Table 4.6.B: Exterior Noise Limits for Residential Land Uses, L <sub>n</sub> (dBA) .....	4.6-6
Table 4.6.C: Maximum Interior Sound Levels for Residential Land Uses, L <sub>n</sub> (dBA).....	4.6-6
Table 4.6.D: Typical Construction Equipment Noise Levels.....	4.6-10
Table 4.10.A: Known or Suspected Hazardous Material Releases within the Project Site.....	4.10-4
Table 4.11.A: Global Warming Potentials .....	4.11-2
Table 5.A: Short-term (Construction) Alternatives Impact Comparison .....	5-26
Table 5.B: Long-term (Operational) Alternatives Impact Comparison.....	5-27
Table 7.A: Mitigation and Monitoring Reporting Program .....	7-3
Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project .....	8-3

## **1.0 EXECUTIVE SUMMARY**

### **1.1. INTRODUCTION**

This Executive Summary has been prepared according to the California Environmental Quality Act (CEQA) Guidelines Section 15123 for the County of Orange Subsequent Environmental Impact Report (SEIR) for the proposed Dana Point Harbor Marina Improvement Project (“Marina Improvement Project”). This SEIR has been prepared by the County of Orange, OC Dana Point Harbor to analyze the proposed project’s potential impacts on the environment, to discuss alternatives, and to propose mitigation measures for identified potentially significant impacts that will minimize, offset, or otherwise reduce or avoid those environmental impacts.

### **1.2. SUMMARY OF PROJECT DESCRIPTION**

The project addressed in this SEIR includes replacement of waterside facilities in the West and East Basins in Dana Point Harbor, connection of dock gangways with the quay wall and bulkheads within those basins, and replacement of gangways and security gates to both marina areas. Additionally, new Embarcadero/Dry Boat Storage Staging docks and dinghy docks, along with renovations to the marine services docks, OC Sailing and Events Center docks, guest slips, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed project. The project also includes public access improvements to gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. In order to accommodate displaced boats during project implementation, a temporary dock near the east breakwater next to Doheny State Beach is included in the project. Once renovations are complete, the temporary dock may be used on a permanent basis as a yacht broker dock; however, any permanent use within this federal anchorage area would require approval by the United States Army Corps of Engineers (Corps). See Chapter 3.0, Project Description, for a complete description of the project components.

### **1.3. ALTERNATIVES**

The following three alternatives to the proposed project were selected for consideration, including the No Project Alternative as required by CEQA:

- Alternative 1: No Project/No Development
- Alternative 2: Reduced Project Alternative – East and West Marinas
- Alternative 3: Reduced Project Alternative – Americans with Disability (ADA) Improvements

In evaluating an appropriate range of alternatives to the proposed project, a number of alternatives were considered and rejected by the Lead Agency. These included consideration of alternative locations and several design alternatives (publicly represented as Alternatives 1 through 5). Each of these alternatives was rejected for differing reasons, as described further in Chapter 5.0, Alternatives.

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the reduced physical impacts that would occur with this alternative. If there were no changes to the existing conditions on site, there would be no impacts related to construction traffic, noise, or construction or operational air emissions. Further, under the No Project/No Development Alternative there would be no additional shading impacts to marine resources.

The CEQA Guidelines require that if the environmentally superior alternative is the No Project Alternative, “the EIR also identify an environmentally superior alternative among the other alternatives” (CEQA Guidelines Section 15126.6(e)(2)). Alternative 3 would result in the greatest overall reduction of short-term physical environmental impacts compared to the proposed project. In addition, because Alternative 3 eliminates the significant and unavoidable impacts to biological resources due to shading associated with the project, it would be considered the Environmentally Superior Alternative under long-term conditions. However, Alternative 3 does not meet the project objectives because the majority of dock facilities would not be renovated.

The alternatives analysis is described in greater detail in Chapter 5.0, Alternatives.

#### **1.4. AREAS OF CONTROVERSY**

Pursuant to *State CEQA Guidelines* Section 15123, this SEIR acknowledges the areas of controversy and issues to be resolved which are known to the County of Orange or were raised during the scoping process. Major issues and concerns raised at the scoping meeting held on December 8, 2007, and comments submitted in writing during the NOP process included: (1) concerns regarding the reduction of the overall number of slips within the harbor; (2) water quality concerns related to construction and operations; (3) navigation safety concerns related to boater traffic; (4) construction impacts related to traffic congestion and parking; (5) marine habitat concerns; (6) concerns related to the project’s relationship to the Harbor Revitalization Project; (7) concerns related to the existing live-aboards within the marinas; and (8) noise and air quality impacts.

The Draft SEIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures designed to reduce or eliminate potentially significant impacts of the proposed project.

#### **1.5. SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Table 1.A identifies the project environmental impacts, a significance determination, proposed mitigation measures, and level of significance after mitigation is incorporated into the project. Table 1.A also identifies cumulative impacts resulting from the proposed project in conjunction with the approved and pending cumulative projects. Environmental topics addressed in this SEIR include: Land Use, Geology and Soils, Hydrology and Water Quality, Traffic and Circulation, Air Quality, Noise, Biological Resources, Aesthetics, Recreation, and Hazards and Hazardous Materials.

Refer to Section 2.4 of this SEIR for a discussion of additional effects found not to be significant through the Initial Study/Notice of Preparation process.

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<b>LAND USE</b>		
<b>Divide an Established Community:</b> The proposed project would not change the existing uses within or adjacent to the project site. Therefore, the proposed project would not divide an established community or disrupt the existing physical arrangement of the surrounding area.	No mitigation is required.	Less Than Significant
<b>Conflict with Land Use Plan, Policy, or Regulation:</b> The proposed project would make long-term improvements to the existing land uses on the project site. These improvements would enhance the value of the site's existing uses, and no conflict with any applicable land use plan, policy, or regulation would occur.	No mitigation is required.	Less Than Significant
<b>Conflict with HCP or NCCP:</b> There are no adopted Habitat Conservation Plans (HCPs) or Natural Communities Conservation Plans (NCCPs) applicable to the project site. Therefore, the proposed project would not result in effects to an adopted HCP or NCCP.	No mitigation is required.	Less Than Significant
<b>Cumulative Land Use Impacts:</b> Proposed project improvements are intended to be fully consistent with all applicable CCA policies and with the City and County General Plans. There are no incompatibilities between the proposed project and planned future projects. Therefore, the contribution of the proposed project to potential cumulative land use compatibility impacts in the project area is considered less than significant.	No mitigation is required.	Less Than Significant
<b>GEOLOGY AND SOILS</b>		
<b>Rupture of a Known Earthquake Fault:</b> The project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, nor is it currently identified by the regulatory community as being located within zones of either primary or secondary co-seismic surface deformation (e.g., pressure ridges, escarpments, fissures). Thus, the site is not expected to experience primary surface fault rupture or related ground deformation. However, since the site is 3.4 miles (mi) from the Newport-Inglewood Fault Zone, significant ground shaking or secondary seismic ground deformation effects would occur at the site should a major seismic event occur along this fault zone.	<b>4.2-1</b> To reduce potential seismic ground-shaking impacts associated with the Americans with Disabilities Act (ADA) platforms, OC Dana Point Harbor and the Director, OC Public Works (OC PW)/Building Permit Services shall, prior to issuance of building permits, review and approve final design plans to ensure that recommendations contained in the Geotechnical Evaluation prepared for the proposed project (Leighton Associates, Inc., January 2008) are incorporated into final site drawings. The potential damaging effects of regional earthquake activity shall be considered in the design of each structure. The seismic evaluation shall be based on basic data, including the Uniform Building Code (UBC) Seismic Parameters. Structural design criteria shall be determined in consideration of building types, occupancy category,	Less Than Significant



**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	seismic importance factors, and possibly other factors. Design construction shall be performed in conformance with the latest UBC, California Building Code, or International Building Code and County Ordinances. Conformance can be expected to satisfactorily mitigate the effect of seismic groundshaking (refer to FEIR No. 591, Mitigation Measures 4.3-9 and 4.3-12).	
<p><b>Soil Erosion:</b> Because the majority of construction operations related to the Marina Improvement Project will be conducted on or underwater, no soil erosion or loss of topsoil is anticipated. Soil disturbance could occur for the following purposes: lighting improvements; utility connections; and gangway/landside connections. However, the project would also be subject to Erosion and Sediment Control Plan (ESCP) for erosion and sedimentation control during construction. Best management practices (BMPs) would be undertaken to control runoff and erosion from earth-moving activities such as excavation. The project would be required to adhere to all applicable construction standards with regard to erosion control. Additionally, mitigation measures are required to reduce fugitive dust and transport of soil (refer to Section 4.5, Air Quality, and Section 4.3, Hydrology and Water Quality, respectively). With implementation of these standard control measures, soil erosion potential will be reduced to less than significant levels.</p>	No mitigation is required.	Less Than Significant
<p><b>Liquefaction and Lateral Spreading:</b> There is the potential for liquefaction to occur with the fill and alluvial soils that comprise the Island as well as the small peninsula adjacent to the Sport Fishing Docks in the eastern region of the Harbor and in the peninsula area of the Orange County (OC) Sailing and Events Center in the western region of the Harbor. Liquefaction potential was determined to exist in either relatively thin layers or significantly thicker zones, typically on the order of 10 to 15 ft in thickness.</p> <p>Construction equipment used in demolition or to construct the proposed project has the potential to impact the stability of the seawall if the load is not properly set back from the wall. Implementation of Mitigation Measure 4.2-2, which requires appropriate setbacks from the wall, will reduce the load impacts on the seawall to less than significant levels.</p>	See Mitigation Measure 4.2-1 above.  <b>4.2-2</b> To reduce potential lateral and surcharge load impacts from construction equipment near the seawall, OC Dana Point Harbor shall review and specifically approve contract provisions requiring equipment and/or storage setbacks from the seawall prior to issuance of any contract to demolish or construct within the project area. To reduce potential impacts associated with the instability of the seawall due to increased lateral loads imposed by construction equipment, adequate setbacks shall be observed from bulkhead areas for cranes, pile-driving equipment, or any other heavy construction equipment. (refer to FEIR No. 591, Mitigation Measure 4.3-6).	Significant and Unavoidable

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>The guide piles that will be installed within the marina will be primarily subjected to lateral loading conditions associated with minor wave action, wind, and more significantly, by the impact loads associated with boats that dock at the platforms. In addition, the slope movements that may occur as a result of liquefaction could impart significant additional lateral load on the guide piles within the zone of slide movement. Implementation of Mitigation Measure 4.2-1 will ensure that lateral load impacts associated with the piles will be less than significant.</p> <p>Because liquefaction is an existing condition on site the potential impact to the seawall and gangway platforms in select locations in the event of an earthquake capable of producing liquefied conditions will continue to exist. Therefore, impacts associated with liquefaction are significant unavoidable adverse impacts of the proposed project related to geology and soils.</p>		
<p><b>Septic Tanks:</b> The proposed project would utilize the existing sewer system. The project does not include the use of septic tanks or alternative methods for disposal of wastewater into the subsurface soils.</p>	No mitigation is required.	Less Than Significant
<p><b>Cumulative Geology and Soils Impacts:</b> Mitigation Measures 4.2-1 and 4.2-2 have been proposed to ensure that recommendations contained in the Geotechnical Evaluation prepared for the proposed project are incorporated into final project plans, and adequate setbacks will be implemented to ensure no project construction activities contribute to seawall failure. Incorporation of these mitigation measures will minimize or avoid potential hazards due to on-site and off-site geologic factors and ensure that the project’s geological impacts are considered less than cumulatively considerable. The project would not contribute to any regional or localized geologic or soil-related risks. Therefore, the contribution of the proposed project to potential cumulative geology and soils impacts in the project area is considered less than significant.</p>	No mitigation is required.	Less Than Significant

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<b>HYDROLOGY AND WATER QUALITY</b>		
<p><b>Degrade Water Quality:</b> Implementation of the proposed project may result in short-term water quality impacts associated with temporary construction staging area(s), excavation associated with the construction of new ramp structures and waterside improvements associated with the removal of the docks and piles, and construction of the new docks and piles. Implementation of Mitigation Measures 4.3-1 through 4.3-6 would reduce potential water quality impacts to less than significant levels. .</p>	<p><b>4.3-1</b> To reduce water quality impacts related to pile removal and replacement, OC Dana Point Harbor shall verify, prior to the issuance of any construction permits, that authorization has been obtained from: (1) the United States Army Corps of Engineers (Corps) under the Section 404 Permit program for the discharge of material into jurisdictional waters; and (2) the Corps, under Section 10 of the Rivers and Harbors Act for the placement of piles. In addition, standard conditions of the Corps permits require Section 401 water quality certification by the Regional Water Quality Control Board (RWQCB). In order to obtain these authorizations, the County shall develop a mitigation plan subject to review and approval by the appropriate resource agencies (Corps, United States Fish and Wildlife Service [USFWS], National Marine Fisheries Service [NMFS], California Department of Fish and Game [CDFG], and RWQCB).</p> <p><b>4.3-2</b> To reduce water quality impacts related to pile removal and replacement, OC Dana Point Harbor shall verify, prior to the issuance of any construction permits, that best management practices (BMPs) for all pile removal and replacement activities have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable in a manner meeting the approval of the OC Public Works (OC PW) Director. The construction contractor shall be responsible for performing and documenting the application of silt curtains and other BMPs identified in this document.</p> <p><b>4.3-3</b> Prior to the issuance of any construction permits, OC Dana Point Harbor shall verify that a trash and debris containment boom has been incorporated into project plans and will be implemented during all dock removal and replacement activities in order to reduce impacts to water quality to the maximum extent practicable in a manner</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<p>meeting the approval of the OC Public Works (OC PW) Director. The construction contractor shall be responsible for performing and documenting the application of the trash and debris containment boom.</p> <p><b>4.3-4</b> To reduce impacts related to dewatering or construction-related non-storm water discharges, the construction contractor shall determine, prior to commencement of grading activities, whether dewatering of groundwater will be necessary during project construction. Any dewatering will require compliance with the State General Permit for discharges to land with a low threat to water quality or a dewatering permit from the San Diego Regional Water Quality Control Board (RWQCB), consistent with National Pollutant Discharge Elimination System (NPDES) requirements. Once it receives and reviews the Notice of Intent (NOI), the RWQCB will decide which permit is applicable and whether sampling is required. A copy of the permit shall be kept at the Marina Improvement Project, available for City and/or RWQCB review upon request.</p> <p><b>4.3-5</b> To reduce impacts related to water quality during landside construction, the Construction Contractor shall prepare an Erosion and Sediment Control Plan (ESCP) for approval by the Director, OC Public Works (OC PW)/Building Permit Services to demonstrate compliance with local and State water quality regulations for construction activities. The ESCP shall be approved prior to the issuance of any construction permits and shall identify how all construction materials, wastes, or demolition debris, etc., shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion, or dispersion. The ESCP shall also describe how the applicant will ensure that all best management practices (BMPs) will be maintained during construction. A copy of the current ESCP shall be kept at</p>	

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<p>the offices of OC Dana Point Harbor and be available for review on request (refer to FEIR No. 591, Standard Conditions of Approval [SCA] 4.4-7).</p> <p><b>4.3-6</b> To reduce impacts related to water quality during landside construction, the Construction Contractor shall submit for review and approval by the Director, OC Public Works (OC PW)/Inspection Services Division, an Amendment to the Dana Point Harbor Conceptual Water Quality Management Plan (WQMP) specifically identifying best management practices (BMPs) that will be used on site to control predictable pollutant runoff. Any required Amendment to the Conceptual WQMP shall be approved prior to the issuance of any construction permits. The WQMP will specifically identify BMPs that will be used on site to minimize the volume, velocity, and pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively address dry weather nuisance flow control predictable pollutant runoff. The WQMP shall follow the model WQMP as outlined in Exhibit 7.1 1 of the 2003 Drainage Area Master Plan, prepared by the County of Orange Flood Control District on July 1, 2003, or the most recent version available. This WQMP shall also demonstrate conformance with the policies and provisions governing Water Quality and Hydrology identified in Chapter 2 of the Dana Point Harbor Revitalization Plan, Resource Protection section, including applicable provisions from the Project Design Features and Requirements section. The WQMP shall identify, at a minimum, the routine structural and nonstructural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Discuss regional water quality and/or watershed programs (if available for the project);</li> </ul>	

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<ul style="list-style-type: none"> <li>• Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas and conserving natural areas;</li> <li>• Include the applicable Routine Source Control BMPs and where necessary, Treatment Control BMPs as defined in the DAMP; and</li> <li>• Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary (refer to Land Use Plan [LUP] I-6.1-6).</li> </ul>	
<p><b>Groundwater Supplies:</b> The project site is not located within a groundwater recharge basin, and there are no production wells within the vicinity. Therefore, there would be no impact to groundwater supply with implementation of the proposed project. Based on the proposed project, groundwater withdrawal would not be required during operation of the project. Therefore, impacts to groundwater would not be significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Degrade Groundwater Quality:</b> The project site is not located within a groundwater recharge basin, and there are no production wells within the vicinity. Therefore, there would be no impact to groundwater quality with implementation of the proposed project. Therefore, impacts to groundwater quality would not be significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Alter Drainage Pattern:</b> The OC Dana Point Harbor (Harbor) drainage pattern (off-site and on-site drainage facilities) would not be altered as part of the proposed project. The reconfiguration of the boat slips would result in a net decrease in impervious area of approximately 3,262 square feet. However, the docks are not considered an impervious area, as typically defined, because of the gaps in the docks that are over open marina waters. Therefore, the project would not increase storm water flows. As a result, the drainage pattern and runoff volumes would remain essentially the same as in the existing condition. Therefore, potential drainage impacts as they relate to drainage pattern and runoff volumes are considered less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<b>Levee or Dam Failure:</b> The proposed project is not within an inundation area for the failure of a levee or dam. Therefore, flooding as a result of the failure of a levee or dam is considered less than significant.	No mitigation is required.	Less Than Significant
<b>Seiche and tsunami or mudflow:</b> The proposed project is within a seiche and tsunami influence area. The proposed project would not change or worsen this existing condition, and there is an established warning system in place that would provide early notification of an advancing tsunami that would allow for evacuation.  Because the site is not located in a hilly area, it is not considered to be at a high risk for inundation by mudflow. In addition, the project site is a coastal harbor comprised of a body of water. Therefore, the impacts of the proposed project related to a potential mudflow are considered less than significant.	No mitigation is required.	Less Than Significant
<b>Cumulative Hydrology and Water Quality Impacts:</b> The proposed project would be required to prepare a WQMP, in compliance with the DAMP, which would mitigate the project's cumulative contribution to drainage and erosion impacts to less than significant levels. Other cumulative projects' required compliance with the DAMP and WQMP would reduce cumulative impacts associated with construction and operation to less than significant levels. Therefore, no adverse cumulative impacts related to Hydrology and Water Quality would result from the proposed project.	No mitigation is required.	Less Than Significant
<b>TRANSPORTATION AND CIRCULATION</b>		
<b>Marina Vehicle Trip Generation:</b> Because the proposed project results in a reduction in the overall number of slips through the Harbor, no increase in traffic due to boater usage is anticipated.	No mitigation is required.	Less Than Significant
<b>Boater Vessel Traffic - Harborwide:</b> Based on the navigable width of the proposed channel and the amount of boater traffic, project implementation would result in a slight decrease in the level of service for both marina basins. However, the Boat Traffic Study concluded that the amount of change is considered to be so small that it would not result in any perceptible change in operations.	No mitigation is required.	Less Than Significant
<b>Boater Vessel Traffic - Embarcadero/Dry Boat Storage Docks, Marine Services Docks, Sport Fishing Docks:</b> The redesign of these areas would allow operations to continue to operate under similar conditions as	No mitigation is required.	Less Than Significant

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>currently exist, and it is anticipated that the intensity of boating operations in this area will remain consistent with existing and historic levels. Boats will be staged at the docks by professional boat handlers as part of the dry dock storage service, which will help eliminate potential boater loading/unloading conflicts and congestion in the staging area. A 294-linear-foot portion of the Marine Services docks will be redesignated with project implementation for use by the Dry Boat Storage facility, which is a part of the Harbor Revitalization Project. However, this is not expected to affect operations for Marine Service operators such as the Marine Services docks because this existing dock space is currently subleased to other independent businesses. Operational impacts related to boat traffic in these areas are expected to remain similar to existing conditions and are therefore considered to be less than significant.</p>		
<p><b>Boater Vessel Traffic - Temporary Dock:</b> In order to accommodate boaters during the dock and slip renovations, the project includes a temporary dock. Once renovations are complete, the temporary dock may be used on a permanent basis as a yacht broker dock; however, any permanent use within this federal anchorage area would require approval by the United States Army Corps of Engineers (Corps). The temporary dock is located in an area that is not currently used for slips and would not result in any perceptible change in operations and would not significantly impact boat traffic.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Boater Vessel Traffic – Construction:</b> During each phase of construction, boats in the affected areas will be relocated to the temporary dock or open slips throughout the marinas away from construction areas. The construction phasing of the proposed project will ensure that boater traffic impacts during construction are localized and short-term. The number of slips vacated each year is anticipated to, over the life of the construction, absorb the loss of slips due to project implementation. Therefore, boat traffic will be dispersed away from construction areas, reducing congestion. The construction equipment required for the proposed project will generally be localized within the dock areas where construction activities are being conducted. Therefore, impacts to boater traffic during construction are anticipated to be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>



**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p><b>Boater Vessel Traffic - East and West Basins:</b> Implementation of the project would result in fewer, and on average longer, slips in the harbor, which may attract some larger boats to the marinas. However, the change in the average size of slips in the marinas would not change operations. In addition, the proposed design of the marinas would not significantly change boat congestion. However the proposed design may result in additional boat-to-boat conflicts. Mitigation Measure 4.4-1 will ensure that impacts related to boat traffic in the inner basin channels will be reduced to a less than significant level.</p>	<p><b>4.4-1</b> To reduce potential boat congestion in the East and West Basins, OC Dana Point Harbor (Harbor) shall, beginning at the start of construction and in the areas of construction activity, provide education and outreach to ensure that the slow speed/no wake policy is adhered to and to ensure that speeds in the Inner Channel are maintained at 4 to 5 knots in order to maintain boat traffic flow and steerage. Additionally, no construction shall be permitted to block the main navigational channels in the Harbor and should minimize the disruption or loss of existing docks by providing temporary facilities to the greatest extent feasible (refer to Implementation Plan [IP] II-3 Special Provisions [SP] No. 3).</p>	<p>Less Than Significant</p>
<p><b>Construction Traffic.</b> Although the proposed Marina Improvement Project would not create additional traffic, construction traffic associated with the renovations could create temporary and intermittent traffic and circulation impacts on site. Implementation of Mitigation Measure 4.4-2 will reduce potential construction-related traffic impacts to a less than significant level. The primary staging area for the duration of project construction will be located in the West Cove parking lot and will extend all the way to the quay wall, which will require the boardwalk to be rerouted or detoured around it for the entire construction period. During each phase, there will be periods of time when the boardwalk will be detoured, and parking may be restricted or impacted by the boardwalk detour. Additionally, four other possible staging areas have also been identified in parking areas. In order to ensure that impacts related to parking and walkway conflicts with construction equipment remain less than significant, Mitigation Measure 4.4-2 has been proposed, which requires OC Dana Point Harbor to prepare a Construction Management Plan (CMP).</p> <p>Due to the length of construction related to implementation of the Marina Improvement Project, it is possible that construction of the proposed project could occur at the same time as the Dana Point Harbor Revitalization project Commercial Core component. Due to the close proximity of these two projects within the same Harbor, the construction</p>	<p><b>4.4-2</b> Public and boater access shall be provided to all Harbor facilities and businesses to the extent that they can be safely accessed during construction activities and reduce parking congestion/conflicts. To reduce parking, public access, and circulation conflicts during construction operations, OC Dana Point Harbor shall prepare a Construction Management Plan (CMP) that establishes access and staging locations for staging areas, temporary access routes, and parking areas that are separate from those used by the general public. The CMP shall also include the locations for shuttle drop-off areas, the relocations of public transit facilities, and provisions for valet service (in the event that construction activities do not allow for convenient parking adjacent to existing businesses).</p> <p>The CMP shall be prepared and approved prior to issuance of any construction or building permits and shall include a construction sign program to direct Harbor visitors and boaters to available parking during all phases of construction (refer to FEIR No. 591, Mitigation Measures 4.5-3 and 4.1-3a, Land Use Plan [LUP] I-4.4.1-6 A, Implementation Plan [IP] II-14.6e, and IP II-3 Special Provisions [SP] No. 3).</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>traffic from the combined projects could result in a potentially significant circulation impact. Implementation of Mitigation Measure 4.4-3 would reduce potential construction traffic impacts to a less than significant level.</p>	<p><b>4.4-3</b> Construction phasing for implementation of all Dana Point Harbor Revitalization Plan improvements shall minimize the disruption of vehicular and pedestrian access routes and parking availability to the maximum extent feasible. Access to the Marine Services Commercial areas shall be maintained during all construction phases. To reduce parking, public access, and circulation conflicts during construction operations, OC Dana Point Harbor shall prepare a coordinated construction truck route and parking program should the Dana Point Harbor Revitalization Plan Commercial Core construction occur at the same time as construction of the Marina Improvement Project.</p> <p>In the event of temporary closures, alternative routes and clear directional signage shall be provided. Any temporary parking loss during construction shall be replaced prior to its removal and shall be located in reasonable proximity to the uses it serves to the maximum extent feasible. Temporary replacement parking spaces, located in reasonable proximity to the uses they serve, to the maximum extent feasible shall be provided prior to the removal of any existing parking spaces due to construction, in accordance with an approved Construction and Temporary Operations Plan (refer to Implementation Plan [IP] Section II-14.6e).</p> <p>The coordinated program shall be approved by the Director, OC Public Works/Building Permit Services, prior to the issuance of any construction permits, and shall identify construction haul routes, the hours of construction traffic, traffic controls and detours, and off-site vehicle staging areas and address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes.</p>	

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p><b>Operational Long-Term Parking:</b> The proposed project does not involve any changes to the number of parking spaces located in the Harbor. The Program FEIR (Table 4.5-37) concluded that the number of parking spaces provided with the Revitalization Plan would exceed the County’s parking requirements. The modifications to the Dana Point Harbor Land Use Plan (LUP) certified by the California Coastal Commission (CCC) include the adoption of a parking standard of 0.6 space per boat slip; and include a requirement to reserve adequate land areas to provide parking for 2,409 slips (under the “no net loss” policy). In addition, implementation of the Project does not increase the number of slips in the Harbor and therefore does not create a need for additional parking spaces.</p> <p>A temporary dock will also be in place for the duration of construction activities (up to 8 years). The temporary dock may be used on a permanent basis as a yacht broker dock; however, any permanent use within this federal anchorage area would require approval by the Corps. Because these docks will be utilized by yacht brokers, parking for these docks will be provided in the designated boater lots near each particular yacht broker’s building. If needed, customers will be shuttled to the temporary dock by boat or car by the yacht broker staff. Although the Marina Improvement Project does not result in significant operational impacts related to parking conditions, Mitigation Measure 4.4-2, as discussed above, is proposed to ensure that potential parking conflicts during construction are reduced to a less than significant level.</p>	<p>See Mitigation Measure 4.4-2 above.</p>	<p>Less Than Significant</p>
<p><b>Cumulative Transportation and Circulation Impacts:</b> Cumulative projects’ construction workers and equipment and haul vehicles working in the vicinity of the proposed project may utilize the same haul route. Therefore, when combined, these projects have the potential to contribute to cumulative construction-related traffic impacts. With implementation of Mitigation Measure 4.4-3 and Mitigation Measures included in the Program FEIR, potential cumulative impacts related to the proposed project would be less than cumulatively significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<b>AIR QUALITY</b>		
<p><b>Fugitive Dust:</b> Because the majority of construction operations related to the Marina Improvement Project will be conducted on or underwater, little fugitive dust is expected to be generated by these operations. However, small amounts of fugitive dust could be generated as construction</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>equipment or trucks travel into, out of, and on the Harbor property, or from the excavation and pile installation for the Americans with Disabilities Act (ADA) gangways foundations. The amount of particulate matter (particulate matter less than 10 microns in diameter [PM<sub>10</sub>] and particulate matter less than 2.5 microns in diameter [PM<sub>2.5</sub>]) generated during construction will be relatively small and will not exceed the South Coast Air Quality Management District (SCAQMD) thresholds of significance for particulate matter. Therefore, construction of the project will result in less than significant adverse impacts related to fugitive dust.</p>		
<p><b>Odors:</b> The heavy-duty construction equipment used in the project area during construction would potentially emit odors, primarily from diesel engine sources. However, the odors would cease to occur after construction is completed. In addition, on-shore wind conditions at the Harbor are fairly consistent and will function to quickly disperse and dilute any odorous emissions. No other sources of objectionable odors during the construction and/or operation of the project have been identified. Therefore, the construction and operation of the project would result in less than significant adverse impacts related to odors.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Stationary and Mobile Sources:</b> The proposed project would not result in any substantive changes in long-term on-site stationary sources. Due to a decrease in the number of slips, the project would likely result in either no change or only a minor change in off-site vehicle trips. Therefore, the operation of the proposed project would result in a less than significant impact related to stationary and mobile source emissions.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>CO Hotspots:</b> Because the proposed project does not increase or expand capacity, it would likely result in either no change or only a minor change in off-site vehicle trips, no substantial increase in carbon monoxide (CO) contributions would occur in the project vicinity as a result of the proposed project. Therefore, no CO hot spots are expected as a result of the project and the proposed project would result in less than significant impacts related to CO hotspots.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p><b>Localized Significance of Construction Emissions:</b> The calculated emissions rates for the project construction activities will be below the localized significance thresholds (LSTs) for nitrogen oxides (NO<sub>x</sub>), CO, PM<sub>10</sub>, and PM<sub>2.5</sub> at 50 meters (m) from sensitive receptors. Therefore, the construction activities for the proposed project would result in less than significant short-term, localized, air quality impacts.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Consistency with the AQMP:</b> The proposed project would not result in any population growth and is consistent with the Orange County (County) General Plan designation for the site. In addition, the proposed project is not expected to result in any increase in long-term regional air quality emissions. Therefore, the project will not conflict with the Air Quality Management Plan (AQMP).</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Equipment Exhaust and Related Construction Activities:</b> Construction of the proposed project is planned to occur in multiple phases over approximately eight years. Construction equipment/vehicle emissions during slip and pile removal and installation periods for the construction of the proposed project would result in NO<sub>x</sub> and reactive organic compound (ROC) emissions that would exceed the SCAQMD established daily emissions threshold for those pollutants. While the adherence to SCAQMD rules and regulations would reduce this impact, it would remain significant and adverse because the SCAQMD daily threshold would be exceeded. No feasible mitigation measures beyond compliance with SCAQMD rules and regulations are available to offset this significant impact. Therefore, construction of the Marina Improvement Project would result in significant adverse impacts related to emissions of NO<sub>x</sub> and ROC during construction.</p>	<p>No feasible mitigation measures beyond compliance with SCAQMD rules and regulations are available.</p>	<p>Significant and Unavoidable</p>
<p><b>Cumulative Air Quality Impacts:</b> Construction of the project would contribute cumulatively to the local and regional air pollutants, together with other projects under construction. The proposed project would also contribute to adverse cumulative air quality impacts because construction activity would result in additional emissions of pollutants, which may exacerbate ambient levels currently in excess of applicable NAAQS or CAAQS for PM<sub>10</sub> and O<sub>3</sub> (because NO<sub>x</sub> and ROC are precursors to O<sub>3</sub>). Although the cumulative short-term construction impacts of the proposed project would remain significant and unavoidable, no long-term operational cumulative air quality impacts would occur.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<b>NOISE</b>		
<p><b>Long-Term Noise Impacts:</b> The proposed project includes replacement and improvements to existing marina facilities. The project would result in a reduction in the total number of boat slips in the marina; hence, the project is not expected to increase the number of vehicle trips on local roads or increase the number of boats using the marina. The Program FEIR determined that noise impacts associated with boat slips are not anticipated to be significant. Therefore, the operation of the proposed project would not result in any long-term adverse noise impacts.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Short-Term Construction Noise Impacts:</b> The nearest sensitive receptors would be subjected to short-term noise reaching 87 A-weighted decibels (dBA) maximum A-weighted noise levels that are measured during a designated time interval, using fast time averaging. (<math>L_{max}</math>) generated by project construction activities. Due to the length of construction for the proposed project, and because the project could be under construction at the same time as the Commercial Core project, construction-related noise impacts are deemed to be significant and unavoidable. Implementation of Mitigation Measures 4.6.1 and 4.6.2 would reduce, but not entirely mitigate, the construction-related noise impacts.</p>	<p><b>4.6-1</b> To reduce project construction noise impacts, OC Dana Point Harbor shall verify that construction hour limitations are noted on building and/or grading plans prior to issuance of any construction or building permits. Construction shall be limited to the hours of 7:00 a.m. to 8:00 p.m., Monday through Saturday. In accordance with the County of Orange and City of Dana Point Noise Ordinances, no construction activities shall be conducted outside of these hours or on Sundays and federal holidays.</p> <p>The following measures shall also be noted on building and/or grading plans and implemented to reduce potential construction noise impacts on nearby sensitive receptors:</p> <ol style="list-style-type: none"> <li>1. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from the sensitive receptors nearest the construction areas.</li> <li>2. The construction contractor shall locate equipment staging in areas farthest from noise-sensitive receptors nearest the project site during all project construction (refer to FEIR No. 591, Standard Conditions of Approval [SCA] 4.9-1 and 4.9-3).</li> </ol> <p><b>4.6-2</b> To reduce construction noise impacts throughout the phased construction activities of the proposed project, OC Dana Point Harbor shall coordinate with those residents living on boats within the Marina to relocate them to be moved as far</p>	<p>Significant and Unavoidable</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	as feasible from the construction activities to minimize construction-related noise nuisance impacts. In addition, OC Dana Point Harbor staff shall provide Marina boat residents with information regarding the availability of other nearby Marina facilities. Information regarding the timing and location of the construction activities shall also be made available on the Harbor website, by postings throughout the Marina, and other means as appropriate.	
<p><b>Short-Term Construction Vibration Impacts:</b> The proposed pile driving for pile installation in the marina would generate the primary source of vibration during construction. However, the level of vibration at the closest sensitive receptors would not exceed the California Department of Transportation (Caltrans) Transportation and Construction-Induced Vibration Guidance Manual thresholds, and there is virtually no risk of architectural damage to normal buildings.</p> <p>The live-aboards are also in proximity to the proposed construction activities; however the boats would not be subject to groundborne vibrations. Implementation of Mitigation Measure 4.6-2 would also lessen any construction nuisance impacts to the live-aboards. Hence the proposed project would not result in any significant vibration impacts.</p>	See Mitigation Measure 4.6-2 above.	Less Than Significant
<p><b>Cumulative Noise Impacts:</b> If the Commercial Core Project is under construction at the same time as the Marina Improvement Project, cumulative construction-related noise and vibration impacts would be considered significant and adverse. Implementation of Mitigation Measures 4.6.1 and 4.6.2 would reduce, but not entirely mitigate, the construction-related noise impacts. See discussion under Short-term Construction Noise Impacts.</p> <p>Long-term noise generated by on-site operations for the Marina Improvement Project would not change after implementation of the proposed project; the proposed project would not contribute to off-site cumulative noise impacts from other planned and future projects. Therefore, impacts related to operational noise would be less than cumulatively significant.</p>	No mitigation is required.	Less Than Significant

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<b>BIOLOGY</b>		
<p><b>Impacts to any species identified as a candidate, sensitive, or special status species:</b></p> <p><b>Sea Turtles.</b> No green sea turtle mortality would be expected to occur as a result of the waterside construction activities, nor would the project cause any decline in green sea turtle populations. However, construction activities and vessels within the Harbor could induce behavioral modification to this species that would result in a change in swimming behavior to avoid excessive noise, turbidity, or the vessel movements. Implementation of Mitigation Measure 4.7-4 would reduce these potential construction impacts to a less than significant level.</p>	<p><b>4.7-4</b> To reduce potential construction impacts to sensitive habitats and endangered species, OC Dana Point Harbor shall hire a qualified marine biologist who shall conduct a pre-construction marine biological survey to identify sensitive marine biological resources (i.e., eelgrass, reefs and kelp beds, and seabirds). This survey shall be used to prepare a Marine Biological Impact Reduction Plan (MBIRP) to map sensitive biological resources and minimize construction impacts to marine resources. The marine biologist shall also meet with the construction crews prior to the issuance of any construction permits or any construction activities to review sensitive areas to avoid and to review proper construction techniques. The Marine Biologist shall:</p> <ul style="list-style-type: none"> <li>• Brief construction and work vessel crews on the potential for sea turtles to be present and provide crews with the identification characteristics of sea turtles since they may occasionally be mistaken for seals or sea lions.</li> <li>• Prepare an incident report of any green sea turtle activity in the project area and inform the construction manager to have the crew aware of the potential for additional sightings. The report shall be provided within 24 hours to the California Department of Fish and Game and the National Marine Fisheries Service.</li> <li>• A biological monitor shall be present on site during the start-up of each construction phase and periodically throughout construction activities to monitor the presence of endangered species (seabirds, marine mammals, and sea turtles). In the event that an endangered species is sighted within 100 meters (m) of the construction zone, all construction activity shall be temporarily stopped until the animal is safely outside</li> </ul>	<p>Less Than Significant</p>



**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p><b>Listed Or Otherwise Sensitive Bird Species.</b> The special-status marine birds most likely to occur in the vicinity of the project area include brown pelican, double-crested cormorant, western snowy plover, California gull, elegant tern, and occasionally, California least tern and common loon. Construction activities associated with the proposed project may result in some temporary disruptions to the roosting activities of great blue herons in the project vicinity. The Program FEIR included mitigation which was intended to protect the nesting habitat of the black-crowned night herons and snowy egrets, and is applicable to the Marina Improvement Project.</p> <p>Implementation of Mitigation Measure 4.7-5 will ensure that potential impacts to the nesting habitat of these species are reduced to a less than significant level.</p>	<p>the outer perimeter of construction. The on-site biological monitor shall have the authority to halt construction operation and shall determine when construction operations can proceed.</p> <ul style="list-style-type: none"> <li>• In the event a marine mammal is injured or killed as a consequence of a vessel collision, the vessel operator and OC Dana Point Harbor shall immediately notify the National Marine Fisheries Service (Southwest Division) and shall submit a written follow-up report within 24 hours of the incident.</li> <li>• Monitor the construction process on a regular basis to ensure that all water quality Best Management Practices (BMPs) are implemented and to assist the project engineer in avoiding and minimizing environmental effects to Harbor marine biological resources.</li> </ul> <p><b>4.7-5</b> Prior to issuance of any demolition or construction permits, OC Dana Point Harbor shall ensure that the following provisions are incorporated into the final project plans for the purpose of protecting migratory and sensitive nesting birds (blue herons, snowy egrets, the black crowned night heron, owls and raptors) within the study area during construction:</p> <ul style="list-style-type: none"> <li>• If construction activities are performed during the breeding and nesting season (January through September), a preconstruction survey within 500 feet (ft) of the site for nests shall be performed by a qualified biologist at least 15 days prior to construction to document the presence/absence of all these species;</li> <li>• If an active nest of any bird species listed pursuant to the federal or California Endangered Species Act, California bird species of special concern or a wading bird (herons or egrets), as well as owls or raptors, is found, construction activities within 300 ft (500 ft</li> </ul>	

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<p>from any identified raptor nest) shall not exceed noise levels of 65-decibel (dB) peak until the nest is vacated and juveniles have fledged and there is no longer evidence of a second attempt at nesting.</p> <ul style="list-style-type: none"> <li>The qualified biologist shall monitor active nest sites on a weekly basis. If the biologist notes that all young have fledge from the nest, then the noise restriction near the nest is no longer required.</li> </ul>	
<p><b>Impacts to any riparian habitat or other sensitive natural community:</b></p> <p><b>Soft- and Hard-Bottom Associated Benthic Communities/Reefs and Kelp Beds.</b> The installation of the temporary docks adjacent to the East Breakwater would create a long-term adverse shading effect on water column habitat and a combination of hard-bottom quarry stone/natural reef habitat and soft-bottom habitat. Shading over kelp areas would be considered a significant and adverse impact for the duration of the temporary docks. The length of time that habitats and organisms would be affected by shading is potentially up to eight years. Therefore, due to the length of time that these habitats will have been subjected to reduction in light conditions, and because there is no feasible mitigation to reduce shading impacts with the current project design, impacts to these habitats are considered significant and adverse.</p> <p>Permanent dock installation at the OC Sailing &amp; Events Center would create additional shading over some soft-bottom and natural reef areas. This would result in a long-term, adverse decrease in the amount of unobstructed habitat in this area. The proposed configuration of the new headwalk at the Sport Fishing Docks creates an additional dock surface area that would shade riprap habitat, also resulting in a long-term adverse shading impact. Because the shading impacts in the OC Sailing and Events Center and Sport Fishing Docks areas would be permanent during the life of the project, and because there is no feasible mitigation to reduce shading impacts with the current project design, shading impacts for these areas are considered significant and adverse.</p>	<p>No feasible mitigation measures</p>	<p>Significant and Unavoidable</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p><b>Impacts to federally protected wetlands through direct removal, filling, hydrological interruption, or other means:</b></p> <p><b>Water Turbidity Construction Impacts.</b> Pile replacement activities would have a potential to release detectable levels of sediment-bound contaminants into the water column that would be redistributed through the tidally induced movement of the turbidity plume. Organically enriched sediments resuspended into the water column during pile replacement would also cause a slight decrease in dissolved oxygen levels. Turbidity would result in a short-term reduction of light and an increase of suspended material in areas that are high in macrophyte productivity. Bottom sediments would also be disturbed during construction activities and could potentially affect marine biological resources. While the impact is expected to be short-term, turbidity levels for each specific phase may be above ambient conditions for an extended period. Implementation of Mitigation Measure 4.7-1 would reduce water turbidity impacts to a less than significant level.</p> <p><b>Oil And Fuel Discharges.</b> Accidental oil or fuel spills that could potentially occur during project construction activities could result in significant effects on water quality, and depending on the severity of the spill, affect the fish and wildlife of the Harbor. The potential for the occurrence of petroleum product leaks or spills would be low, but the potential for significant, long-term effects on marine resources would be moderate to high. Implementation of Mitigation Measure 4.7-1 would reduce water quality degradation and the potential for adverse impacts on water quality and marine resources to a less than significant level.</p>	<p><b>4.7-1</b> Prior to issuance of any construction permits, the Director, OC Dana Point Harbor, shall review and approve a Marina Construction Management Plan and confirm that the following construction best management practices (BMPs) are included to minimize turbidity plumes and possible contaminants released into the water column during construction activity:</p> <ul style="list-style-type: none"> <li>• No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to tidal erosion and dispersion. Construction materials shall not be stored in contact with the soil.</li> <li>• Hazardous waste and oil spill contingency plans and spill response equipment shall be kept on site or near the Harbor during Marina construction. The Construction Contractor shall have adequate equipment available to contain such spills immediately.</li> <li>• Any construction debris shall be removed from the site. All trash shall be disposed of in the proper trash receptacles at the end of each construction day.</li> <li>• Floating booms shall be used to contain debris discharged, and any debris discharged, including construction debris from the sea floor, shall be removed no later than the end of each day. A postconstruction bottom survey shall be conducted to ensure that all material has been successfully removed from construction areas.</li> <li>• Where feasible, silt curtains shall be deployed around work barges and the pile removal and placement operations in order to minimize the spread of turbid waters outside the project area.</li> </ul>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p><b>Water Turbidity Long-Term Operational Impacts.</b> Periodic and/or uncontrolled discharges of various pollutants, oils, greases, and wastes would potentially create significant long-term adverse effects on water quality with subsequent adverse impacts on local marine life. The policies and procedures required for Clean Marina Certification provide tenants and boaters with reasonable BMPs, safety guidelines, information on pump-out facility use, regulations and steps to take in response to trash and debris disposal, accidental spills, leakages, and fires to reduce the potential for water quality degradation. Implementation of Mitigation Measure 4.7-7 will assist in reducing potential long-term water quality-related impacts to marine life to a less than significant level.</p>	<ul style="list-style-type: none"> <li>• Barges and work vessels shall be operated in a manner to ensure that sensitive resources within the Harbor are not impacted through grounding, propeller damage, or other activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.</li> </ul> <p><b>4.7-7</b> To reduce potential long-term water quality-related impacts to marine life, OC Dana Point Harbor shall, prior to occupancy of any new dock or slip facilities, provide boater education material to tenants as part of lease materials, and to reduce the potential for water quality and degradation of Dana Point Harbor marine resources by boaters. In addition, OC Dana Point Harbor shall provide the following to boaters:</p> <ul style="list-style-type: none"> <li>• A copy of all applicable regulations regarding vessel discharges of wastes, antifouling paint use, and refuse management (including handling of hazardous wastes);</li> <li>• Information regarding procedures for notifying appropriate authorities regarding spills of hazardous materials, containment measures, and applicable penalties for violations;</li> <li>• A regular cleaning schedule of the Marina dock facilities and vacuum sweeping of the parking lots;</li> <li>• Adequate signage to identify the location off pump-out stations and hours of operation;</li> <li>• A regular inspection and maintenance schedule for the pump-out facility;</li> <li>• Educational information about the pump out station to tenant boaters;</li> <li>• A list of existing local, State, and federal regulations that will be enforced pertaining to marine sanitation devices and the illegal discharge of boat sewage; and;</li> </ul>	

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<ul style="list-style-type: none"> <li>A list of other local pump-out locations shall be made available to boaters.</li> </ul>	
<p><b>Interfere substantially with the movement of any native resident or migratory fish or wildlife species, impact any migratory wildlife corridors, or impede the use of native wildlife nursery sites:</b></p> <p><b>Eelgrass (<i>Zostera Marina</i>).</b> Eelgrass is a nursery habitat for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass). The proposed project has a potential to impact eelgrass in the vicinity of the proposed OC Sailing and Events Center Docks as a result of shading from either dock structures or small boats tied up to the dock. The level of impact and the mitigation required for any disturbance to eelgrass will be determined during preconstruction and postconstruction surveys for the project, as required in Mitigation Measures 4.7-2 and 4.7-3. Implementation of Mitigation Measures 4.7-2 and 4.7-3 would reduce potential impacts to eelgrass to a less than significant level.</p> <p><b>Surfgrass (<i>Phyllospadix spp.</i>).</b> Surfgrass is a sensitive marine resource that occurs in rocky shoreline and rocky subtidal habitats at depths to approximately 20 ft. Its sensitivity is related to its use by invertebrates and fishes as nursery habitat and its susceptibility to long-term damage because it is a very slow-growing species. Revegetation occurs very slowly through initial seeding and eventually through the spreading of roots and rhizomes over surfaces of rocks. Surfgrass is considered to be Essential Fish Habitat by the National Marine Fisheries Service (NMFS) and is an extremely important nursery habitat for juvenile lobsters and juvenile olive rockfish. Surfgrass does not occur within the confines of the Harbor; thus, it would not be impacted by construction activities.</p>	<p><b>4.7-2</b> To reduce impacts related to potential disturbance to the shallow water marine substrate, OC Dana Point Harbor shall confirm that preconstruction and postconstruction eelgrass and <i>Caulerpa</i> monitoring surveys are conducted in accordance with the most currently approved National Marine Fisheries Service (NMFS) Control Protocol and the Southern California Eelgrass Mitigation Policy (SCEMP) as adopted by the NMFS, in consultation with the California Department of Fish and Game. The survey shall be conducted during the active growth period (typically March through October) when possible. The preconstruction survey reports shall be completed within 30 days prior to construction activities, and the postconstruction survey reports shall be completed within 30 days of completion of each phase of the project and shall be submitted to the California Coastal Commission and the United States Army Corps of Engineers. The survey shall provide recommendations to avoid areas of eelgrass if determined to be present and/or provide recommendations for appropriate mitigation.</p> <p>In the event that <i>Caulerpa</i> is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed disturbing activity is eliminated in accordance with the NMFS <i>Caulerpa</i> Control Protocol (NMFS 2007).</p> <p>An eelgrass mitigation plan shall be developed based upon the results of preconstruction and postconstruction surveys. The plan shall require that direct losses, if any, to eelgrass vegetation shall be mitigated at a ratio of 1.2:1 (mitigation</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<p>to impact), and potential eelgrass habitat shall be mitigated at a ratio of 1:1 according to requirements of the SCEMP. As detailed in the SCEMP, the actual amount of eelgrass to be mitigated shall depend on preconstruction and postconstruction surveys (refer to IP II-3 SP24).</p> <p><b>4.7-3</b> To reduce potential impacts related to the presence of eelgrass, OC Dana Point Harbor shall hire a qualified marine biologist who shall implement the following measures during construction activities near Baby Beach and the OC Sailing and Events Center:</p> <ul style="list-style-type: none"> <li>• A qualified marine biologist shall mark the positions of eelgrass beds with buoys prior to the initiation of any construction to minimize damage to eelgrass beds outside the construction zone. Impacts to eelgrass beds shall be avoided where practical and feasible. To assist the construction crew in avoiding unnecessary damage to eelgrass, the project marine biologist shall meet with construction crews prior to construction to review areas of eelgrass to avoid and to review proper construction techniques.</li> <li>• Barges and work vessels shall be operated in a manner to ensure that eelgrass beds are not impacted through grounding, propeller damage, or other activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels</li> </ul>	
<p><b>Conflict with any local policies or ordinances protecting biological resources:</b></p> <p><b>Invasive Algae (<i>Caulerpa taxifolia</i> or <i>Undaria pinnatifolia</i>).</b> <i>Caulerpa</i> has a potential to cause ecosystem-level impacts on California’s bays and near shore systems due to its extreme ability to outcompete other algae and seagrasses. Although <i>Caulerpa</i> was not observed within the regions proposed for waterside improvements, the State Water Resources Control</p>	<p>See Mitigation Measure 4.7-2</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>Board (SWRCB), through the NMFS and the California Department of Fish and Game (CDFG), requires that projects that have the potential to spread this species through dredging, and bottom-disturbing activities conduct preconstruction surveys to determine whether this species is present. In the event that <i>Caulerpa</i> is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed disturbing activity is eliminated in accordance with the NMFS <i>Caulerpa</i> Control Protocol (Version 3, adopted March 12, 2007 [NMFS 2007]). Implementation of Mitigation Measure 4.7-2 would reduce potential impacts to <i>Caulerpa</i> to a less than significant level.</p> <p><i>Undaria pinnatifida</i> is not currently growing within the Harbor. However, as outlined in Mitigation Measure 4.7-2, preconstruction surveys will be conducted. Should it be found during preconstruction surveys, it should be removed prior to Marina modifications to prevent its spread during the pile and dock removal process. It should be noted that at this time, there are no defined eradication processes for this species by the NMFS or the CDFG.</p> <p><b>Fisheries Management Plan (FMP) Species:</b> Construction activities could potentially affect identified Coastal Pelagic FMP species (northern anchovy) and Pacific Groundfish FMP species (scorpion fish and juvenile olive rockfish). However, construction activities would cause these species to avoid construction zones, resulting in a less than significant impact. In addition, based on the life histories and distribution of these species, most of the populations would be distributed in offshore areas rather than the confines of the Harbor, and the potential for short-term construction-related impacts to FMP species is expected to be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Conflict with an adopted habitat conservation plans:</b></p> <p><b>Marine Protected Areas:</b> No Marine Protected Areas occur in the Harbor; therefore, no short-term construction-related impacts to such areas would occur.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Marine Mammals:</b> Vessel traffic could collide with marine mammals or could expose these resource groups to contaminants and interfere with foraging. However, marine mammals are mobile and are generally capable of avoiding boat traffic, especially at the speeds the slower barge and tug</p>	<p>See Mitigation Measure 4.7-2</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>vessels would likely be traveling. Vessel operators are also trained to recognize the presence of marine mammals, which reduces the potential for adverse impacts. Therefore, impacts to marine mammals are expected to be less than significant.</p> <p>In the event that a collision resulted in the death of a marine mammal, the loss would be a locally significant impact, but it would not result in a significant population level impact. However, to ensure that impacts related to collisions with marine mammals remain less than significant, and that any potential vessel collision is properly reported, Mitigation Measure 4.7-4 requires the vessel operator and OC Dana Point Harbor to immediately notify the NFMS and to submit a written follow-up report within 24 hours of the incident.</p> <p>Marine mammals are not anticipated to be in the immediate construction areas and would not suffer any direct mortality resulting from construction activities. Pile extraction and pile driving can cause underwater noise and vibrations that marine mammals are capable of sensing, and they would be expected to avoid the immediate vicinity and move away from any area of disturbance. The sound intensity produced, and the potential level of impact on marine mammals for the Dana Point Harbor Improvement Project, is considered less than significant. However, to ensure that pile-driving activities remain less than significant, Mitigation Measure 4.7-6, requiring slowly ramping up pile-driving activities (referred to as a “soft start”) has been proposed. Implementation of Mitigation Measure 4.7-6 will ensure that any potential pile-driving noise impacts on marine mammals will remain at a less than significant level.</p>	<p><b>4.7-6</b> To ensure that potential pile-driving noise impacts to marine mammals remain less than significant, OC Dana Point Harbor shall ensure that the following provisions are incorporated into the final project plans for the proposed project:</p> <ul style="list-style-type: none"> <li>• The contractor shall use sound abatement techniques to reduce noise and vibrations from pile-driving activities. Recommended sound abatement techniques shall include, but are not limited to, vibration or hydraulic insertion techniques, drilled or augured holes for cast-in-place piles, bubble curtain technology, and sound aprons if feasible for the project.</li> <li>• At the initiation of each pile-driving event and after breaks of more than 15 minutes, the pile driving shall employ a “soft-start” in which the hammer is operated at less than full capacity (i.e., approximately 40–60 percent energy levels) with no less than a 1-minute interval between each strike for a 5-minute period. The operation of the hammer at 40–60 percent energy level during the soft start of pile driving is expected to result in similar levels of noise reduction (40–60 percent) underwater.</li> </ul>	



**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>Construction activities would cause a temporary reduction in submarine light levels and a short-term reduction of plankton productivity due to increased turbidity. Because plankton drift with the current and turbidity is expected to be localized, there would be only short-term, less than significant construction impacts to the plankton community.</p> <p>Construction activities would not cause direct mortality of open water or bottom-dwelling fishes, as fishes would avoid the immediate work area due to either increased turbidity or a potential increase in underwater pressure and noise levels from work equipment.</p> <p>Secondary impacts of increased water turbidity and decreased dissolved oxygen concentrations on fishes would be a short-term, less than significant construction impact. Because the proposed project would proceed incrementally and is phased over 8 years, fish living within the marina basins would be able to move to nearby areas. Therefore, potential impacts from construction activity would result in less than significant impacts to the water column biota.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p><b>Cumulative Biological Resource Shading Impacts.</b> Shading impacts to marine biological resources due to new and additional dock coverage of water surfaces are considered significant and adverse for the temporary/yacht broker docks. Because the temporary docks will be present for the duration of construction activities (up to 8 years) and could possibly become permanent as yacht broker docks, and because there is no feasible mitigation to reduce shading impacts with the current project design, shading impacts in the temporary/yacht broker dock area are considered a significant and unavoidable adverse impact for both construction (short-term) and operational (long-term) conditions.</p>	<p>No feasible mitigation measures are available.</p>	<p>Significant and Unavoidable</p>
<b>AESTHETICS</b>		
<p><b>Degradation of the Existing Scenic Vistas, Visual Character, or Quality of the Site and its Surroundings:</b> Construction activities and equipment of the proposed project would impact the existing public views from lookout points in the vicinity of the Harbor. Large construction equipment and the temporary docks would be visible throughout construction. Upon project completion, the construction equipment and temporary docks would be removed. Implementation of Program FEIR PDFs 4.2-4 and 4.2-7 and Mitigation Measures 4.8-1 and 4.8-2 would</p>	<p><b>4.8-1</b> To reduce the visual impact associated with construction equipment and materials, OC Dana Point Harbor shall prepare a Construction Management Plan that establishes access and staging locations for construction equipment, separate from those used by the general public. The contractor's construction equipment and supply staging areas shall be established away from existing Marina operations. The Plan shall specify the following:</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>reduce the visual impact associated with construction equipment.</p> <p>After construction is complete, the boat docks in the marina would be reoriented into new configurations. However, views of the project area would not be substantially different from existing conditions and would not be a significant effect of the project.</p>	<p>a. During construction and grading, the Contractor shall keep the site clear of all trash, weeds, and debris.</p> <p>b. The grading contractor shall not create large stockpiles of debris or soils, but shall seek to place smaller piles adjacent to each other to minimize visual impacts.</p> <p><b>4.8-2</b> To reduce the visual impact associated with construction equipment and materials, the Director, OC Public Works (OC PW)/Subdivision and Grading, or designee, shall require OC Dana Point Harbor to provide screened construction fencing around the construction staging area to temporarily screen views of construction equipment and materials. The construction screening shall be in place prior to issuance of any construction permit for development within the Marinas (refer to Land Use Plan [LUP] I-8.1.1-30 and FEIR No. 591, Mitigation Measure 4.2-2).</p>	
<p><b>Damage to Scenic Resources, including Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway:</b> The proposed project does not anticipate removal of any vegetation, including mature stands of trees within the viewshed of a State Scenic Highway. Therefore, no impacts to a State Scenic Highway are anticipated.</p> <p>Dana Point Harbor Drive, Dana Drive, and Island Way are designated as Scenic Highways (Landscape Corridor) in the City’s General Plan. Construction activities would have the potential to impact portions of these streets’ view of the project area. However, these impacts would be temporary during construction and would cease upon project completion. Program FEIR PDFs 4.2-4 and 4.2-7, and Mitigation Measures 4.8-1 and 4.8-2 would minimize impacts associated with construction on the views from these streets.</p>	<p>See Mitigation Measures 4.8-1 and 4.8-2 above.</p>	<p>Less Than Significant</p>
<p><b>New Sources of Light and Glare:</b> The proposed project would include replacement of the existing lighting on the docks. The replacement lighting would be low-intensity lighting with minimal spillover and would not substantially increase the amount of light and glare. To ensure that light and glare are designed to minimize off-site spillage, Program FEIR PDF 4.2-19 and Mitigation Measure 4.8-3 are proposed to reduce impacts associated with lighting.</p>	<p><b>4.8-3</b> To reduce impacts associated with lighting, an Exterior Lighting Plan (including outdoor recreation areas) for all proposed improvements shall be prepared prior to the issuance of a building permit. The lighting plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been</p>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	designed and located so that all direct rays are directed downwards, confined to the property, away from other areas and, where feasible, to minimize impacts to sensitive biological resource areas. The Lighting Plan shall be subject to review and approval by the Director, OC Dana Point Harbor (refer to FEIR No. 591, Mitigation Measure 4.2-4).	
<p><b>Cumulative Aesthetics Impacts:</b> There are no visual incompatibilities between the proposed Marina Improvement Project and other cumulative projects, as the Marina Improvement Project does not contribute new uses or structures to the Harbor. Therefore, the contribution of the proposed project to potential cumulative aesthetic impacts in the project area is considered less than significant.</p> <p>The proposed project would not contribute to a cumulative adverse impact related to light and glare or shade and shadow because the proposed project would be consistent with the existing developed marine Harbor setting. Therefore, no adverse cumulative impacts related to aesthetics or visual resources would result from the proposed project.</p>	No mitigation is required.	Less Than Significant
<b>RECREATION</b>		
<p><b>Project Vicinity Recreational Facilities:</b> The proposed project would not substantially affect any of the existing off-site, adjacent recreational uses and activities such as surrounding City, County and State parks. In addition, the marina waterside improvements are not anticipated to increase employment nor increase the permanent population that would utilize the existing recreational facilities in the project vicinity.</p>	No mitigation is required.	Less Than Significant
<p><b>Harborwide Recreational Facilities:</b> The proposed project would make improvements to the recreational amenities at the marinas. These improvements would enhance the existing recreational uses on site. Therefore, the proposed project would not result in any long-term adverse impacts related to recreation.</p>	No mitigation is required.	Less Than Significant
<p><b>Cumulative Recreation Impacts:</b> There are no recreational marinas in the immediate vicinity that would be considered to be within the cumulative study area for recreational impacts. Implementation of the proposed project in concert with the other Harbor Revitalization Projects is intended to increase lifespan and use of the recreational activities and associated facilities within Dana Point Harbor. Therefore, the proposed project would</p>	No mitigation is required.	Less Than Significant

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
not cumulatively, along with other projects in the vicinity, result in increased demand for recreational facilities or require development or expansion of additional recreational facilities.		
<b>HAZARDS AND HAZARDOUS MATERIALS</b>		
<p><b>Hazardous Materials During Construction:</b> The proposed renovations may pose a potential concern through the release of potentially hazardous materials during disturbance of any soils potentially contaminated by hazardous materials. Specifically, construction of the ADA gangways will require a certain amount of soil disturbance. Mitigation Measure 4.10-1 would mitigate potential impacts related to contaminated groundwater during excavation to a less than significant level.</p>	<p><b>4.10-1</b> During all excavation and construction activities for the Americans with Disabilities (ADA) gangway platforms and utilities, OC Dana Point Harbor shall require that all construction subcontractors address site safety requirements by complying with the appropriate health and safety measures required by the Occupational Safety and Health Administration (OSHA). Applicable specifications prepared by OSHA related to earth resources consist of Section 29 Code of Federal Regulations (CFR) Part 1926, which are focused on worker safety in excavations. In the event that suspicious odors are observed in soil, construction shall be terminated until the soil is properly characterized for hazardous waste content. Appropriate measures shall be taken in compliance with all applicable regulations for the characterization and disposal of hazardous materials (refer to FEIR No. 591, Mitigation Measure 4.3-4).</p>	Less Than Significant
<p><b>Hazardous Materials during Operation:</b> The operation of the marina as proposed would involve the use of small amounts of hazardous materials typical of such uses. The handling, use, storage, transport, and disposal of small amounts of substances used for boat cleaning and maintenance such as cleaners, solvents, and paints are subject to existing applicable federal, State, and local regulations. Because the uses on site remain the same as under current conditions, it can be assumed that these materials are already present on site, and that their use will continue. Substantial changes to the operational characteristics and types of potentially hazardous materials present on site are not anticipated, and no mitigation is required.</p>	No mitigation is required.	Less Than Significant
<p><b>Cumulative Hazards and Hazardous Materials Impacts:</b> The proposed project would not create potential significant cumulative impacts related to hazardous materials off site, as hazardous materials are not expected to be encountered. In addition, the Orange County Sheriff, Orange County Fire Authority, and the Orange County Harbor Patrol are</p>	No mitigation is required.	Less Than Significant

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

Potential Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
<p>trained in emergency response procedures for safely responding to accidental spills of hazardous substances in the Harbor, further reducing potential impacts. With implementation of MM 4.10-1 and compliance with all federal, State, and local regulations concerning the storage and handling of hazardous materials, the impacts of the proposed project in combination with reasonably foreseeable projects in the surrounding areas would not contribute to significant cumulative impacts to people or the environment due to exposure to hazardous materials or hazards.</p>		
<b>GREENHOUSE GASES</b>		
<p><b>Climate Change/GHG Emissions:</b> Greenhouse gas (GHG) emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with project-related vehicular trips and stationary source emissions, such as electricity used for lighting. GHG emissions generated by the proposed project would predominantly consist of carbon dioxide (CO<sub>2</sub>).</p> <p>Implementation of the project would result in GHG emission levels that would not substantially conflict with implementation of the GHG reduction goals under Assembly Bill (AB) 32 or other State regulations. Therefore, project-related impacts related to global climate change (GCC) are considered less than cumulatively significant. However, in order to ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, the Governor’s Executive Order (EO) S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Mitigation Measure 4.5-1 is proposed. Implementation of this measure would further reduce GHG emissions from construction and energy consumption sources.</p>	<p><b>4.11-1</b> OC Dana Point Harbor shall review and specifically approve contract provisions requiring that the following measures be incorporated into the design and construction of the project:</p> <p><b>Energy Efficiency Measures.</b></p> <ul style="list-style-type: none"> <li>• Install energy-efficient lighting and lighting control systems</li> <li>• Install solar or other energy-efficient outdoor lighting, such as light-emitting diodes (LEDs)</li> <li>• Landscape with native or drought-tolerant species to reduce water consumption and provide passive solar benefits, where feasible.</li> </ul> <p><b>Solid Waste Measures.</b></p> <ul style="list-style-type: none"> <li>• Reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) to the extent feasible; and</li> <li>• Provide storage areas for recyclables and green waste and adequate recycling containers located in public areas (refer to FEIR No. 591, Project Design Feature [PDF] 4.6-1).</li> </ul>	<p>Less Than Significant</p>

**Table 1.A: Summary of Project-Specific Impacts, Mitigation Measures, and Level of Significance**

<b>Potential Environmental Impact</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<p><b>Cumulative Greenhouse Gases:</b> Project-related GHG emissions are not project-specific impacts to global warming but are instead the project's contribution to this cumulative impact. Therefore, the SEIR analyzed whether the project's GHG emissions would contribute toward the potential for GCC on a cumulative basis. Implementation of Mitigation Measure 4.11-1 would further reduce GHG emissions from construction and energy consumption sources. In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. Therefore, project-related impacts in regard to GCC are considered less than cumulatively significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>

## 2.0 INTRODUCTION

### 2.1 PURPOSE OF THE SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

This Subsequent Environmental Impact Report (SEIR) addresses a project proposal for the renovation of the waterside facilities located within Dana Point Harbor, located in Capistrano Bay on the Southern Orange County coastline. The Harbor is a County of Orange (County) facility located within the City of Dana Point (City), is operated by OC Dana Point Harbor, a County agency, and is owned by the County. A location map and Harbor layout graphics are included in Chapter 3.0, Figures 3.1 and 3.2.

This Draft SEIR has been prepared to analyze and disclose the potential environmental effects associated with the construction and future operation of the proposed Dana Point Harbor Marina Improvement Project. This SEIR is intended to tier off the Dana Point Harbor Revitalization Program Environmental Impact Report (EIR) No. 591 (State Clearinghouse Number 2003101142) that was certified by the Orange County Board of Supervisors on January 31, 2006, hereafter referred to as Final EIR No. 591 (FEIR No. 591). The Marina Improvement Project is legally and functionally separate from and independent of the Revitalization Project but was analyzed in FEIR No. 591 to be sure that the overall impacts from development, including cumulative and related projects, were addressed.

An SEIR is an informational document intended to inform decision makers and the general public of the potential significant environmental impacts of a project. An SEIR also identifies possible ways to reduce or avoid significant impacts and describes reasonable alternatives to the project. The California Environmental Quality Act (CEQA) Lead Agency has the authority to approve or deny the proposed project (see Chapter 3.0 for a description of the project). The County, as the CEQA Lead Agency, will consider the information in this SEIR along with other information before taking any action on the project. The California Coastal Commission (CCC) also has discretionary authority over the Marina Improvement Project as discussed below in Section 2.1.4 and will rely on the SEIR when making decisions on the project. However, the CCC is not the CEQA Lead Agency for the Marina Improvement Project. An evaluation of potential project alternatives is included in this SEIR, including a No Project Alternative.

As set forth in the CEQA Guidelines (Section 15121(b)), the information in an SEIR does not control the agency's ultimate discretion in acting on a proposed project. The agency must, however, respond to each significant effect identified by the SEIR and must make specific findings related to mitigation or make a statement of overriding considerations to support a decision to proceed with the project even though certain significant effects cannot be reduced to a level of insignificance. To that end, this SEIR discusses the potentially significant effects of the proposed project, identifies measures for reducing or avoiding significant adverse effects, and evaluates alternatives to the proposed project. To aid in this effort, input has been provided by interested agencies, particularly during the Notice of Preparation (NOP) comment period and prior to completion of the report. The original NOP was circulated from November 27, 2007, to January 2, 2008, to inform Responsible and Trustee Agencies and the interested public that a SEIR was being prepared for the Marina Improvement Project. Due to

the length of time that passed prior to release of this SEIR, the NOP was reissued on December 21, 2009. After circulation of the NOP, comments were received from local, State, and federal agencies, as well as the general public. These comments, too, have been reviewed and where appropriate addressed in the SEIR. This SEIR may be used as an environmental database against which to evaluate future site-specific implementation permits and approvals for construction and development within the project area.

### **2.1.1 Authority**

This SEIR has been prepared in accordance with CEQA (Public Resources Code, Section 21000 et seq.), and the State Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Section 15000 et seq.). This SEIR also complies with the procedures for implementation of CEQA as required by the County (County of Orange 2000).

The Guidelines stipulate that an SEIR must be prepared for any project that may have a significant impact on the environment. The proposal under consideration is a “project” as defined by Section 15180 of the Guidelines.

FEIR No. 591 evaluated the entire Harbor Revitalization Plan at a program, or conceptual, level of detail and provided a project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168. FEIR No. 591 was certified by the Orange County Board of Supervisors and is being relied upon by the County for CEQA environmental review clearance for revitalization and redevelopment of the “commercial core” area, the Dry Boat Storage building, parking deck, hotel, and other Harbor ancillary support uses. The Program EIR and projects covered in the Program EIR are further described in Section 3.0, Project Description. The current Dana Point Harbor Marina Improvement Project was anticipated to require further environmental review in the Program EIR, as further discussed in Section 3.0, Project Description.

Upon preparation of an Initial Study (IS) for the Marina Improvement Project, the County determined that an SEIR should be prepared to focus on significant effects not discussed in the previous Program EIR and to satisfy the requirements of CEQA for the proposed Dana Point Harbor Marina Improvement Project. Consistent with CEQA Guidelines Section 15168, the County is proceeding with the SEIR, utilizing the analyses in the previous certified FEIR No. 591 as the basis to address the environmental impacts of the Marina Improvement Project. Therefore, the Marina Improvement Project is now being evaluated at a project, or construction level, focusing on significant effects not discussed in the previous Program EIR (CEQA Guidelines Section 15162).

### **2.1.2 Intended Uses of the SEIR**

On January 31, 2006, the Orange County Board of Supervisors certified the Dana Point Harbor Revitalization Program EIR No. 591 (State Clearinghouse Number 2003101142). The Dana Point Harbor Marina Improvement Project SEIR is intended to tier off FEIR No. 591 and is being prepared to comply with CEQA requirements for the waterside, or the Marina Improvement Phase, of the Revitalization Plan.



The approach of this SEIR is as described in Section 15162 of the State CEQA Guidelines. This section implements the requirements in Section 21166 of CEQA, which limit preparation of an SEIR to certain situations. This section provides interpretation of the three situations in which the statute requires preparation of an SEIR. This SEIR focuses primarily on the marina, or waterside, improvements within the overall Harbor Revitalization Plan. There is more project-specific information and more detailed marina design and engineering plans available at this time sufficient to address all environmental impacts at a detailed level not possible at the time FEIR No. 591 was prepared. This SEIR addresses all phases of Dana Point Harbor Marina Improvement Project, including construction and operation.

This SEIR may be used by the County, as CEQA Lead Agency, and other State and local agencies in considering discretionary actions relative to the proposed project, including but not limited to the agencies listed in Table 2.A that may use the SEIR for their respective approvals. However, before the SEIR is used for any future discretionary approval, it will be closely examined to determine whether its analysis adequately addresses the environmental issues raised by the proposed approval. If it does not, further environmental analysis may be required by CEQA for those approvals.

**Table 2.A: Lead Agency and Potential Responsible Agencies**

SEIR Recommendation	County of Orange Planning Commission
SEIR Certification	County of Orange Board of Supervisors
Project Plan Approval	County of Orange Board of Supervisors California Coastal Commission (CCC) State Lands Commission (consultation)
Coastal Development Permit (CDP)	CCC City of Dana Point (landside CDPs)
Section 404 Permit Navigable waters (dock renovations and pile placement)	United States Army Corps of Engineers United States Fish and Wildlife Service (USFWS) (consultation) National Marine Fisheries Service (NMFS) California Department of Fish and Game (CDFG) California Regional Water Quality Control Board, San Diego Region (RWQCB)
Section 10 Permit Navigable waters (docks)	United States Army Corps of Engineers United States Coast Guard (consultation)
Section 401 Certification water quality permits	San Diego RWQCB

This SEIR contains all the items required by CEQA, including a summary, project description, environmental setting, detailed impact analysis, and analysis of project alternatives.

**2.1.3 Lead Agency and Other Agencies Having Jurisdiction**

CEQA defines a “Lead Agency” as the public agency that has the principal responsibility for carrying out or approving a project that may have a significant adverse effect upon the environment. Other agencies that also have authority or responsibility to provide discretionary approval for a proposed

project are designated as “Responsible Agencies.” The Lead Agency and Responsible Agencies must consider the information contained in the SEIR prior to acting upon or approving the project. The County is the land owner and project proponent for implementation of the Dana Point Harbor Revitalization Plan that includes the Marina Improvement Project. As the agency with the authority to approve the proposed project and certify the SEIR, the County is the Lead Agency for the proposed project. The CCC also has discretionary authority over the Marina Improvement Project as discussed below in Section 2.1.4 and will rely on the SEIR when making decisions on the project. However, the CCC is not the CEQA Lead Agency for the Marina Improvement Project. In addition to approval of the project by the County, various other permits and approvals would be required from other responsible agencies. The potential Responsible Agencies that have been identified as of the preparation of this document and the required permits, approvals, or their associated responsibilities for the proposed project are identified in Table 2.A, Potential Responsible Agencies.

Trustee Agencies are State agencies having discretionary approval or jurisdiction by law over natural resources affected by a proposed project that are held in trust for the people of the State of California. Because the Dana Point Harbor was entrusted to the County by the Tidelands Act as the trustee of the Harbor for the people of the State of California, the California State Lands Commission is a Trustee Agency.

#### **2.1.4 California Coastal Act/Local Coastal Program**

The project site is located entirely within the Coastal Zone and is subject to regulation under the California Coastal Act of 1976 (Coastal Act). The Harbor is under the land use planning and regulatory jurisdiction of the City of Dana Point (landside areas) and the California Coastal Commission (CCC) (waterside areas) and is included in the certified Dana Point Specific Plan/Local Coastal Program (LCP; Dana Point LCP). In 1981, the County approved the LCP for Dana Point, known as the South Coast Planning Unit Dana Point LCP, and in 1985 the LCP was certified by the CCC. In 1991, when the City of Dana Point was formed, LCP authority for the entire City, including the Harbor, was transferred to the City. Landside areas remain under the oversight of the CCC as an appealable jurisdiction while the CCC exercises full discretionary authority over all waterside areas, including all aspects of the Marina Improvement Project.

Implementation of the Dana Point Harbor Revitalization Plan requires a series of subsequent approvals by the City of Dana Point and the CCC to modify existing regulatory documents, including the City’s LCP. The Revitalization Plan and District Regulations therefore required an LCP Amendment (LCPA). The LCPA includes a Land Use Plan (LUP) component and an Implementation Plan (IP) component, which together establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the Coastal Act. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

During the public and regulatory review and approval process with the City and the CCC, refinements to the LUP in the form of various suggested modifications were made to the proposed LCPA. Due to the incorporation of additional policies, regulations, and development standards by the CCC as part of the LCPA review and certification process, the previously certified FEIR No. 591 prepared for the

project required review to determine whether the previous conclusions remain valid. Therefore, an Addendum to FEIR No. 591 was prepared to provide a record of the changes resulting from the LCPA approval process that occurred subsequent to the certification of FEIR No. 591. The Addendum concluded that no new or more severe significant environmental effects were associated with the changes to the project that occurred since the 2006 FEIR No. 591 was certified.

The waterside portion of the project is now proceeding through a separate, independent process for environmental review and approval. The Coastal Development Permit (CDP) process regulates all development in the Coastal Zone. Any projects proposed within the Coastal Zone are required to obtain a CDP prior to construction. Because the project area includes submerged lands, the CCC would issue the CDP for this project.

## **2.2 NOTICE OF PREPARATION/PUBLIC SCOPING MEETING**

The County has complied with Sections 15063 and 15082 of the CEQA Guidelines by preparing and issuing a Notice of Preparation of a Draft SEIR. The NOP, which was distributed on November 27, 2007, included a description of proposed activities that are within the scope of the SEIR. The NOP was circulated to responsible agencies and interested groups as required by CEQA.

At the time the NOP was published and circulated for review and comment, the County had intended to include renovations to the seawalls as a part of the Dana Point Harbor Marina Improvement Project. However, subsequent to circulation of the NOP, it was determined that no remedial action to repair the entire length of the seawalls was immediately required; repairs to the seawall will be made where necessary.

Additionally, at the time the NOP was circulated, the County indicated that dredging in the West Basin area may be required to accommodate the proposed renovations to the OC Sailing and Events Center docks. However, the County has subsequently decided that no dredging will occur due to the subsurface rock conditions. Buoys with low tide warnings will be placed in this area to alert boaters during tidal fluctuations.

The removal of these two project components reduces the potential impacts associated with the proposed project and does not expand the scope of potential environmental impacts that will be analyzed in the SEIR, as originally described in the County's NOP and IS. Therefore, the County has identified no new probable environmental effects of the project, and recirculation of the NOP is not mandated by CEQA.

The NOP review/comment period ended on January 2, 2008. As stated previously, due to the length of time that passed prior to release of this SEIR, the NOP was reissued on December 21, 2009. The second review period ended on January 20, 2010. The IS responses, as well as NOP comments, were used to establish the scope of the issues addressed in this SEIR. Appendix A contains copies of the NOPs and the NOP comment letters that were received. Written responses to the NOP issued on November 27, 2007, were received from the following:

- California Department of Toxic Substances
- California Department of Transportation (Caltrans)
- California Department of Parks & Recreation
- City of Dana Point
- Native American Heritage Commission
- Orange County Fire Authority
- Orange County Clerk – Recorder
- South Coast Air Quality Management District (SCAQMD)
- State Clearinghouse
- Dana Point Yacht Club
- Anchor Marine (Nossaman, Guthner, Knox and Elliott, LLP)
- Rodger Beard
- Bruce Heyman
- April Salem
- Barbara Merriman
- Thomas Kulp
- Howard L. (Les) Howell

Written responses to the NOP reissued on December 21, 2009, were received from the following:

- California Department of Toxic Substances
- Native American Heritage Commission
- OC Public Works Department
- SCAQMD
- Bruce Heyman
- Michael Murphy
- Tom Smith

A public scoping meeting was held on December 8, 2007. Speaker cards for persons who gave verbal comments at the scoping meeting, as well as comments sheets collected, are also included in Appendix A.

## 2.3 AREAS OF CONTROVERSY

The purpose of the CEQA scoping process is to present the proposed project and to solicit input from interested individuals regarding environmental issues that should be addressed in this Draft SEIR. Major issues and concerns raised at the scoping meeting held on December 8, 2007, and comments submitted in writing during the NOP process included: (1) concerns regarding the reduction of the overall number of slips within the Harbor; (2) water quality concerns related to construction and operations; (3) navigation, congestion, and safety concerns related to boater traffic; (4) construction impacts related to traffic congestion and parking; (5) marine habitat concerns; (6) noise and air quality impacts; (7) concerns related to the project's relationship to the Harbor Revitalization Project; (8) concerns related to the existing live-aboards within the marinas. (9) establishing baseline existing conditions for purposes of the SEIR; (10) potential in-water boat maintenance and repair impacts, including copper contamination, resulting from changes to the shipyard; and (11) operational changes to the marinas and other specific areas where recreational and commercial boat and landside activities occur.

The Draft SEIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures designed to reduce or eliminate potentially significant impacts of the proposed project.

## **2.4 EFFECTS FOUND NOT TO BE SIGNIFICANT**

As required by State CEQA Guidelines, Section 15128, this SEIR identifies the potential effects of the proposed project that were determined to be significant and adverse. The proposed project would not result in adverse impacts related to the following: Agricultural Resources, Population and Housing, Cultural Resources, Mineral Resources, and Public Services and Utilities. These issues are briefly discussed below along with reasons they were determined not to be significant. For further information and additional discussion, please refer to the IS and NOP in Appendix A of this SEIR.

### **2.4.1 Agricultural Resources**

The project site is located in Dana Point Harbor in an urbanized area surrounded by commercial and residential development. The project site is located entirely in saltwater where there is no historical agricultural use. Based on the City's and County's General Plan, no farmland, agricultural zoning, or Williamson Act contracts exist within or adjacent to the project site. Therefore, implementation of the proposed project would not convert farmland to nonagricultural use. No impact to farmland or agriculture would occur. Therefore, this issue is not evaluated further in this SEIR.

### **2.4.2 Population and Housing**

The proposed Marina Improvement Project does not propose the construction of any new homes or businesses. In addition, the proposed Marina Improvement Project does not create additional employment that could increase the City's population. There would be no displacement or loss of residential units as a result of the project, and no replacement housing would be necessary.

Construction of the Marina Improvement Project may result in temporary displacement or relocation of persons living on their boats ("live-aboards"). There are currently 12 permitted live-aboards in the East Basin Marina and 29 permitted live-aboards in the West Basin Marina, for a total of 41. The number of live-aboards is relatively small due to the County's policy that allows only up to 10 percent of the total number of slips on any one dock and up to 3 percent of the total slips in the Harbor overall to be permitted for live-aboards (approximately 72 live-aboards could be permitted based on 2,409 existing slips). The live-aboards would be relocated as necessary within the Harbor. Because the displacement of the live-aboards would be temporary, and would be accommodated within the existing marinas, impacts are considered less than significant. Therefore, this issue is not evaluated further in this SEIR.

### **2.4.3 Cultural Resources**

There are no historic buildings or resources located on site that would be impacted by the proposed project. In addition, the presence of prehistoric cultural material is unlikely because the waterside

improvements are in a location that has historically been covered by water, and no cultural resources are likely to be discovered in the Harbor waters. In addition, the area was dredged to create the original Harbor and has been regularly dredged for maintenance purposes since its inception. Additionally, implementation of the proposed waterside project would not require significant earthmoving or earth-disturbing activities on land and is therefore not anticipated to result in significant impacts to fossil remains. Hence, impacts to cultural resources are not anticipated. Therefore, this issue is not evaluated further in this SEIR.

#### **2.4.4 Mineral Resources**

There are no known mineral resources within the Dana Point Harbor. The project does not involve the extraction of minerals and would not impact any known mineral resource recovery sites. Therefore, no impacts are anticipated, and this issue is not evaluated further in this SEIR.

#### **2.4.5 Public Services and Utilities**

The Marina Improvement Project would not create additional demand for police staff, police services, Harbor Patrol facilities or fire protection personnel or services because the overall capacity of the marina will not be increased. In addition, implementation of the project would not change response times. Further, the proposed project would not impact existing educational facilities and would not result in additional roadway maintenance, library service, or public transportation needs that would exceed the existing capacity and levels of service. Similarly, because capacity is not increased, the Marina Improvement Project would not increase the demand for natural gas, or cause an increased demand for water service or sewer facilities.

The facilities providing electrical service to the docks will be upgraded to current standards and Department of Boating and Waterways (DBW) guidelines. Due to the age of the existing facilities, it is anticipated that upgraded electrical facilities would provide up to an 85 percent increase in capacity. The Program EIR stated that although upgrades to the electrical facilities would be required, service was anticipated to be available to the project. The Program EIR concluded that impacts related to electrical facilities would be less than significant with implementation of standard conditions, project design features, and mitigation measures. Therefore, these issues are not evaluated further in this SEIR. Likewise, FEIR No. 591 did not identify any unavoidable significant impacts related to public services and utilities. However, FEIR No. 591 did include Standard Conditions (SCs), Project Design Features (PDFs), and Mitigation Measures (MMs) related to public services and utilities. The PDFs and MMs that are included in the Program EIR and are applicable to the Marina Improvement Project are restated verbatim below.

#### **Police Protection:**

- MM 4.10-7** Construction shall not block the main navigational channels of Planning Areas 8 through 12.
- MM 4.10-8** The emergency alley behind the Harbor Patrol office shall not be blocked during construction activities.

### Utilities:

- PDF 4.10-2** New utilities will be located underground to the extent feasible as part of the Project development. Utility undergrounding activities will be coordinated with the utility providers to ensure that service to adjoining utility customers is not interrupted.
- MM 4.10-9** The County of Orange shall continue to comply with the Building Code and Title 24 of the California Administrative Code relating to energy conservation.
- MM 4.10-10** Electrical, natural gas, and cable television services and equipment locations shall be coordinated with the applicable utility providers. Electrical, natural gas, and cable television services and equipment locations shall be coordinated with the applicable utility providers.

## 2.5 FORMAT OF THE SEIR

Pursuant to State CEQA Guidelines Section 15120(c), this SEIR contains the information and analysis required by Sections 15122 through 15131. Each of the required elements is covered in one of the sections described below.

### 2.5.1 Section 1.0: Executive Summary

Section 1.0 contains the Executive Summary of the SEIR document, listing all significant project impacts, mitigation measures that have been recommended to reduce any significant impacts of the proposed project, and the level of significance of each impact following mitigation. The summary is presented in a matrix (tabular) format.

### 2.5.2 Section 2.0: Introduction

Section 2.0 contains a discussion of the purpose and intended use of the SEIR, a background on the NOP and scoping process, and areas of controversy known to the Lead Agency, including issues raised by the public. A summary discussion of effects found not to be significant and, therefore, not included in the SEIR analysis is also included in this section.

### 2.5.3 Section 3.0: Project Description

Section 3.0 includes a discussion of the project's geographical setting, the history of the project site, and the project's goals, objectives, characteristics, and components.

### 2.5.4 Section 4.0: Environmental Analysis, Impacts, and Mitigation Measures

Section 4.0 includes an analysis of the project's environmental impacts. It is organized into topical sections, including Land Use, Geology and Soils, Hydrology and Water Quality, Transportation and Circulation, Air Quality, Noise, Biological Resources, Aesthetics, Recreation, and Hazardous

Materials. The environmental setting discussions describe the “existing conditions” of the environment on the project site and in the vicinity of the site as they pertain to the environmental issues being analyzed (Section 15125 of the State CEQA Guidelines).

The project impact discussions identify and focus on the significant environmental effects of the proposed project. The direct and indirect significant effects of the project on the environment are identified and described, giving due consideration to both the short-term and long-term effects as necessary (Section 15126.2[a] of the State CEQA Guidelines).

Cumulative impacts are based on the build out of the project and the surrounding area, including all other known proposed projects in the surrounding area.

The discussions of mitigation measures identify and describe feasible measures that could minimize or lessen significant adverse impacts for each significant environmental effect identified in the SEIR (Section 15126[c] of the State CEQA Guidelines). The level of significance after mitigation is reported in each section. Unavoidable adverse effects are identified where mitigation is not expected to reduce the effects to insignificant levels.

### **2.5.5 Section 5.0: Alternatives to the Proposed Project**

In accordance with CEQA, the alternatives discussion in Section 5.0 describes a reasonable range of alternatives that could feasibly attain the basic objectives of the project and that are capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance. Alternatives analyzed in Section 5.0 include: No Project/No Development Alternative; Reduced Project Alternative—East and West Basins; and Reduced Project Alternative—Americans with Disabilities Act (ADA) Improvements.

### **2.5.6 Section 6.0: Long-Term Implications of the Project**

Section 6.0 includes CEQA-mandated discussions required by Section 15126 of the State CEQA Guidelines regarding: (a) significant irreversible environmental changes that would result from implementation of the proposed project, and (b) growth-inducing impacts of the proposed project.

### **2.5.7 Section 7.0: Mitigation Monitoring and Reporting Program**

Section 7.0 provides a list of all proposed project Mitigation Measures, defines the party responsible for implementation, and identifies the timing for implementation of each control measure.

### **2.5.8 Section 8.0: Program EIR Mitigation**

Section 8.0 provides a list of mitigation measures contained in the Dana Point Harbor Revitalization Project Program EIR that are applicable to the Marina Improvement Project. These measures were adopted at the time the Program EIR was certified and are reiterated because they are deemed to be applicable to the proposed project.



## **2.5.9 Sections 9.0, 10.0, and 11.0**

Sections 9.0 and 10.0, respectively provide: the Draft SEIR preparers, technical report authors, and other experts included in preparation of the Draft SEIR; and the references used by the authors.

## **2.6 METHODOLOGY**

### **2.6.1 Impact Significance Criteria**

The CEQA Guidelines (Section 15126) require that an SEIR “identify and focus on the significant environmental effects” of a proposed project. “Effects” and “impacts” mean the same under CEQA and are used interchangeably within this SEIR. A “significant effect” or “significant impact” on the environment means “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (CEQA Guidelines, Section 15382).

In determining whether an impact is “significant” within CEQA’s definition, emphasis has been given to the basic policies of CEQA with respect to a particular subject matter, as well as to specific criteria for significance found in the CEQA Guidelines (Appendix G to the CEQA Guidelines). An effort has been made to avoid overly subjective significance criteria that are not based on specific CEQA policies and/or generally accepted thresholds upon which significance can be determined. For each subject area addressed within this SEIR, significance criteria that have been applied in analyzing the potential effects of the proposed project are identified.

### **2.6.2 Standard Conditions and Uniform Codes**

The project description is deemed to include compliance with standard conditions and the Uniform Building Code, as mandated by the County or other regulatory agency. These include, but are not limited to, compliance with all current State and County codes and regulations related to building and safety requirements, including those provisions of the Uniform Building Code adopted by the County, the Alquist-Priolo Act (seismic safety), and standard County building, grading, subdivision, and development requirements.

For analytical purposes, compliance with these regulatory requirements is not considered mitigation, but rather compliance with standard conditions. Where an otherwise significant impact is avoided, in whole or in part, due to the application of standard regulatory requirements, the text will note that an issue of environmental concern exists and that it is addressed by a standard regulatory requirement. The requirement and the manner in which it addresses the environmental issue are identified.

### **2.6.3 Impact Analysis**

The impact analysis presented in this SEIR identifies specific project-related impacts. As described above, the significance criteria provide the basis for distinguishing between impacts that are determined to be significant (i.e., impact exceeds the threshold of significance) and those that are insignificant. The existing environmental setting (i.e., existing conditions) is the basis for documenting the nature and extent of impacts anticipated to result from project implementation.

In assessing the impacts of the proposed project and the various CEQA alternatives, the County has conducted the following analysis:

- “Potential effects” of the project have been identified. Initially, no determination is made that they truly are “significant,” “adverse,” or “substantial.” This process merely identifies issues and impacts that may seem possible. “Potential effects” include issues identified in the Initial Study prepared for the proposed project, as well as those raised by the public, the County, and other public agencies.
- With respect to each potential effect, an analysis has been conducted to determine if, in fact:
  - The project produces the identified “effect”
  - The effect produces a substantial, or potentially substantial, change in the physical conditions within the area affected by the project (i.e., “significant”)
  - The changed conditions are “adverse”
- Where the investigation of a potential effect concludes that the effect is too speculative for evaluation, that conclusion is noted and the discussion of that effect is ended.
- Where the investigation demonstrates that a potential effect does or may (without undue speculation) occur, but is beneficial, that conclusion is noted.
- Where the investigation demonstrates that a potential effect is not significant or not adverse, that conclusion is noted.

#### **2.6.4 Mitigation Measures**

Where the impact analysis described above demonstrates that a potential effect does or may (without undue speculation) occur and is found to have a substantial or potentially substantial and adverse impact on physical conditions within the area affected by the project, that conclusion is noted and:

- Mitigation measures are provided that will minimize the significant effects and, in most cases, reduce them to levels of insignificance; and/or
- Where feasible mitigation measures are not identified that can reduce the significant effects to levels of insignificance, the significant effect will be identified as one that will result in “significant unavoidable adverse impacts.”

Where significant unavoidable adverse impacts are identified, a Statement of Overriding Considerations must be prepared by the approving agency before a project may be approved.

### **2.7 CEQA ALTERNATIVES**

Section 15126.6 of the CEQA Guidelines requires that an SEIR describe a range of reasonable alternatives to the project or to the location of the project that could feasibly attain the basic objectives of the project and evaluate the comparative merits of the alternatives. This SEIR identifies and describes several alternatives to the proposed project and assesses their environmental impacts. The alternatives analysis is included in Section 5.0, Alternatives to the Proposed Project.

As required by CEQA, this SEIR analyzes a range of alternatives that eliminate any significant adverse environmental effects of the proposed project or reduce those impacts to a level of insignificance. It also assesses whether each alternative would impede or achieve the project's objectives. The merits of each alternative have been evaluated and compared to the proposed project, and an "environmentally superior" alternative has been identified.

## 2.8 INCORPORATION BY REFERENCE

Section 15150 of the CEQA Guidelines permits an SEIR to incorporate by reference documents that provide relevant data. The documents hereby incorporated by reference are listed below, and the pertinent material is summarized throughout this SEIR, where information is relevant to the analysis of impact of the proposed project. All documents incorporated by reference are available for review at the OC Dana Point Harbor, 24650 Dana Point Harbor Drive, Dana Point, CA 92629.

Documents incorporated by reference include:

- City of Dana Point, 2006. Dana Point Harbor Revitalization Plan and District Regulations, LCPA (LCPA 06-03).
- Dana Point Harbor Revitalization Plan and District Regulations – LUP Component, LCPA (LCPA 1-08). CCC, effectively certified on October 13, 2010; and
- Dana Point Harbor Revitalization Plan and District Regulations – Implementation Plan (IP) Component, LCPA (LCPA 1-10). CCC, effectively certified on January 12, 2011.

The three documents above were prepared to satisfy the requirements of the Coastal Act for a Harbor LUP and to establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the Coastal Act. These documents replace the previous LUP, Zoning Ordinance, and design guidelines.

- RBF Consulting, 2006. Dana Point Harbor Revitalization Project Program EIR No. 591 (State Clearinghouse [SCH] No. 200310114).

The Program EIR was certified by the Orange County Board of Supervisors on January 31, 2006. The Program EIR evaluated the entire Harbor Revitalization Plan at a program, or conceptual, level of detail and provided project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168. Because more project-specific information and more detailed marina design and engineering plans have been developed, environmental impacts for the Marina Improvement Project can be addressed at a detailed level legally or factually not possible at the time the Program EIR was prepared. Consistent with CEQA Guidelines, Section 15168, this SEIR for the Marina Improvement Project builds upon and tiers on the analyses in the certified Program EIR to address the environmental impacts of the proposed project. Additional information regarding the Program EIR is included in Section 3.3 of this SEIR.

- LSA Associates, Inc., 2005. Dana Point Harbor Boat Launch Ramp Renovation Mitigated Negative Declaration.

A Mitigated Negative Declaration (MND) was prepared to provide environmental documentation and CEQA compliance for the Dana Point Harbor Boat Launch Ramp Renovation Project. The project includes replacement and improvement of the existing deteriorated boat launch ramp and apron. The Boat Launch Ramp Renovation Project is located immediately adjacent to the proposed Marina Improvement Project area. Information contained within the MND primarily related to marine biology has been utilized within this SEIR.

- Moffatt and Nichol, 2007. Dredge Material Evaluation. Dana Point Harbor Maintenance Dredging Report.

The “Dredge Material Evaluation” report provides sediment quality data for sediments within the proposed dredge area within the Harbor and provides an evaluation of dredging and disposal options. This report summarizes the physical, chemical, and biological data necessary to support dredging and disposal and provides a discussion of the results in terms of available guidelines. The intent of this report is to provide the regulators with enough data to make decisions on dredging and disposal suitability.

- County of Orange, Dana Point Harbor, Draft Marina Condition Evaluation, BLUEWater Design Group, January 2005.

The purpose of the Marina Condition Evaluation was to visually review the general condition of each facility and to identify deferred maintenance repair costs and expected recurring maintenance requirements. The purpose of the evaluation was to provide general condition assessments of the facilities and to aid in determining the extent of improvements required to extend the service life of the marinas or for marina renovations.

- Addendum to Final Environmental Impact Report No. 591, Dana Point Harbor Revitalization Project, State Clearinghouse (SCH) No. 200310114, County of Orange; September 2011.

Due to the incorporation of additional policies, regulations, and development standards by the CCC as part of the LCPA review and certification process, the previously certified FEIR No. 591 was reviewed to determine whether the previous conclusions remain valid. An Addendum to FEIR No. 591 was prepared to provide a record of the changes resulting from the LCPA approval process that occurred subsequent to the certification of FEIR No. 591. The Addendum concluded that no new or more severe significant environmental effects were associated with the changes to the project that occurred since the 2006 FEIR No. 591 was certified.

## **3.0 PROJECT DESCRIPTION**

### **3.1 PROJECT LOCATION AND SETTING**

Dana Point Harbor (Harbor) is located in Capistrano Bay on the Southern Orange County coastline. The Harbor is a County of Orange (County) facility located within the City of Dana Point (City) and offers recreational boaters, County residents, tourists, and others a number of recreational activities, retail shopping, and dining opportunities. The facility is operated by OC Dana Point Harbor, a County agency, and is owned by the County. The County was designated over 40 years ago by the Tidelands Act as the trustee of the Harbor for the people of the State of California.

The Harbor is bordered by the Pacific Ocean to the south; Dana Headlands and Old Cove Marine Preserve to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north. Interstate 5 (I-5), located approximately two miles east of the Harbor, runs north-south through the City and provides regional access to the Harbor. The Harbor is primarily accessible from Pacific Coast Highway and the Street of the Golden Lantern via Dana Point Harbor Drive (see Figure 3.1). Secondary access is provided by Cove Road and the Pacific Ocean.

Land uses surrounding the Dana Point Marina Improvement Project within the Harbor boundaries include Marine Services, commercial retail, restaurants, public parking, public waterways, yacht clubs, Harbor patrol facilities, a hotel, Harbor-related public recreational areas, the Ocean Institute, and public parks. Residential, commercial, and hotel uses are located to the north and west along the coastal bluffs, outside of the Harbor boundaries.

Some of the boater-related terms used in this document may be unfamiliar to readers. Therefore, a list of definitions is provided in Table 3.A in order to orient readers to the terms used to describe common features of the Harbor's Marinas and waterfront developments.

### **3.2 PROJECT HISTORY AND BACKGROUND**

The construction of Dana Point Harbor began in the late 1960s, with the Harbor officially being dedicated on July 31, 1971. Since its creation nearly four decades ago, many parts of the Harbor's infrastructure, including dock facilities and landside facilities such as storm drains, sewers, parking lots, and some of the buildings, have deteriorated and are in need of modernization and/or replacement. In 1997, a Task Force was formed to help develop a plan for the future of the Harbor. The Dana Point Harbor Revitalization Project (Revitalization Plan) was developed over the next several years and officially adopted by the County Board of Supervisors and the Dana Point City Council in 2006. A Program Environmental Impact Report (Program EIR) was prepared for the overall Harbor Revitalization Project (landside and waterside areas) and certified by the Orange County Board of Supervisors on January 31, 2006 (County of Orange Dana Point Harbor Revitalization Program FEIR No. 591).

**Table 3.A: Boater Terminology Definitions**

<b>Breakwater</b>	A barrier that protects a Harbor or shore from the full impact of waves.
<b>Buoy</b>	A floating object marking the navigable limits of channels, sunken dangers, isolated rocks, telegraph cables etc.
<b>Dock</b>	A platform that forms the space for receiving or mooring a boat.
<b>Doublewide</b>	A slip designed to accommodate two boats between fingers
<b>Dry Boat Storage</b>	A landside system used for indoor or outdoor storage of boats, typically storing the boats in vertical rack systems.
<b>End Ties</b>	Locations where boats may be tied to the end of a mainwalk; usually in the main channel of a marina
<b>Fairway</b>	The unobstructed channel between boat slips; used to access individual slips
<b>Fingers</b>	Docks separating boats into slips
<b>Float</b>	A pier that floats on top of the water, with guide piles driven to maintain its location.
<b>Freeboard</b>	The distance between the statutory deck line of a boat and the waterline
<b>Gangway</b>	A ramp used to access floats and docks from the shore
<b>Headwalk</b>	A dock providing access from a gangway to several connected mainwalks
<b>Jetty</b>	A structure, usually constructed of large rock, that projects into a body of water to influence the current or tide or to protect a Harbor or shoreline from storms or erosion, similar to a breakwater.
<b>Main Channel</b>	Navigable channel used to enter/exit the marinas
<b>Mainwalk</b>	A dock providing access to slips
<b>Mast-up Storage</b>	A landside storage lot where boats with masts in a vertical position can be stored
<b>Mole</b>	A solid fill barrier that protects a Harbor or shore from the full impact of waves, similar to a breakwater or jetty.
<b>Pier</b>	A pile-supported structure over water that extends out from the seawall.
<b>Pile or Piling</b>	A long, slender column, usually of timber, steel, or reinforced concrete, that is driven into the ground to carry a vertical load. Piers and floating docks are typically supported or secured by pilings.
<b>Quay</b>	A wharf usually built parallel to the shoreline along the edge of a body of water.
<b>Revetment</b>	A facing of wood, stone, or any other material placed to sustain an embankment; also, a retaining wall.
<b>Riprap</b>	A loose assemblage of broken stones erected in water or on soft ground as a foundation.
<b>Seawall</b>	A retaining wall that separates land from a body of water.
<b>Side Ties</b>	Locations where one side of a boat may be tied to the side, or parallel with a dock
<b>Whaler</b>	A wooden frame structure that frames and supports the floatation foam within a dock system

FEIR No. 591 evaluated the entire Harbor Revitalization Plan at a program or conceptual level of detail and provided project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168. See Section 3.3 for further discussion regarding the use of the previously certified Program EIR.

### **FEIR No. 591**

Implementation of the Dana Point Harbor Revitalization Plan required a series of subsequent approvals by the City of Dana Point and the California Coastal Commission (CCC) to modify existing regulatory documents, including the City's Local Coastal Program (LCP). The Revitalization Plan and District Regulations therefore required an LCP Amendment (LCPA). The LCPA includes a Land Use Plan (LUP) component and an Implementation Plan (IP) component, which together establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the Coastal Act. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

The changes to the Harbor LUP certified by the CCC resulted in several changes to the plan as proposed, including removal of the lighthouse land use designation; the elimination of a freestanding Marine Retail store in PA 1; a "no net loss" or maximum of 155 slip-loss policy for boat slips; a requirement to maintain a minimum 1.6-acre (ac) shipyard; a requirement to provide dry boat storage capacity of 493 spaces; a minimum of 334 parking spaces for vehicles with trailers; and adoption of a parking standard of 0.6 space per boat slip and 1 space per 3 passengers for sport fishing, charter boat, and passenger ferry operations. The suggested modifications by the CCC did not intensify the proposed project, but rather clarified or refined the description and/or locations of the proposed project components.

Due to the incorporation of additional policies, regulations, and development standards by the CCC as part of the LCPA review and certification process, the previously certified FEIR No. 591 required review to determine whether the previous conclusions remain valid. An Addendum to FEIR No. 591 was prepared to provide a record of the changes resulting from the LCPA approval process that occurred subsequent to the certification of FEIR No. 591. The Addendum concluded that no new or more severe significant environmental effects were associated with the changes to the project that occurred since the 2006 FEIR No. 591 was certified.

The waterside portion of the project is now proceeding through a separate, independent process for environmental clearance and approval. As part of the CCC approval, a suggested modification was included to establish a goal for any dock replacement to attempt to achieve a “no net loss” of slips harborwide, but if not feasible to limit the loss of boat slips to a maximum of 155 slips with an average slip length not to exceed 32 feet (ft), as stated in LUP Policy 4.2.2-6:

**LUP Policy 4.2.2-6:** Protect and enhance berthing opportunities in Dana Point Harbor. The goal for any dock replacement should be no net loss of slips harbor-wide. However, if conformance with current engineering and Americans with Disabilities Act (ADA) design requirements and/or the provision of larger slips to meet demands, requires a reduction in the quantity of slips in existing berthing areas, those slips should be replaced, if feasible in new berthing areas elsewhere in the Harbor (e.g. within a portion of the ‘safe harbor’ area near the east breakwater). Priority shall be given to provision of slips that accommodate boats less than 25 feet in length. The average slip length shall not exceed 32 feet. If new berthing areas are not available or are limited in size, the net loss of slips harbor wide shall be minimized and shall not exceed 155 slips.

The Marina Improvement Project has been designed to be consistent with the approved LUP component of the LCPA for the Dana Point Harbor Revitalization Project.

### **3.3 USE OF THE PREVIOUSLY CERTIFIED FEIR NO. 591**

As stated above, the Dana Point Harbor Revitalization Program EIR No. 591 (State Clearinghouse Number 2003101142) was certified by the Orange County Board of Supervisors on January 31, 2006. As defined by California Environmental Quality Act (CEQA) Guidelines Section 15168, “A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) As logical parts in the chain of contemplated actions; (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.”

FEIR No. 591 evaluated the entire Harbor Revitalization Plan at a program, or conceptual, level of detail and provided project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168.

As illustrated on Figure 3.2, the Harbor was divided into 12 planning areas for the purpose of establishing land use regulations and development standards. The planning and environmental analysis of the landside and waterside improvements were analyzed together in FEIR No. 591, but can be considered separately for planning, funding, and future environmental processing purposes. Portions of Planning Area (PA) 1 and all of PA 2 (known as the Commercial Core) were analyzed at a project level since project-specific construction-level details were available for those planning areas. FEIR No. 591 provided a programmatic analysis of the remaining PAs 3 through 12 and the remaining portion of PA 1. The proposed project addressed in this Subsequent Environmental Impact Report (SEIR) is composed of waterside PAs 8 through 12, as indicated on Figure 3.2. PAs 3 through 7 and the portion of PA 1 that includes the fuel dock facilities will require future additional environmental review as future projects and funding sources are identified.



As noted in FEIR No. 591 and explained above, the current project (PAs 8 through 12) was anticipated to require further environmental review by the County prior to consideration. Because more project-specific information and more detailed Marina design and engineering plans have been developed, environmental impacts for the Marina Improvement Project can be addressed at a detailed level not possible at the time Program EIR No. 591 was prepared and subsequently certified by the Orange County Board of Supervisors. Consistent with the concept of tiering and requirements in CEQA requiring a SEIR (Guidelines Section 15162), the Marina Improvement Project is not dependent on and is a complete and independently functioning project that can proceed as a separate project distinct from the Commercial Core Project and other landside projects. The County prepared an Initial Study (IS) to determine the appropriate documentation required for compliance with CEQA. The IS is included as Appendix A to this document. The analysis contained in the IS concluded that the project may have different effects on the environment than were analyzed in the previous Program EIR and that substantial new information and analyses are needed to assess the impacts on the environment. At the time FEIR No. 591 was prepared for the Revitalization Plan, specific construction-level detail was not available for the Marina Improvement Project. CEQA Guidelines (Section 15162) state that an SEIR should be prepared for a project under certain circumstances where major additions or changes to the previous EIR are required, and when new information of substantial importance not known at the time of the previous EIR shows that the project will have significant effects not discussed in the previous EIR. Therefore, because schematic level plans have subsequently been developed for the Marina Improvement Project, and these improvements and changes in Marina operations could potentially cause environmental impacts that can now be analyzed with greater detail, the IS determined that an SEIR is required for the project. By way of incorporating the findings of FEIR No. 591 and the environmental effects of the entire Harbor Revitalization Project, the Executive Summary of FEIR No. 591 is included in Appendix A of this SEIR.

The IS (see Appendix A) includes an overview of FEIR No. 591 and a summary of applicable Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM) for each environmental topic. After analyses of the Marina Improvement Project, several measures were deemed no longer applicable. Additionally, the listed PDFs, SCs and MMs were restated verbatim in the IS as included in the certified Program FEIR. However, during the subsequent approval process for the Land Use Plan component of the Local Coastal Program Amendment (LCPA), several of these measures were clarified and became Land Use Plan (LUP) Policies within the revised Dana Point Harbor Revitalization Plan Land Use Plan. Where applicable, the wording has been revised throughout this SEIR to be consistent with the approved LUP Policy. Refer to Table 8.A in Section 8.0 of this SEIR for a list of mitigation measures deemed applicable to the Marina Improvement Project that are being carried forward and incorporated into the current project to reduce potential impacts.

Consistent with CEQA Guidelines, Section 15168, the County is proceeding with the SEIR, building upon and tiering on the analyses in the certified Program EIR to address the environmental impacts of the project. Therefore, the Marina Improvement Project is now being evaluated at a project or construction level. In accordance with CEQA Guidelines Section 15162, this SEIR is being prepared to focus on project details and environmental effects not identified at the time FEIR No. 591 was certified.

The analysis contained in this SEIR incorporates by reference the documentation contained in the certified Dana Point Harbor Revitalization Plan Program EIR No. 591. Attached to the IS as part of Appendix A is the Executive Summary from FEIR No. 591, which includes a summary of project impacts and issues. In addition, as stated in FEIR No. 591, applicable mitigation measures developed in FEIR No. 591 shall be incorporated into subsequent actions in the program. Table 8.A in Section 8.0 of this SEIR includes a list of mitigation measures deemed applicable to the Marina Improvement Project.

### **3.4 PROJECT SITE AND SITE DESCRIPTION**

#### **Dana Point Harbor**

The Harbor comprises three areas: a landside area along Dana Point Harbor Drive, adjacent to the bluffs; the Island area (connected by a bridge to the landside); and marinas consisting of docks, commercial fishing slips, federal anchorage areas, Ocean Institute dock, tall ship docks for the Spirit of Dana Point and the Pilgrim in addition to the OC Sailing and Events Center docks, fishing pier, fuel dock, sport fishing dock, visitor slips, marine services docks, embarcadero docks, launch ramp floats, and Harbor Patrol docks. The Marina area includes two basins: the West Basin and the East Basin, generally referred to as the West Marina and the East Marina, respectively. Figure 3.3 illustrates the existing Dana Point Marina dock, slip, and waterway facilities. Landside improvements are not included within the scope of this SEIR. In addition, some of the existing Marina facilities and docks are not a part of the Dana Point Harbor Marina Improvement Project. The following several Marina components will be left unchanged by the proposed project: (1) fishing pier, (2) tall ship docks, (3) Ocean Institute docks, (4) Dana Point Yacht Club slips, (5) fuel dock, (6) bait barge (will however, be temporarily relocated during construction), (7) launch ramp floats, and (8) the Catalina Express dock.

The County is responsible for operation and maintenance of all facilities and property within the Harbor. The County contracts with Marina operators for the management of the East and West Marinas, surface storage and boat launch facilities. Public water-oriented recreation opportunities offered at Dana Point Harbor, aside from boating-related activities, include (1) fishing pier; (2) Harbor cruises and certified dive charters; (3) Baby Beach for young swimmers and the launching of nonmotorized watercraft; (4) whale watching; (5) other personal watercraft; (6) paddle boarding; and (7) windsurfing.

#### **Dock Facilities**

Construction of the existing dock systems in the East and West Basins began in the late 1960s, with the Harbor officially being dedicated on July 31, 1971. According to the Draft Dana Point Harbor Marina Condition Evaluation Report (BlueWater Design, January 2005), the design of East & West Basin docks are typically known as the "Huntington" dock system. This type of dock construction historically has a serviceable lifespan of up to 30 years, with a maximum of approximately 38 years. The average age of the current dock facilities in the Marinas is 38 years. The docks and pilings are deteriorating, requiring increasing maintenance, and the ramps pre-date the requirements of the Americans with Disabilities Act (ADA). According to the Draft Dana Point Harbor Marina Condition Evaluation Report, both Marinas are nearing the end of their useful lifespan, and most components of the dock system need to be replaced or will require substantial increases in maintenance.

The principal structural components comprising the dock system at Dana Point Harbor include the deck, timber whalers, and floatation. The floating structures are constructed from modular concrete-encased foam pontoons. Each pontoon ranges in width from 3 to 4 ft for the fingers to 6 to 8 ft for the end ties and main walks. Each pontoon length varies from 8 to 10 ft. The typical main walk pontoon unit is an 8 x 8 ft square pontoon float, while the finger floats vary based on the length of the slip. Representative photos depicting the typical gangway and deck components construction are provided in Figure 3.4.

Timber whalers hold the float units together. These timbers run along the edges of the float units and are bolted to the concrete floats, thereby connecting the pontoons together. The whalers are the structural elements that transfer the loads from one pontoon section to the next. Based on the Draft Dana Point Harbor Marina Condition Evaluation (BlueWater Design, January 2005), the cause of the widespread deck failure throughout the Marina is because the whaler design for fingers greater than 30 ft in length is inadequate for the loads affecting the fingers. This is also the case for the majority of the main walk sections. In addition, the stresses in the whalers are greater than the capacity of the bolted connection in the cantilever deck section; the cantilever section fails by cracking or breaking completely from the pontoon.

The Marina dock systems are anchored with both concrete and concrete-filled steel pipe piles that are approximately 14 inches in diameter. According to the Draft Dana Point Harbor Marina Condition Evaluation Report, all of the steel piles exhibit some level of corrosion, ranging from minor to very extensive, within the region of the pile that is subjected to repeated tidal inundations.

The shoreline interface of Dana Point Harbor is protected by a combination of quay wall and side slope panel protection. The bulkhead is a cast-in-place concrete L-wall that borders the water's edge in the East and West Marinas and the landside perimeter of the Harbor. The basin side slopes are protected within the east and west basins by a grid of precast concrete panels set on grade. Areas outside of the east and west basins are armored with stone riprap.

### **3.5 PROJECT GOALS AND OBJECTIVES**

The primary goals of the project are to revitalize Dana Point Harbor as a popular destination for boaters, local residents, and tourists while maintaining the unique character of the Harbor. The project goals include implementation of Coastal Act Policies in conformance with the approved Dana Point Harbor Revitalization Plan Land Use Plan, including: preservation of marine resources; promoting low-cost recreational opportunities; promoting practices that improve water quality; promoting public access opportunities; and providing a slip mix that minimizes slip loss.

Specific project objectives include:

- Maintain the Harbor's current character and family atmosphere
- Renovate and replace the deteriorating docks and slips
- Satisfy ADA requirements for dock areas of the Harbor
- Maintain a full-service Harbor

- Enhance the level of services for boaters
- Update commercial fishing facilities
- Maximize the number of slips available in the East and West Marinas for public rental by relocating many of the yacht broker slips to another area of the Harbor.
- Relocate guest dock facilities and provide new dinghy docks convenient to Day-Use Commercial uses
- Upgrade utility infrastructure to all areas of the Marinas
- Maintain a safe environment for all levels of the boating community, Harbor users, and merchants
- Provide improvements in accordance with California Department of Boating and Waterways (DBW) guidelines, including the placement of boats in correctly sized slips
- Update sport fishing dock

### 3.6 PROJECT CHARACTERISTICS

The project addressed in this SEIR includes removal of nearly all floating docks and piles in the West and East Marinas; potential repair and/or reconstruction as necessary of portions of the quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, improved lighting on the docks and supporting utilities within both Marina areas. Additionally, new Dry Boat Storage Staging docks, and dinghy docks, along with potential renovations to the OC Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed project. The project also includes public access improvements to gangways and docks in compliance with the ADA guidelines and construction of new docks along the eastern breakwater. Based on the CCC's suggested recommendation that the Marina Project result in the loss of no more than 155 slips, the project addressed in this SEIR includes installation of 2,293 slips for a net loss of 116 slips. The project addressed in this SEIR is based on a schematic preliminary design and is subject to revisions resulting from refinements during future design and engineering phases. Operational changes within the East and West Marinas due to dock and access changes are also described and addressed in this SEIR. Table 3.B contains a list of the proposed Dana Point Harbor Marina Improvement Project components.

Docks and facilities that are not a part of the project and are therefore not included in Table 3.B include the fishing pier, tall ship docks, Ocean Institute docks, Dana Point Yacht Club slips, fuel dock, bait barge, and Catalina Express dock. These dock and slip facilities are not included in the Dana Point Harbor Marina Improvement Project, and changes to these Harbor components are not addressed in this SEIR. It should be noted that most of the project components in Table 3.B are described in terms of the number of existing and proposed slips; however, several areas, including the OC Sailing and Events Center docks, dinghy docks, sport fishing docks, marine services docks, and the Embarcadero/Dry Boat Storage Staging docks, are described in linear feet, not slip numbers. The reason for this is because these dock areas accommodate a varying number and size of boats based on the fluctuating use of these areas by different boats and are not included in the permanent slip count. The conceptual layout of proposed Marina facilities and the dock locations are illustrated in Figure 3.5 and are described in further detail below.

**Table 3.B: Proposed Project Components**

Element	Existing Conditions	Marina Improvement Project
Floating Docks (East/West Marinas and Satellite Areas)	Floating docks supported by 1,306 concrete filled steel pipe piles  2,409 boat slips  Average slip length of 29.85 feet (ft). Majority of West Marina slips oriented west-east. East Marina slips oriented north-south  Approximately 492,530 square feet (sf) of area covered by floating docks	Remove existing piles and replace with 969 piles  2,293 boat slips (loss of 116 slips)  Average slip length not to exceed 32 ft  West Marina slips to be reoriented to a north-south direction. East Marina slips to remain oriented north-south  Approximately 459,540 sf <sup>2</sup> of area covered by floating docks
Access	52 gangways	59 gangways plus 9 Americans with Disabilities Act (ADA) gangways, for a total of 68 gangways
Boat Services	3 sewage pumpouts	4 upgraded sewage pumpouts <sup>3</sup>
Utilities	electrical service, water service, telephone and cable service  Dock Boxes	Upgraded electrical service, water service, telephone and cable service  New Dock Boxes
Embarcadero/Dry Boat Storage Staging Docks	766 linear feet (lf)	1,300 lf
Marine Services Docks	1,190 lf	896 lf
Sport Fishing Docks	1,350 lf	1,350 lf
Guest Slips	42 slips	46 slips
Dinghy Dock	No dinghy dock	374 lf
Harbor Patrol Slips	8 slips plus 2 emergency side-ties	8 slips plus 2 emergency side-ties
Commercial Fishing Slips	15 slips plus 1 end-tie for California Department of Fish and Game boat	15 slips plus 1 end-tie for California Department of Fish and Game boat
OC Sailing and Events Center Docks	890 lf	893 lf
Temporary/Yacht Broker Docks	No existing temporary/yacht broker docks	1 dock located along the eastern breakwater – approx. 2,590 lf <sup>4</sup>

<sup>1</sup> Includes the following: 4 slips at the guest docks, 3 slips at the Harbor Patrol docks and 62 slips at the temporary/yacht broker docks

<sup>2</sup> Includes Temporary Docks during estimated 8 years of construction, and becoming Yacht Broker docks after completion of construction.

<sup>3</sup> Pumpout facilities for individual vessels will be in accordance with CCC requirements and determined at the time CDPs are processed for Marina improvements.

<sup>4</sup> Subject to discretionary approvals to be obtained with completion of the Marina Improvement Project

**Embarcadero/Dry Boat Storage Staging Docks (PA 11).** The existing Embarcadero docks include 766 linear feet (lf) of dock space used for Embarcadero Marina Services, including boat and watercraft rentals, sailing instruction, and dry boat storage hoist operations. The Embarcadero docks are located in the basin adjacent to the public boat launch ramp.

With project implementation, the Embarcadero docks will be completely replaced and renamed the Embarcadero/Dry Boat Storage Staging docks. These docks will be located adjacent to the future Dry Boat Storage building in the basin area adjacent to the boat launch ramp, as shown in Figure 3.6. A new ADA-accessible gangway is also included in the plans for renovation to these docks.

The Embarcadero/Dry Boat Storage Staging docks will accommodate a varying number and size of boats on a fluctuating basis. Therefore, capacity of this area is discussed in terms of linear feet, not number of slips. These docks will contain 1,300 lf of dock space and will continue to provide dock space for Embarcadero Marina operations, as well as for staging boats as they are taken in and out of the storage facility. The Dry Boat Storage building is a part of the landside improvements addressed in the previously certified Program EIR. The design of the Dry Boat Storage building was revised as a result of City and Coastal Commission approvals during the adoption of the FEIR and approval of the LCPA. The FEIR included two Dry Boat Storage buildings with a capacity for storing 800 boats; the Dry Boat Storage buildings were subsequently reduced to one building, reduced in height, with a decreased capacity for 400 boats. Therefore, it is anticipated that the Dry Boat Storage building will house up to 400 boats, which will be operated as a valet launch service and not require trailers or launch vehicles. The Dry Boat Storage building will be supported on piles and will extend out over portions of the new docks, as illustrated in Figures 3.7a through 3.7c. The building has a large door on the south end over the water, which will allow natural light into the overhang area when it is open. In addition, the siding on the lower portions of the wall that overhang the water is proposed to be translucent panels in order to allow natural light into the same overhang area.

Operations related to the Embarcadero Marina are anticipated to remain similar to existing conditions, with boat rentals, sailing lessons, and operation of one hoist for boats stored in surface spaces or on trailers. Overall, approximately 400 boats will be housed in the Dry Boat Storage building and 93 boats will remain in surface parking spaces, providing a total storage capacity for 493 boats. It is anticipated that use of this basin will remain consistent with existing and historic levels. Boats will be staged at the docks by Embarcadero staff as part of the dry dock storage service, which will help eliminate potential boater loading/unloading conflicts and congestion in the staging area. Operational changes in this project area will be further addressed in the discussion of impacts in Section 4.0 of this SEIR.

**Marine Services Docks (PA 11).** The proposed project includes the renovation of the Marine Services docks in their present location in the Marina. The existing and planned Marine Services docks accommodate a varying number and size of boats based on a fluctuating basis, not a permanent slip count. Therefore, capacity is discussed in terms of linear feet, not number of slips. The Marine Services docks currently contain 1,190 lf of dock space, which will be reduced to 896 lf with project implementation. The shipyard currently utilizes approximately 560 lf of this dock space for uses directly related to shipyard operations. The remainder of the dock space is used for monthly rental purposes (e.g. personal watercraft rentals).

The possible future reduction of dock space at the Marine Services docks will proportionally reduce the amount of boating activity at this location. The proposed configuration and location of the Marine Services docks are illustrated on Figure 3.6.

**Sport Fishing Docks (PA 11).** The sport fishing docks will be renovated in their existing location, as illustrated in Figure 3.8. The sport fishing docks accommodate a varying number and size of boats based on a fluctuating basis. Therefore, capacity is discussed in terms of linear feet, not number of slips. The existing sport fishing docks have approximately 1,350 lf of dock space, and this linear footage will remain the same. The preliminary design plans indicate that the mainwalks will extend approximately 10 ft further into the channel. However, this extension is due to the installation of a new 10 ft headwalk; the fingers will remain the same length as in the existing condition and do not create any increased capacity at these docks. The proposed design allows for inclusion of a new ADA-accessible gangway and a larger range of vessel sizes at the sport fishing docks. Operations at the sport fishing docks will remain essentially the same as existing conditions because no increased capacity is planned.

**Guest Slips/Dinghy Dock (PA 10).** The existing guest slips are currently located on the cove side of the West Marina near the OC Sailing and Events Center, as shown earlier on Figure 3.3 (PA 9). The existing guest slips will be removed from the West Marina, and a new guest dock will be located on the cove side of the East Marina, adjacent to the planned Commercial Core. The proposed project could increase the number of existing guest slips from 42 to a total of 46 guest slips. The proposed Marina Improvement Project will provide a minimum of 42 guest slips in accordance with approved LUP Policy 4.2.2-5. The guest slips are illustrated in Figure 3.9.

No public, general use dinghy dock space is currently available in the Harbor. The new dinghy docks will be located near the commercial core in the East Marina on the cove side of the Harbor. The dinghy docks are intended for use by small dinghies on a short-term temporary basis for convenient access to the commercial core for such purposes as shopping, dining and loading and unloading supplies. Because dinghy docks accommodate a varying number and size of boats on a fluctuating basis, capacity is discussed in terms of linear feet, not number of slips. A total of 374 lf is included in the proposed project as dinghy dock space. A new ADA gangway is also included in the plans for the new dinghy docks. The ADA gangway will also provide access to the guest slips because a headwalk connects the dinghy docks to the guest slips. The dinghy docks are illustrated on Figure 3.9.

The guest slips and dinghy docks will replace some existing slips in the East Marina, but will create space for additional slips in the West Marina. Boater activity associated with guest slips is typically higher as compared to regularly rented slips. Moving the slips from one marina to another will slightly increase traffic in the East Basin and slightly decrease traffic in the West Basin. Operations at the new dinghy dock will be a new use in the Harbor because no public general use dinghy dock space is currently available. However, dinghy boat traffic is not expected to congest or cause conflicts due to the relatively small size of the boats and the nature of their maneuverability.

**Harbor Patrol Slips and Dock (PA 10).** The proposed project includes the renovation of the Harbor Patrol slips and dock in their present location on the island side of the East Marina, as shown in Figure 3.10. The schematic design for this area provides for one long dock near the channel will be renovated as a platform dock area. The platform design meets the Harbor Patrol's needs for emergency boat access and provides more deck space for potential emergency situations. Currently there are eight slips plus two emergency side-ties located adjacent to the emergency platform. The proposed project does not change the number of slips.

Operations at the Harbor Patrol docks are anticipated to remain essentially the same as in the existing condition because there is no change in capacity or location.

**Commercial Fishing Slips (PA 10).** The commercial fishing slips are connected by a headwalk to the Harbor Patrol docks. The commercial fishing slips will be renovated in their present location but they will be extended out to the pier headline in the channel, as illustrated on Figure 3.10. The dock extension will allow for additional rental slips in the East Basin and accommodates commercial fishing vessels that will be displaced by East Marina renovations, as East Marina tenants will replace the slips presently used by the commercial fishing boats. No additional commercial fishing boat capacity is planned; the replacement of the 15 existing commercial fishing slips will result in 15 new slips. The one existing end-tie for the California Department of Fish and Game (CDFG) boat will remain after project implementation.

Operations at the commercial fishing docks are anticipated to remain essentially the same as in the existing condition because there is no increase in capacity or change in location.

**OC Sailing and Events Center Docks (PAs 8/9).** The proposed project includes the renovation of the OC Sailing and Events Center docks (previously known as the Youth and Group Facility docks) on the cove side of the West Marina, as shown in Figure 3.11.

Because the OC Sailing and Events Center docks accommodate a varying number and size of boats on a fluctuating basis, capacity is discussed in terms of linear feet, not number of slips. The existing docks consist of 890 lf; an increase to 893 lf is included in the proposed project. The new docks will be provided on the westernmost side of the facility near Baby Beach. It is anticipated that the new dock will be utilized by small boats used by the facility for teaching purposes. Due to the shallow depths in this area, only small boating craft would have access. Buoys with low tide warnings will be placed in this area to warn boaters during tidal fluctuations. The docks on the eastern side of the OC Sailing and Events Center will become part of the West Basin Marina. The new OC Sailing and Events Center docks are an expansion into an area not currently occupied by docks and will create additional slip space in the West Marina.

The renovations to the OC Sailing and Events Center docks will result in an increase of only 3 lf and will not significantly alter the existing uses and activities associated with this facility. The docks will not replace any existing docks or slips and will not conflict with any existing boat uses but may require the designated hand launch area and swim buoys to be moved approximately 50 ft to the west. Continued provision of small boat access and opportunities is consistent with CCC policies.

**Temporary/Yacht Broker Docks. (PA 11).** In order to accommodate boaters during the dock and slip renovations, the project also includes a set of temporary docks along the eastern breakwater. An ADA gangway is included in the plans for the temporary/yacht broker docks. Once renovations to all dock areas are completed, the temporary docks may become docks for some yacht brokers who currently have docks in the East and West Basins. The relocation of some yacht broker slips to this new location will allow for more slips to be made available to the general public. The placement of



these docks near the breakwater would require the relocation of the nearby existing bait barge. It should be noted that these docks are located within a federal anchorage area and that any permanent use within this area would require approval by the Army Corps of Engineers, and the CCC.

**West and East Marinas (PAs 9 and 10).** Marina renovations will include removal of nearly all floating docks and piles and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. Other Marina Improvement Project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with ADA guidelines. A total of four ADA gangways will be installed in the West and East Marinas: one each on the cove side and the island side. The ADA gangway platforms are proposed to be connected to concrete pilings where they attach to the seawall.

A minimal amount of soil disturbance would occur where the piles are installed in order to meet the engineering requirements for the platforms and the 80 ft long gangways.

The structure and materials for the proposed docks will conform to applicable LUP Policies as included in the approved Dana Point Harbor Revitalization Plan Land Use Plan. Approved LUP Policy 7.3.2-3 specifies the following regarding construction materials:

**LUP Policy 7.3.2-3:** The preferred material for pilings used for construction of piers, docks or slips is concrete or steel coated with a nontoxic material. Pilings treated with Ammoniacal Copper Arsenate (ACA), Ammoniacal Zinc Arsenate (ACZA) or Chromated Copper Arsenate (CCA) wrapped or coated prior to installation with a water tight plastic sleeve or similar sealant can also be used, but are not preferred over concrete piles or steel piles coated with a non-toxic material. Timber piles preserved with creosote (or similar petroleum-derived products) are not allowed. To prevent the introduction of toxins and debris into the marine environment, the use of plastic wrapped pilings (e.g., PVC Pilewrap) and reinforced plastic for pilings (e.g., high density polyethylene (HDPE) pile armor) shall conform to the following requirements: (a) The material used shall be durable and a minimum of one-tenth of an inch thick; (b) All joints shall be sealed to prevent leakage; (c) Measures shall be taken to prevent ACA, CCA and/or ACZA from dripping over the top of plastic wrapping into Harbor waters. These measures may include wrapping pilings to the top or installing collars to prevent dripping; (d) The plastic sleeves shall extend a minimum of eighteen (18) inches below the mud line; (e) Plastics used to protect concrete or timber piers and docks or for flotation shall be subject to regular inspection to prevent sloughing of plastics into the waterway. A comprehensive inspection and maintenance plan shall be a requirement of any approval for projects involving plastic or similar material wrapped piles; (f) The marina operator shall be made responsible for removal and disposal of failed docks or materials; and (g) If federal or state regulatory agencies, through new or better scientific information, determine that less environmentally damaging materials or methods are available for new piles or piling replacement, the least environmentally damaging materials and/or methods should be required for such projects, as feasible.

The construction materials for the proposed dock facilities will be trucked to the project site as needed during each phase and stored at a staging area. Once the piles have been emplaced, the

prefabricated docks will be craned into the water from the staging area, and floated to the area under construction.

The West and East Marinas currently contain 2,409 slips, with an average length of 29.85 ft. Due to changes in the Dana Point Harbor specific needs of the public, and based on the Dana Point Harbor wait lists, which show local Dana Point Harbor existing boater's needs for slightly larger slips, the proposed Marina improvements include adjustments to the number and location of slips throughout the Harbor. In consideration of all factors related to slip size, including larger boats in smaller slips, boater feedback, waitlists, local market demand, slip mixes at other marinas located throughout the State, design criteria, and CCC recommendations, California Department of Boating and Waterways (DBW), and ADA design requirements, OC DPH has concluded that a plan with a modified slip mix with a slightly larger average slip size is appropriate.

During the review and approval of the LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project, the CCC and the Dana Point City Council adopted LUP Policy 4.2.2-6 stating that the Marina Project would result in the loss of no more than 155 slips, with an overall average length not to exceed 32 ft. Therefore, at project completion, the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,293, resulting in a net loss of 116 slips. However, the average slip length would increase from 30 (29.85) ft to no more than 32 ft. As shown in Figure 3.13, the proposed reconfiguration of the docks includes an encroachment in the existing 200 ft wide inner channel. The proposed plan includes 20 ft of encroachment on both the north and south sides of both the East and West Basins, for a total of 40 ft, with only 20 ft of encroachment at the entrances of the East and West Basins. The encroachment tapers back to 0 ft adjacent to the Island Bridge to allow vessels to more easily turn around at the Bridge if needed. One-third of the slips (except for pitchforks) are also going to be constructed as double-wide slips in an effort to limit the loss of slips. In addition, to maximize the number of boat slips, the West Marina would be realigned from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina. The reconfiguration of the OC Sailing and Events Center docks will add 13 additional slips to the West Basin plus 256 ft (13 boats) of inside ties. Upon completion, the project will result in an approximately 33,000-square-foot (sf) increase of open water area due to the reconfiguration of docks and slips.

The County expects that no boaters with boat slip license agreements (BSLAs) will need to be relocated from the Harbor upon project completion because the expected number of vacancies over the past few years has exceeded the number of slips that could be lost with the proposed plan. In other words, the number of slips that have been vacated to date and then assigned as temporaries is anticipated to absorb the loss of slips due to project implementation. As slip tenants vacate, the slips will be rented on a temporary basis in anticipation of the proposed Marina Improvement Project. Boat owners with temporary agreements may need to vacate their slips.

The California Integrated Waste Management Board requires all jurisdictions to recycle, reuse or divert 50 percent of all generated waste. The Marina Improvement Project will be required to comply with the Construction and Demolition Debris Waste Reduction and Recycling Program developed by OC Waste and Recycling. It is anticipated that construction debris that cannot be reused or recycled, including docks, pilings and gangways, will be trucked off site to landfills.

### **3.7 PROJECT PHASING**

The proposed project is anticipated to be implemented in 17 phases over approximately 8 years. The first phase includes the construction of the temporary dock and upgrading of the utilities. Each phase will include removal of the existing dock and piles and installation of the new dock and piles. Removal of the existing dock system consists of separating the slips in the water and floating the structures to the west side cove staging area, where landside construction equipment would remove the slip structures from the water via crane and transport the discarded material off site for proper disposal. Installation of the new dock system would be done in reverse. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut 2–3 ft below the mudline. The old piles will be lifted from the water using a crane and then trucked off site. The last phase would be placement of the piles and docks. The preferred method of pile installation is to predrill boreholes to facilitate pile driving. Prestressed concrete piles will then be driven into these holes and grouted with cement or sand.

During construction, boats normally berthed in areas where construction is taking place will be relocated to the temporary docks or open slips throughout the Marinas. It is estimated that an average of 150 boats will need to be relocated during each phase to available berths in the Marina or moved to the temporary dock, as necessary. The County estimates that the number of slips vacated since June 2007, also known as attrition, will offset the loss of slips due to project implementation. As of August 14, 2011, there has been a slip attrition of over 950 boats. As a result, the County expects that no boaters will need to be relocated from the Harbor upon project completion because the expected number of vacancies through attrition over the next few years will exceed the number of slips lost with the proposed plan.

The primary staging area for the duration of project construction will be located in the West Cove parking lot. This construction staging area will result in the loss of approximately 150 parking spaces for the duration of construction activities. The parking spaces would become available once construction activities are finished. Additional potential staging areas have been identified in East Cove, Island West, and Island East parking lots and on a portion of the shipyard parking area. These potential staging areas would temporarily displace parking or dry boat storage; however, the parking requirement of 0.6 space per boat slip would be retained harborwide, and any displaced dry boat storage spaces would be relocated within the Harbor if these secondary staging areas are used. It is not the intent of OC Dana Point Harbor to use multiple staging areas at any one time. The preferred staging area will be based on the location of ongoing improvements in the Harbor. The on-water construction equipment required for the proposed project will generally be localized within the dock areas where construction activities are being conducted.

The preliminary phasing plan and locations of staging areas are illustrated in Figure 3.14.

### **3.8 DISCRETIONARY PERMITS, APPROVALS, OR ACTIONS REQUIRED**

In accordance with Sections 15050 and 15367 of the State CEQA Guidelines, the County is the designated Lead Agency for the project and has principal authority and jurisdiction for CEQA actions. Responsible Agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project. Trustee Agencies are State agencies

that have jurisdiction by law over natural resources affected by a proposed project that are held in trust for the people of the State.

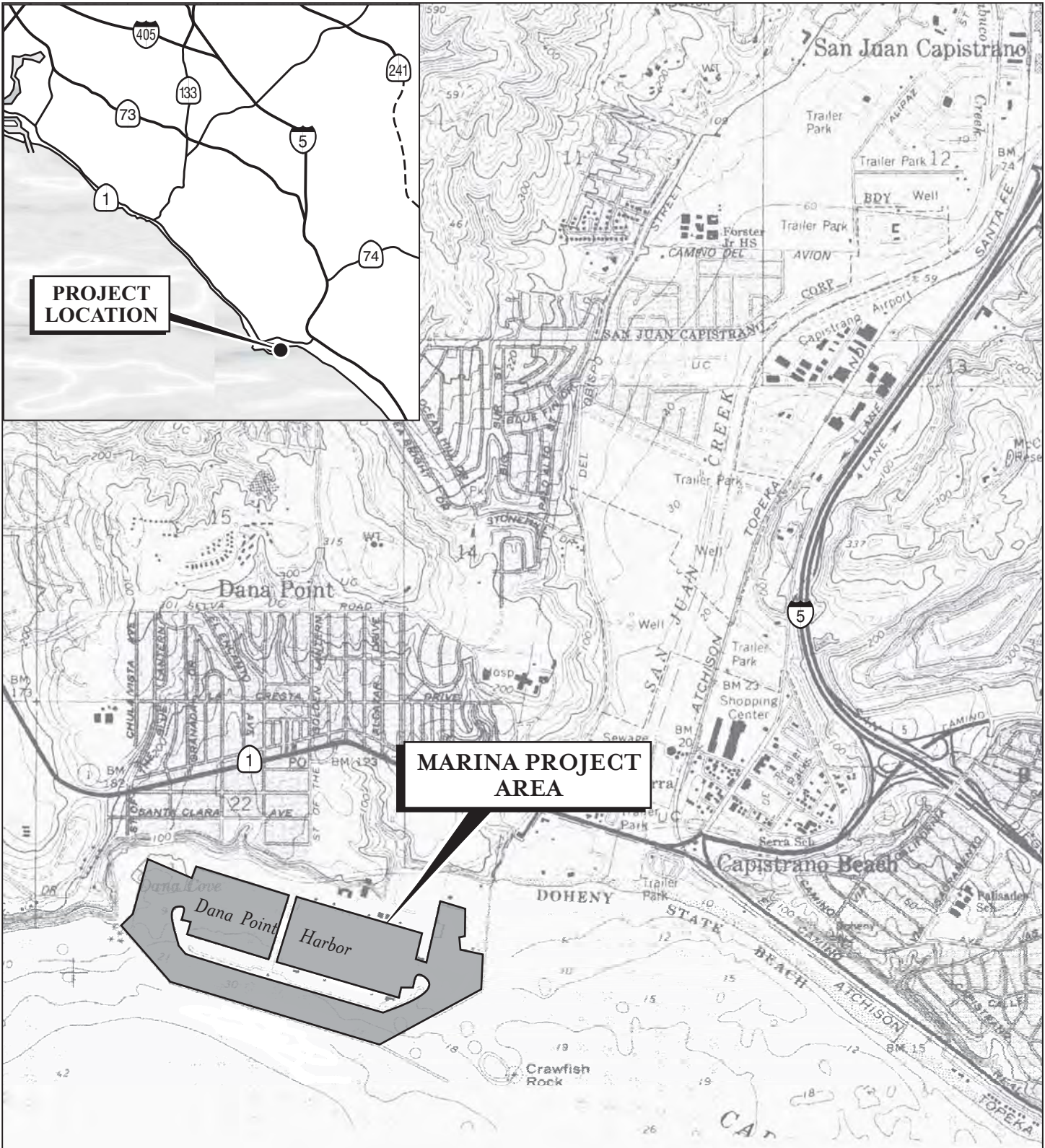
The following discretionary actions have been taken in association with the proposed project and FEIR No. 591:

- **January 31, 2006:** The County Board of Supervisors certified the Harbor Revitalization Plan Program FEIR No. 591 (State Clearinghouse [SCH] No. 2003101142) (Resolution No. 06-013) and approved the Harbor Revitalization Plan (Resolution No. 06-014).
- **September 27, 2006:** The City Council adopted the LCPA (LCPA 06-03) for the Revitalization Plan and District Regulations, thereby amending the City LCP and Zoning Code (Resolution No. 06-09-13-06 and Ordinance No. 06-08).
- **October 13, 2010:** The CCC effectively certified the LUP component of the LCPA with suggested modification, which amended the City Specific Plan LCP to incorporate the proposed Harbor Revitalization Plan.
- **February 8, 2010:** The City approved the LUP component of the LCPA as modified by the CCC.
- **January 12, 2011:** The CCC effectively certified the IP portion of the LCPA (City LCP Amendment No. 1-10) with suggested modification. The IP portion of the LCPA is the accompanying Implementing Actions Program to carry out the certified LUP
- **June 13, 2011:** The City approved the IP component of the LCPA, as modified by the CCC.

Project implementation related to the Marina Improvement Project will require approval of a Coastal Development Permit by the CCC and administrative (ministerial) approvals from the County and Responsible and Trustee Agencies, including but not limited to the City, the CCC, California Water Resources Control Board Region 9, the United States Department of the Interior, the United States Fish and Wildlife Service (USFWS), the United States Army Corps of Engineers (ACOE), the CDFG, National Marine Fisheries Service (NMFS), DBAW, and the California State Lands Commission. See Table 3.C for a list of discretionary and permit approvals required for project implementation.

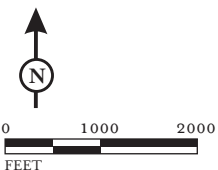
**Table 3.C: Discretionary Permits and Approvals**

SEIR Certification	County of Orange: Planning Commission – Recommendation Board of Supervisors – Certification
Project Plan Approval	County of Orange Board of Supervisors California Coastal Commission (CCC) State Lands Commission (consultation)
Coastal Development Permit(s)	CCC
Section 404 Permit Navigable waters (dock renovations and pile placement, temporary/proposed yacht broker docks)	United States Army Corps of Engineers (ACOE) United States Fish and Wildlife Service (USFWS) (consultation) National Marine Fisheries Service (NMFS) California Department of Fish and Game (CDFG) California Regional Water Quality Control Board, San Diego Region (RWQCB)
Section 10 Permit Navigable waters (docks)	ACOE United States Coast Guard (consultation)
Section 401 Certification water quality permits	San Diego RWQCB
Improvement Plans (infrastructure) Water Quality Management Plans Building Plans/Permits Certificates of Occupancy Dewatering Permit (WDR)	OC Public Works (OC PW) San Diego RWQCB



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FIGURE 3.1



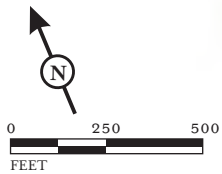
SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif."

Dana Point Harbor Marina Improvement Project  
Project Location



FIGURE 3.2

LSA



LEGEND

- Boundary
- Planning Areas
- Commercial Core Project Area  
(Construction-Level Analysis Analyzed in Certified Final EIR 591)
- Marina Improvement Project Area  
(Proposed Project Construction-Level Analysis)

Dana Point Harbor Marina Improvement Project

Existing Harbor Layout

SOURCE: URS/Cash & Associates

I:\CAE0601\G\6\_3\_10\FIG 3.2 Exist Harbor LO.cdr (6/3/10)

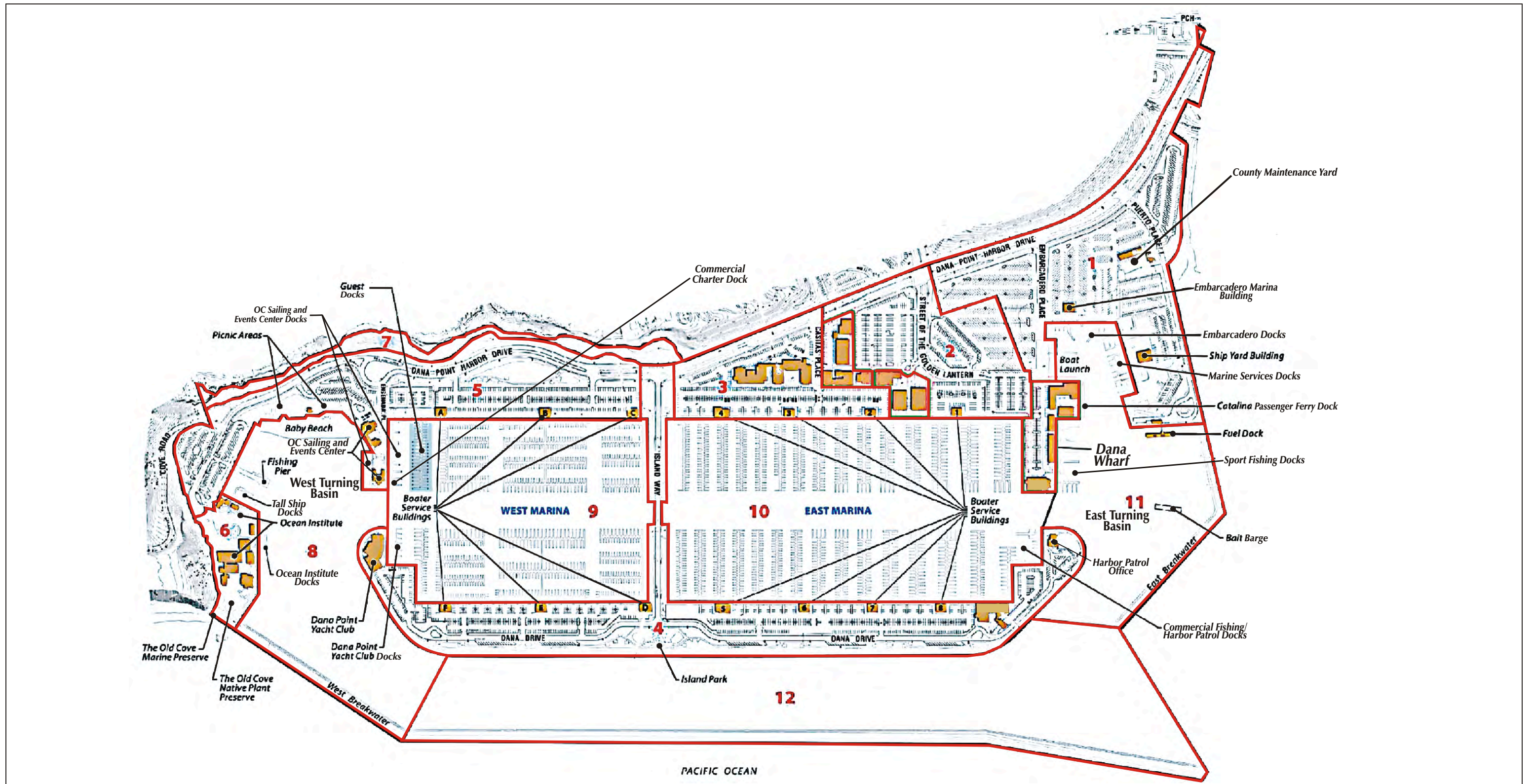
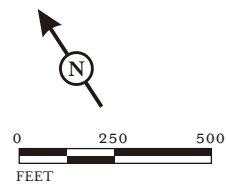


FIGURE 3.3

LSA

# PLANNING AREAS



SOURCE: URS/Cash & Associates

I:\CAE0601\G04\_08\FIG 3-3.cdr (9/8/11)

Dana Point Harbor Marina Improvement Project

Existing Dock Facilities





View of typical gangway.



End view of typical dock.

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FIGURE 3.4

*Dana Point Harbor Marina Improvement Project*  
Typical Gangway and Dock Components

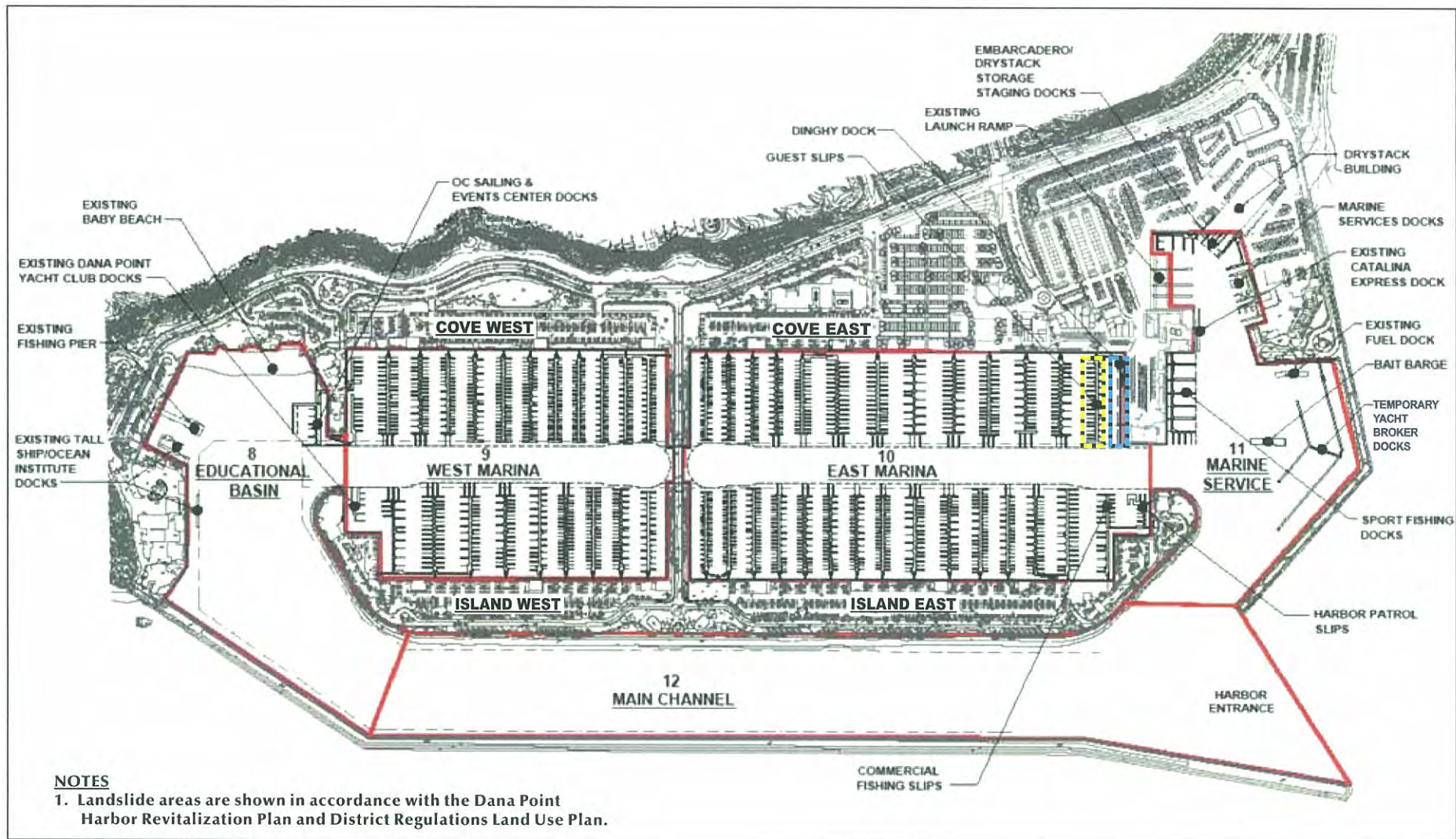
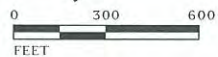


FIGURE 3.5

LSA

**LEGEND**

- Marina Improvement Project Area
- - - Dinghy Docks
- - - Guest Dock



SOURCE: URS Corp.

I:\CAE0601\G6\_3\_10\FIG 3.5 Prop Harbor LO.cdr (6/23/10)

Dana Point Harbor Marina Improvement Project  
 Proposed Harbor Layout

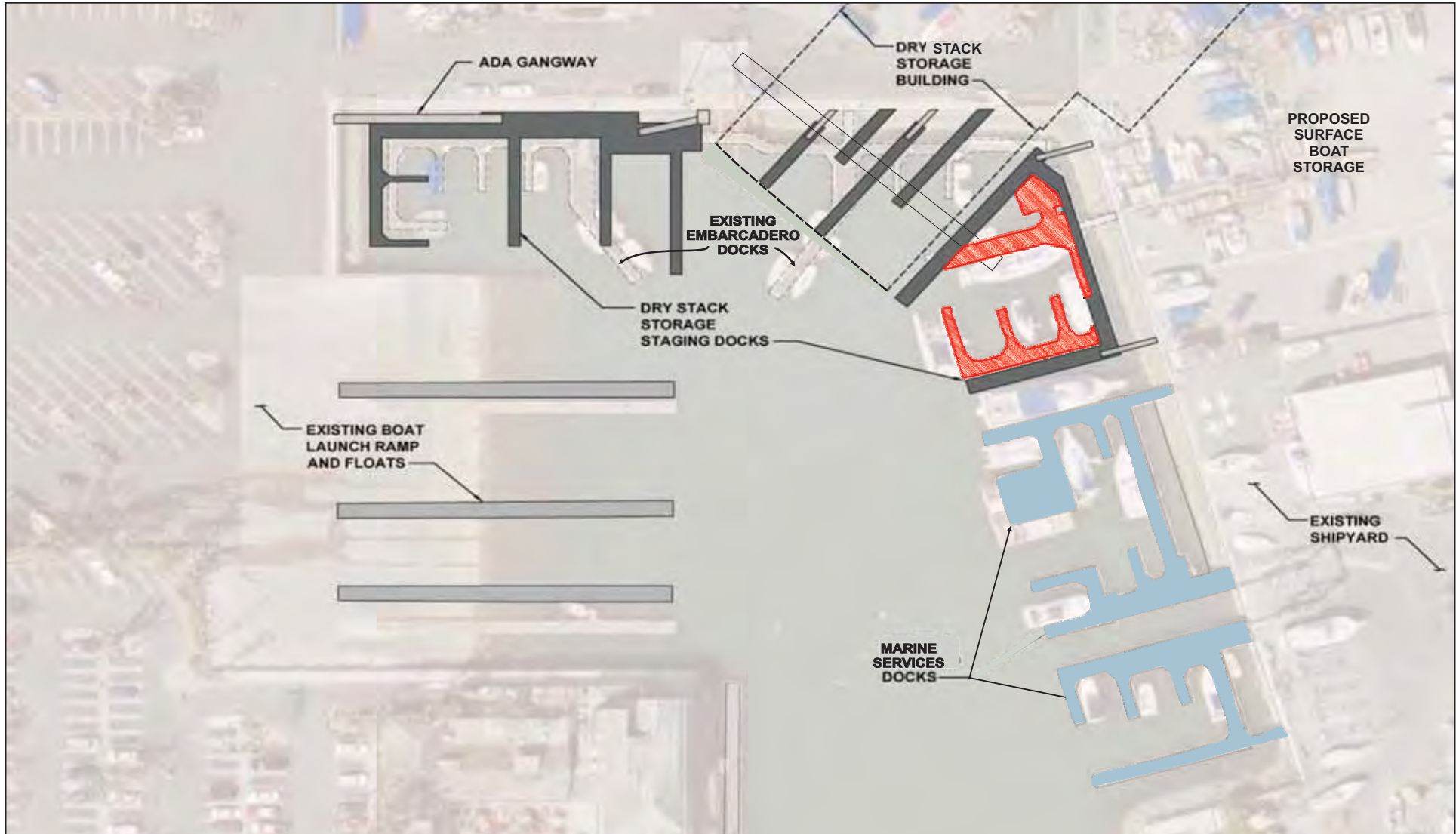
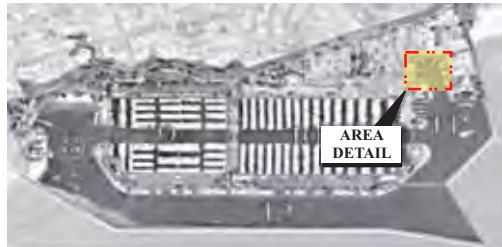
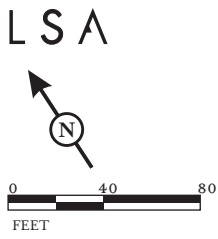


FIGURE 3.6



 - EXISTING MARINE SERVICES DOCKS TO BE REMOVED

*Dana Point Harbor Marina Improvement Project*

Embarcadero/Dry Stack Storage Staging Docks and Marine Services Docks

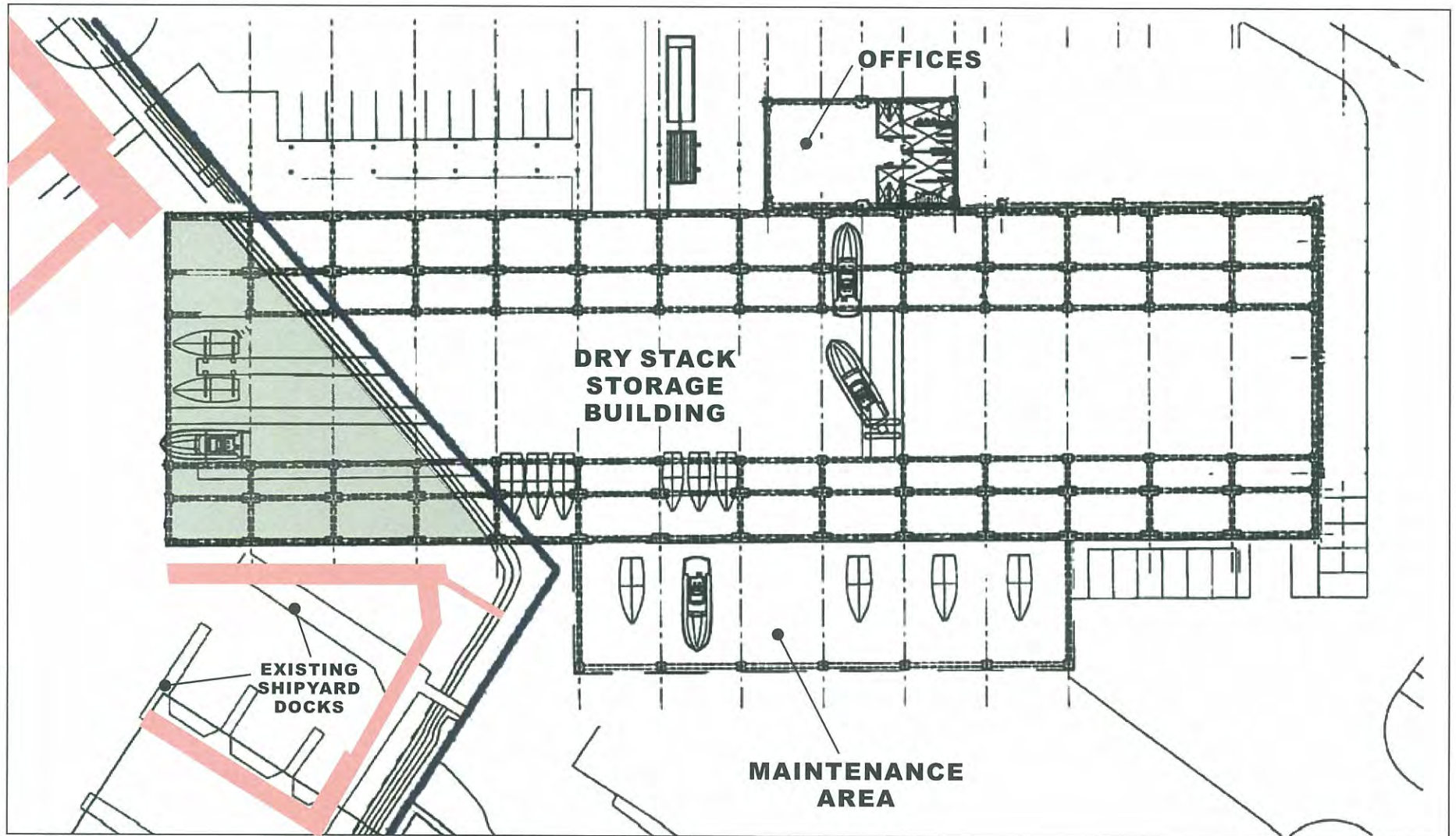
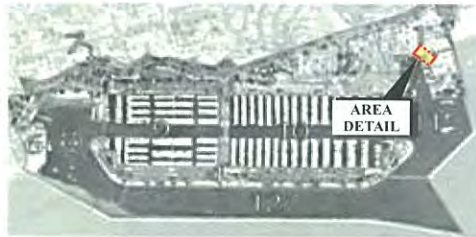
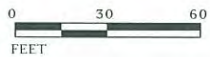


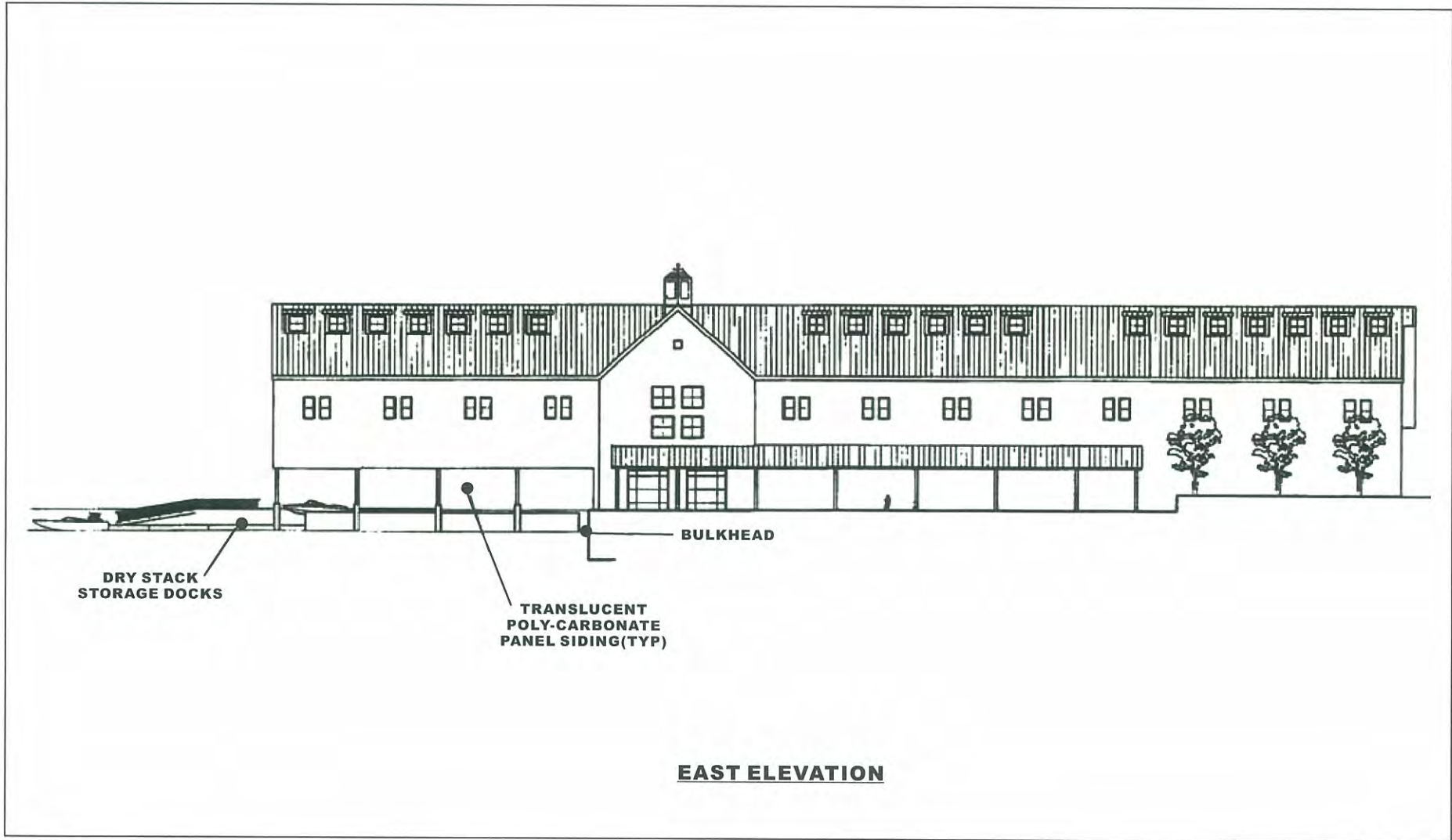
FIGURE 3.7A

LSA



- BUILDING EXTENSION OVER PROPOSED DOCKS
- DRY STACK STORAGE STAGING DOCKS

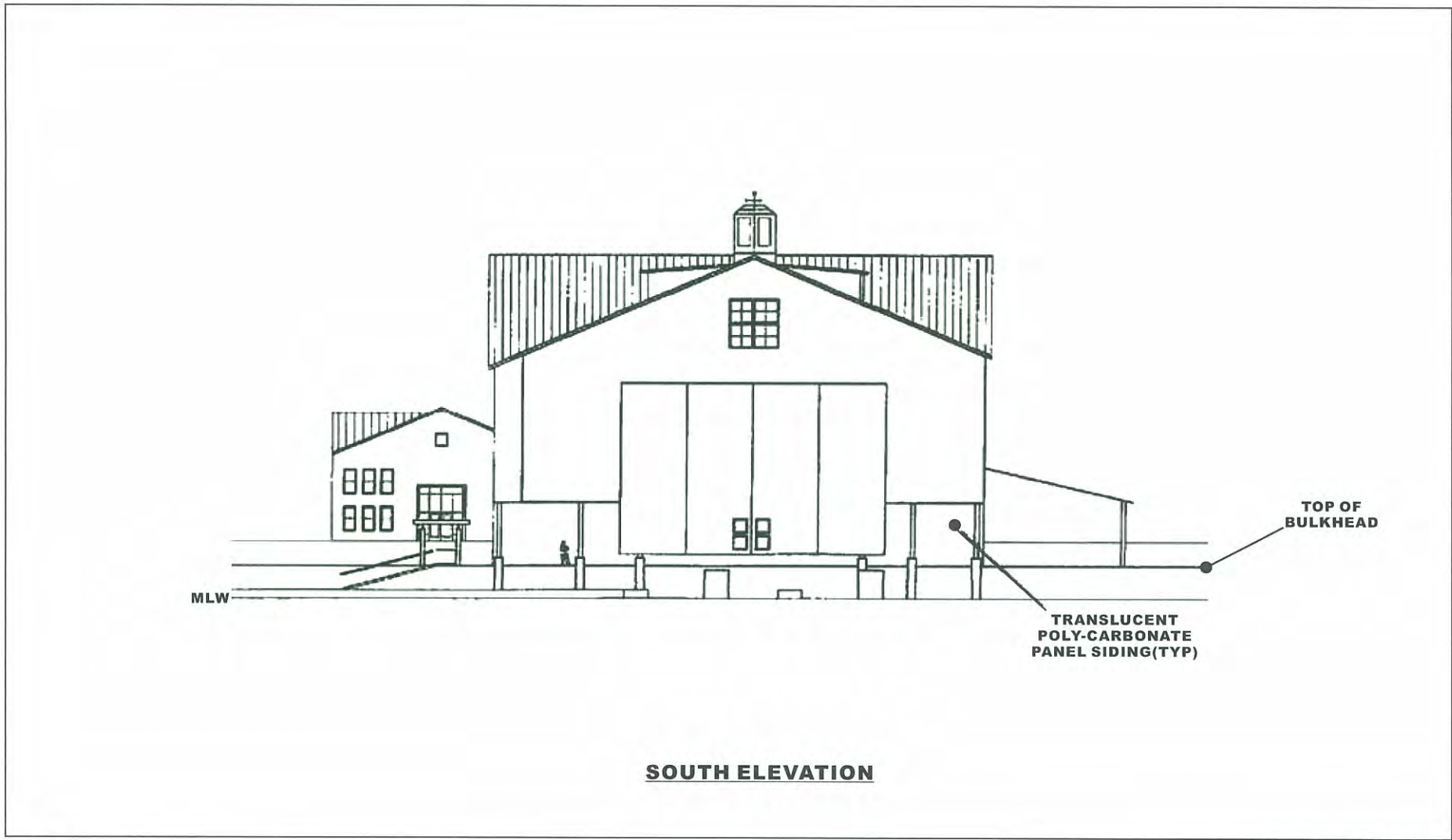
*Dana Point Harbor Marina Improvement Project*  
 Conceptual Plans - Dry Stack Storage Building



LSA

FIGURE 3.7B

*Dana Point Harbor Marina Improvement Project*  
Conceptual East Elevation - Dry Stack Storage Building



LSA

FIGURE 3.7c

*Dana Point Harbor Marina Improvement Project*  
Conceptual South Elevation - Dry Stack Storage Building

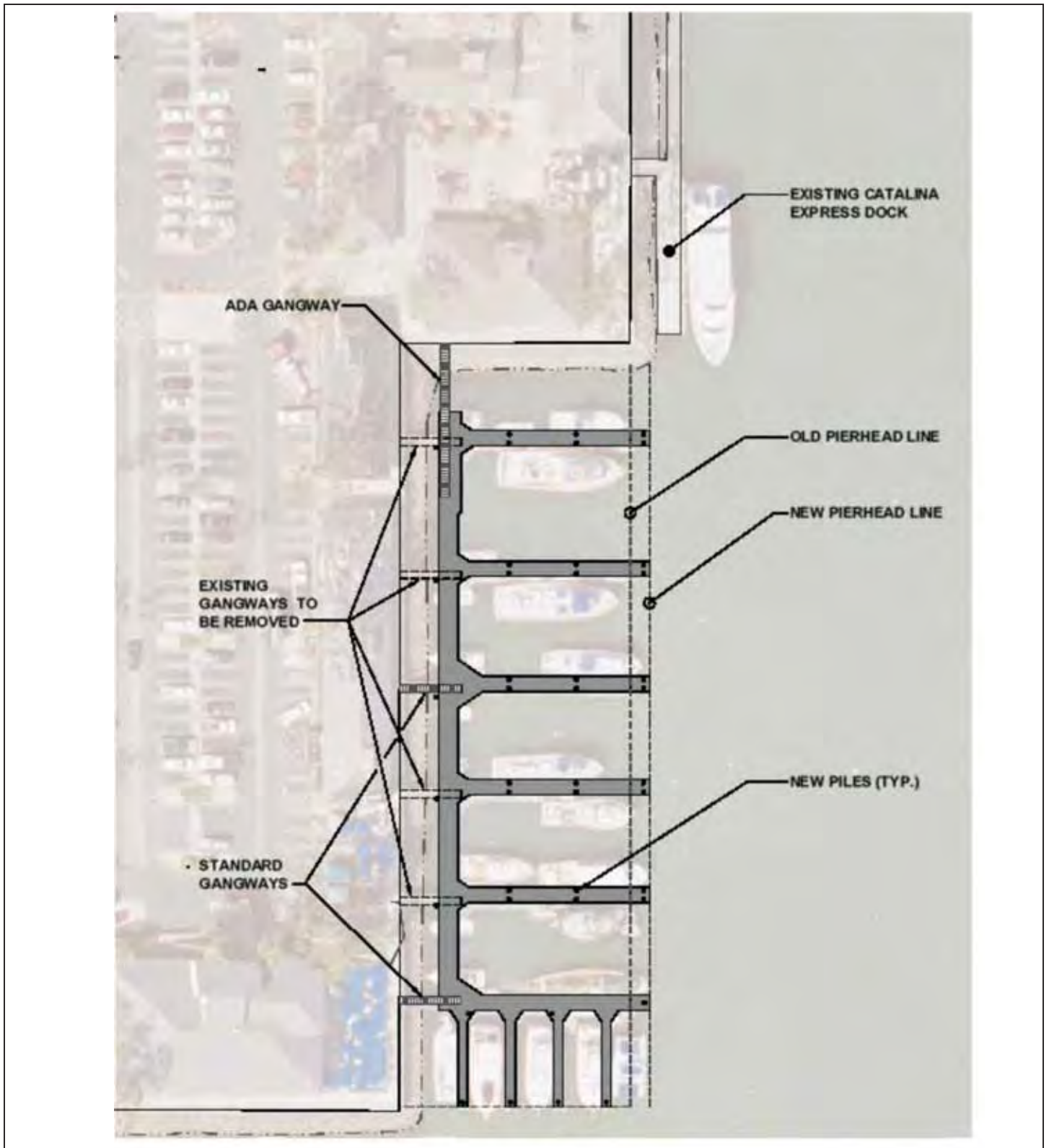
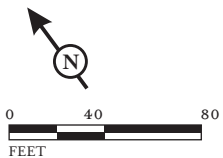
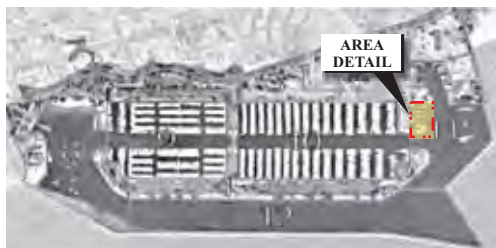


FIGURE 3.8

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SOURCE: URS Corp.



*Dana Point Harbor Marina Improvement Project*  
 Sport Fishing Docks

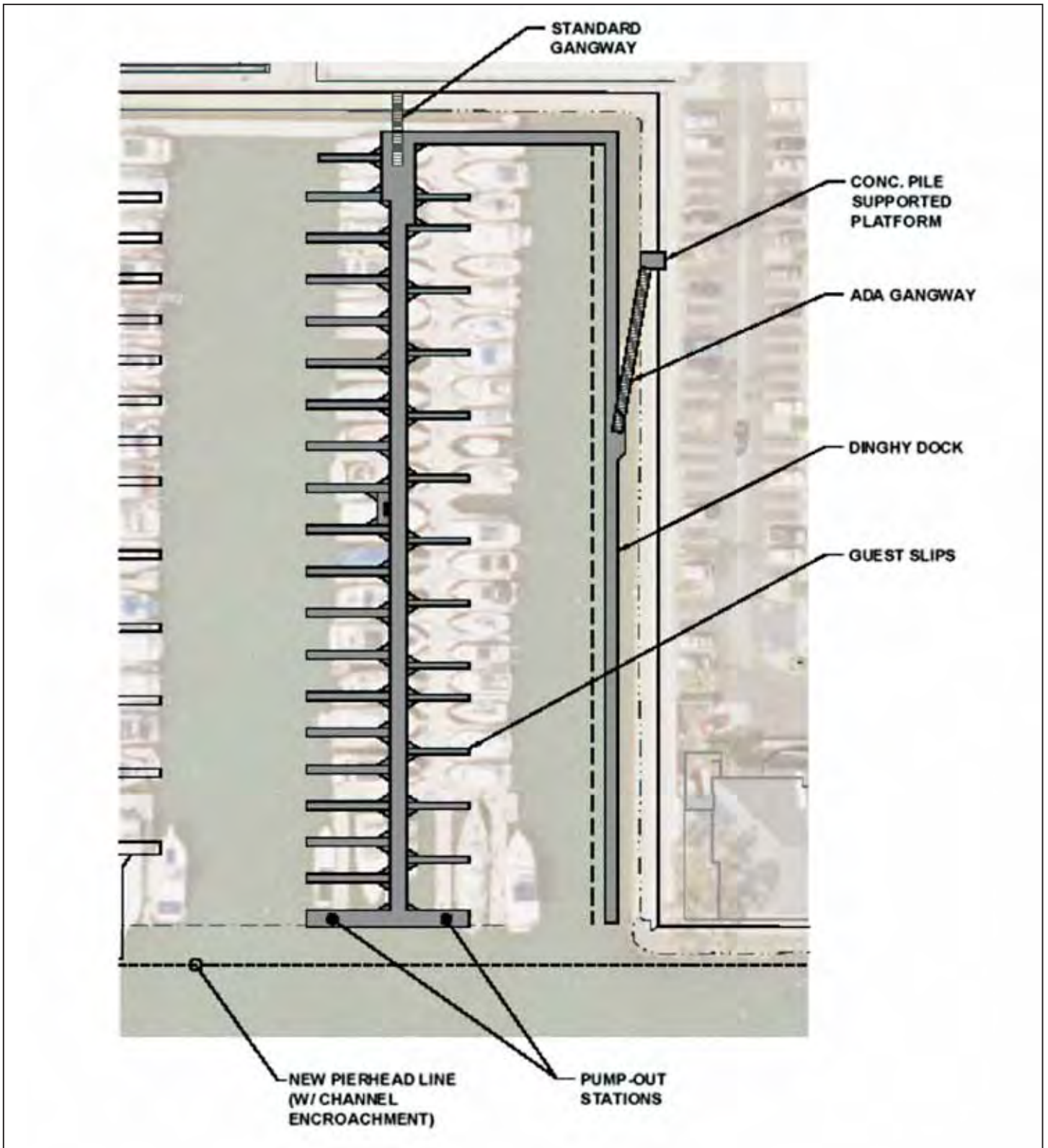
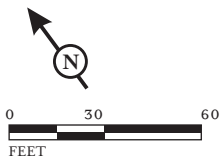
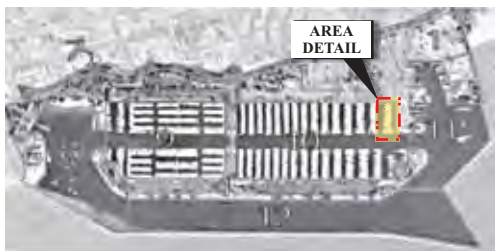


FIGURE 3.9

LSA



SOURCE: URS Corp.



*Dana Point Harbor Marina Improvement Project*  
 Guest Slips and Dinghy Dock



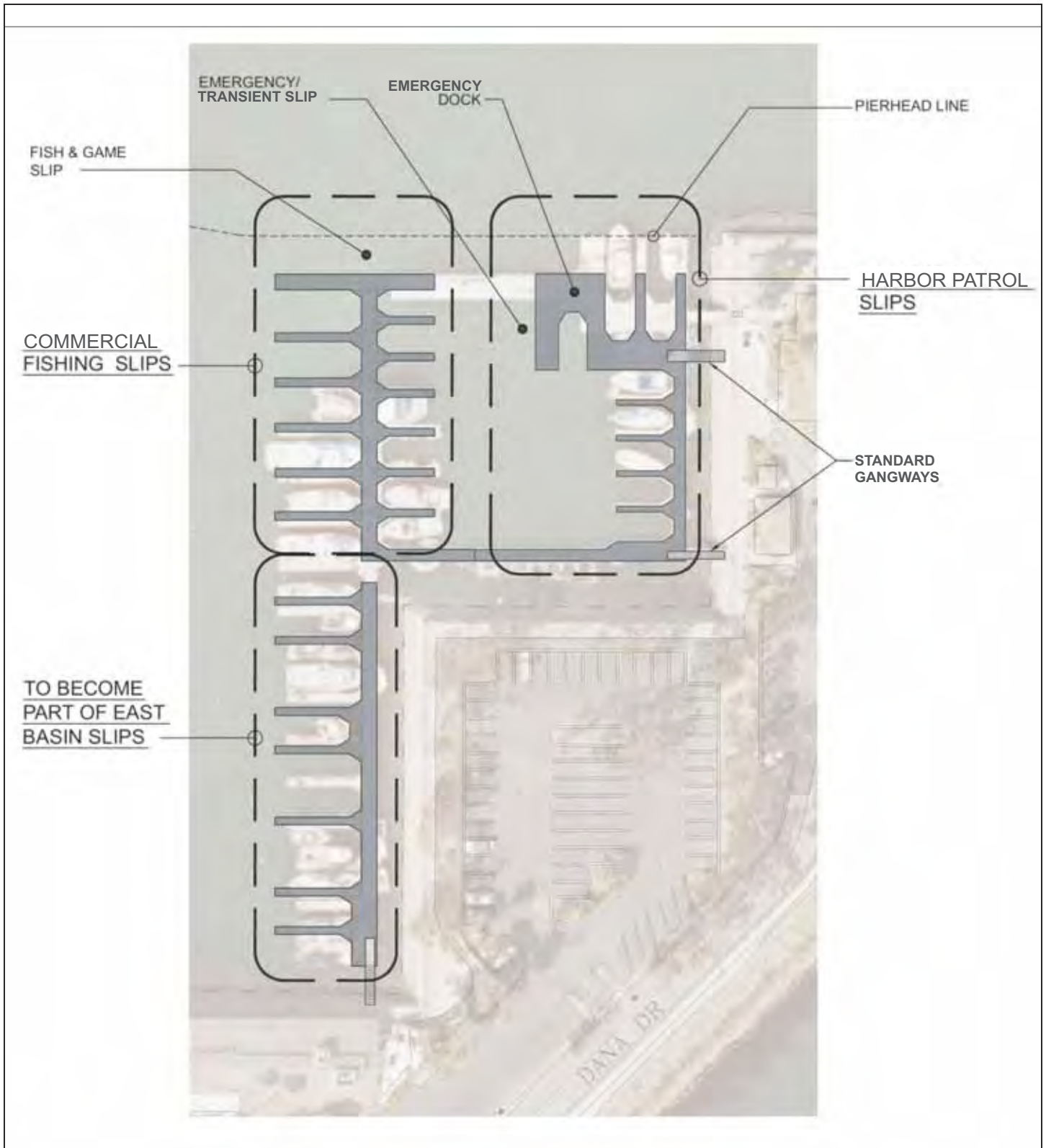
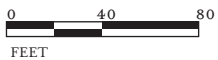
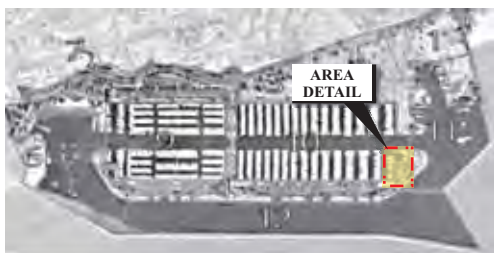


FIGURE 3.10

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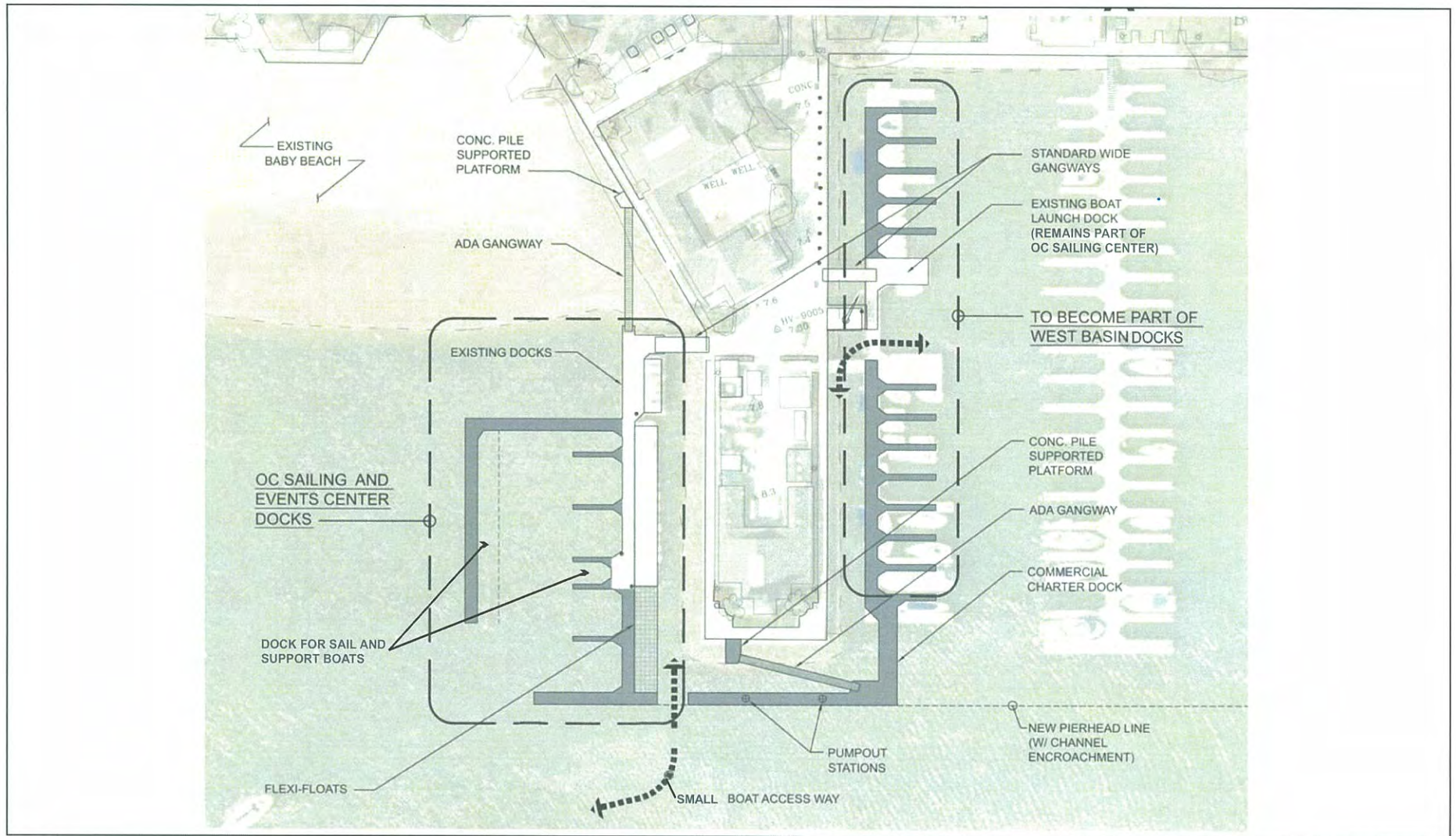


SOURCE: URS Corp.

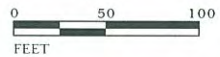


I:\CAE0601\G\_6\_3\_10\FIG 3.10 HP CFS.cdr (6/3/10)

*Dana Point Harbor Marina Improvement Project*  
Harbor Patrol and Commercial Fishing Slips



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SOURCE: URS Corp.

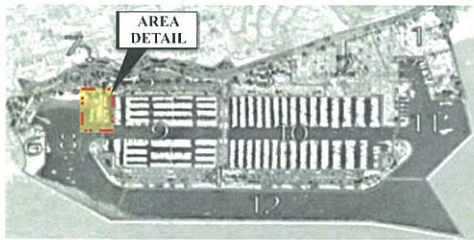


FIGURE 3.11

Dana Point Harbor Marina Improvement Project  
 OC Sailing and Events Center Docks

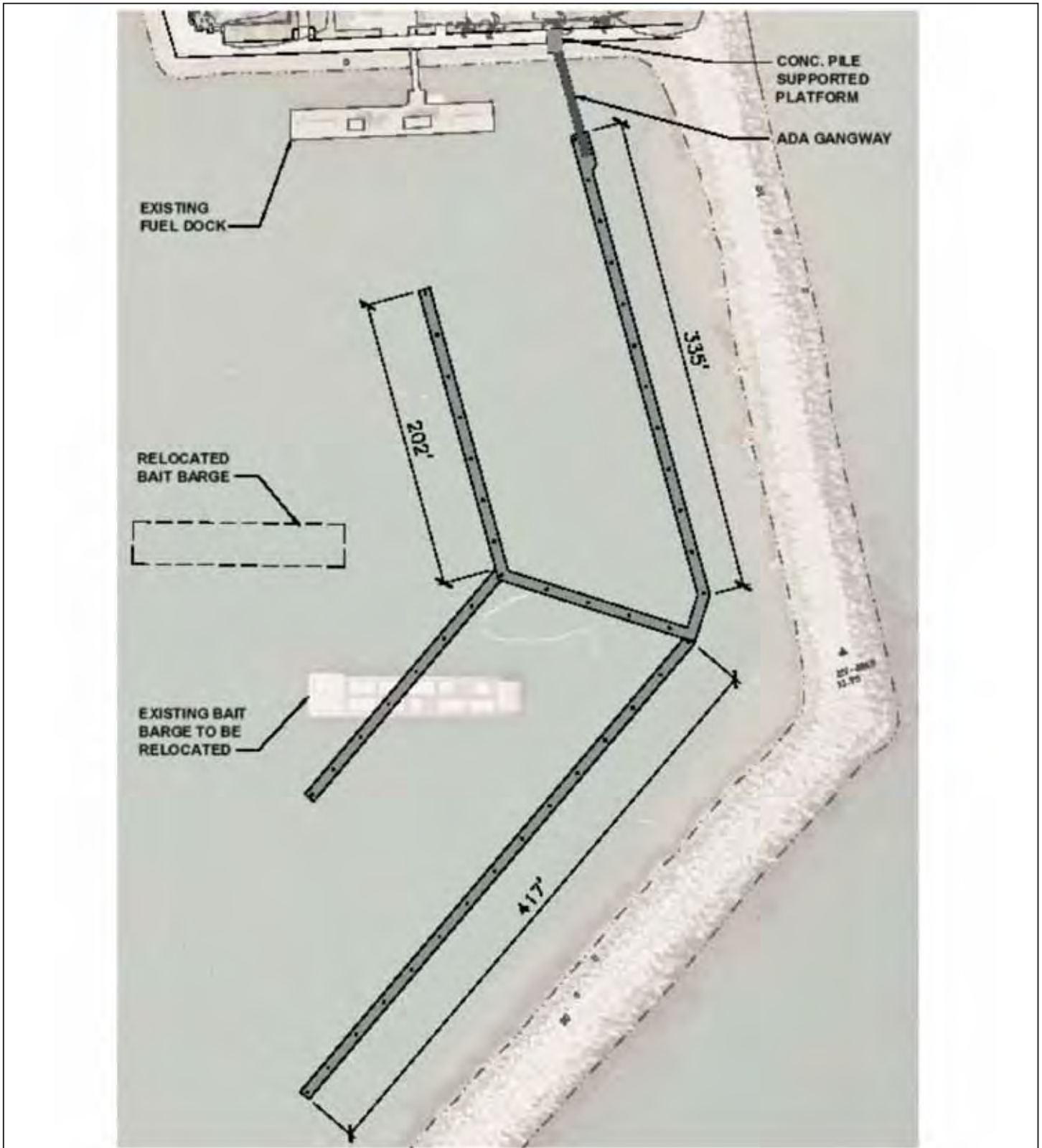
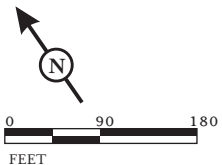


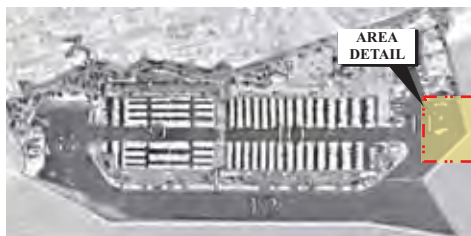
FIGURE 3.12

LSA



SOURCE: URS Corp.

I:\CAE0601\G6\_3\_10\FIG 3.12 Temp D PYBD.cdr (6/3/10)



*Dana Point Harbor Marina Improvement Project*

Temporary Docks/Proposed Yacht Brokers Docks



FIGURE 3.13

LSA



0 300 600  
FEET

*Dana Point Harbor Marina Improvement Project*

*Proposed Channel Narrowing*

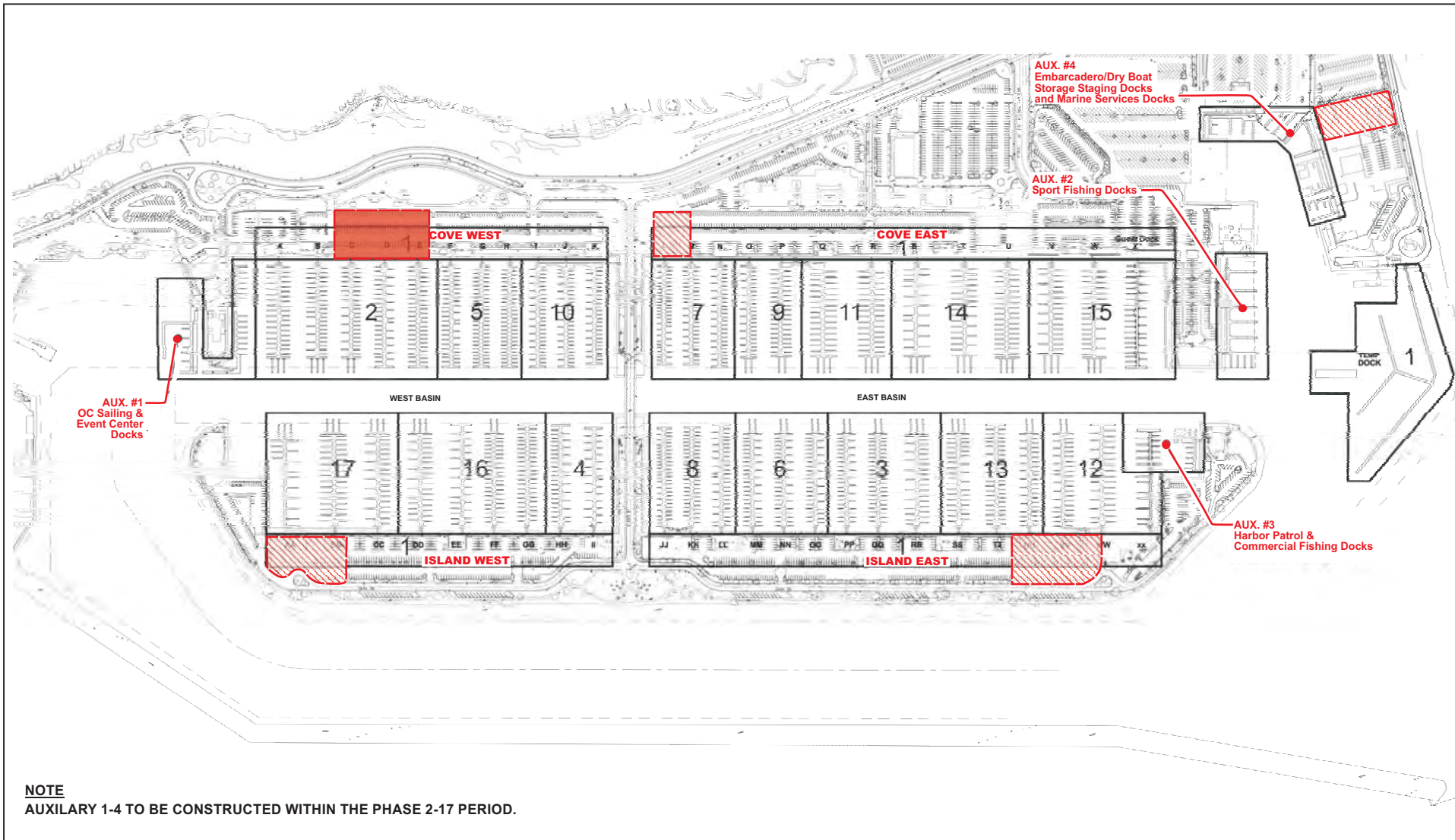
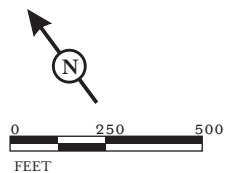


FIGURE 3.14

LSA

- Primary Construction Area
- Additional Potential Staging Areas



*Dana Point Harbor Marina Improvement Project*  
**Preliminary Marina Phasing Plan**

## 4.0 EXISTING SETTING, IMPACTS, AND MITIGATION MEASURES

Section 4.0 describes the existing setting for the areas potentially affected by the proposed Dana Point Harbor Marina Improvement Project. The existing setting is the base environmental condition for which potential environmental effects of the proposed Marina Improvement Project and the project alternatives in the SEIR are evaluated.

The analyses in Section 4.0 include the existing setting, regulatory setting applicable to the environmental topic, methodology of the impact analysis, thresholds of significance, overview of the Program FEIR impact analysis, identification of direct and indirect project impacts, and mitigation measures identified to avoid or substantially reduce potentially significant adverse project impacts. Graphic exhibits and data matrices are included throughout Section 4.0 where applicable to support the impact analyses. The following environmental issues are assessed in accordance with California Environmental Quality Act (CEQA) Guidelines and CEQA requirements in Section 4.0:

- Land Use
- Geology and Soils
- Hydrology and Water Quality
- Transportation and Circulation
- Air Quality
- Noise
- Biological Resources
- Aesthetics
- Recreation
- Hazards and Hazardous Materials
- Greenhouse Gases

For each topic, the potential project impacts are divided into the following two categories: (1) Less Than Significant Impacts, and (2) Potentially Significant Impacts. Impacts are discussed in the following categories:

- **Less Than Significant Impacts** are those project impacts that are determined to be less than significant such that no additional requirements, conditions, or mitigation measures are needed.
- **Potentially Significant Impacts** are those project impacts that cannot be reduced to a less than significant level by project design features alone and that would require additional mitigation measures to further reduce the impacts. Impacts in this category may be reduced to a less than

significant level with mitigation measures (if feasible) or may remain unavoidable adverse impacts.

## 4.1 LAND USE AND PLANNING

This section provides a discussion of Land Use and Planning in relation to the proposed project. This section also addresses the proposed project's effects on land use with consideration of local, State, California Coastal Commission (CCC), and federal plans, regulations, and policies.

### 4.1.1 EXISTING SETTING

#### Project Location

The project site and Harbor are located in Capistrano Bay on the Southern Orange County coastline, approximately halfway between Los Angeles and San Diego Counties. The Harbor is bordered by the Pacific Ocean to the south; Dana Headlands and Dana Point State Marine Park to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north. Interstate 5 (I-5), located approximately two miles east of the Harbor, runs north-south through the City of Dana Point (City) and provides regional access to the Harbor. The Harbor is primarily accessible from Pacific Coast Highway and Street of the Golden Lantern via Dana Point Harbor Drive. Secondary access is provided by Cove Road. The project location is shown in Chapter 3.0, Figure 3-1.

#### Harbor Setting

The Harbor is comprised of three areas: a landside area along Dana Point Harbor Drive, adjacent to the bluffs; the Island area (connected by a bridge to the landside); and marina areas consisting of rental slips, commercial fishing slips, federal anchorage areas, docks for the Spirit of Dana Point, Sea Explorer, and the Pilgrim ships, the OC Sailing and Events Center docks, fishing pier, Harbor Patrol docks, marine services docks, fuel dock, sport fishing dock, Embarcadero docks, Marina Services docks, bait barge, and boat launch ramp facilities. The existing land uses surrounding the Harbor include commercial, residential, and recreational uses. The proposed Marina Improvement Project addressed in this Subsequent Environmental Impact Report (SEIR) is comprised of the marina (waterside) portions of the Harbor, Planning Areas (PAs) 8 through 12, as identified in the certified Land Use Plan (LUP) for Dana Point Harbor.

The West Marina (PA 9) channel connects the marina to the West Turning Basin, which contains docks for the Sea Explorer, and the two tall ships, the Spirit of Dana Point and the Pilgrim. In addition, a public beach area, commonly known as Baby Beach, is located adjacent to the West Turning Basin.

The East Marina (PA 10) contains the Orange County Sheriff Harbor Patrol docks, which are located near the entrance to the East Marina. Commercial fishing slips are located adjacent to the Sheriff Harbor Patrol docks. The East Marina channel connects the East Marina to the East Turning Basin, which contains a full-service fuel dock and a bait receiver.



Embarcadero Marina is located in PA 11 northeast of the East Turning Basin. PA 11 also contains the sport fishing docks, charter boat docks, the Catalina Express dock, boat rental facilities, the public boat launch ramp and docks, and docks utilized by Marine Services operators.

The West and East Marinas currently contain 2,409 slips with an average boat length of 29.85 feet (ft). The marinas are fully sheltered from the open ocean by approximately 8,000 linear feet (lf) of federal breakwater plus the island. See Figure 4.1-1 for an illustration of the land uses within the Dana Point Harbor, as identified in the certified Dana Point Harbor Revitalization Plan and District Regulations LUP.

## **4.1.2 REGULATORY SETTING**

### **State Sovereign Lands/State Tidelands Grant**

The State of California (State) acquired ownership of all previously ungranted tidelands, submerged lands, and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space purposes. Tidelands are those lands that lie between the lines of the mean high tide and the mean low tide; submerged lands lie below the line of mean low water. The State Lands Commission (SLC) has the review responsibility for tidal and submerged lands legislatively granted in trust to local jurisdictions. All tidelands and submerged lands, granted or ungranted, are subject to the Common Law Public Trust, which is a sovereign public property right held by the State-delegated trustee for the benefit of all people.

Dana Point Harbor is held in trust by the County of Orange (County), in accordance with the State Tidelands Grant. The Tidelands Grant for Dana Point Harbor contains conditions that the Harbor must be used "...only for the establishment, improvement and conduct of a Harbor, and for the construction, maintenance and operation thereon of wharves, docks, piers, slips, quays, and other utilities and appliances necessary or convenient for the promotion and accommodation of commerce and navigation..."<sup>1</sup> In addition, the Tidelands Grant states that the lands shall always remain available for public use for all purposes of commerce and navigation.

### **California Coastal Act/Local Coastal Program**

The California Coastal Act of 1976 (CCA) was created to: (1) protect, maintain, and, where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and manmade resources; (2) ensure orderly, balanced utilization, and conservation of Coastal Zone resources, taking into account social and economic needs; (3) maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners; (4) ensure priority for coastal-dependent development over other development on the coast; and (5) encourage State and local cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses in the Coastal Zone. The CCA requires all local governments located within the Coastal Zone to adopt a Local Coastal Program (LCP). The LCP is used by jurisdictions to regulate local land uses and development in a manner that is consistent with

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<sup>1</sup> Dana Point Harbor Tidelands and Submerged Lands Acquisition, State Lands Commission, February 1962.

the goals of the CCA. Specifically, LCPs identify the location, type, densities, and other land use policies for future development within the Coastal Zone of a jurisdiction.

The project site is located entirely within the Coastal Zone and is under the land use planning and regulatory jurisdiction of the City (landside areas) and the CCC (waterside areas). In 1981, the County approved the LCP for Dana Point, known as the South Coast Planning Unit LCP, and in 1985 the County's LCP was certified by the CCC. The City of Dana Point was incorporated in 1989, and in 1991 the CCC approved an LCPA to transfer LCP discretionary authority for the entire City, including the Harbor, to the City. Landside areas remain under the oversight of the CCC as an appealable jurisdiction while the CCC exercises full discretionary authority over all waterside areas, including all aspects of the Marina Improvement Project.

Implementation of the Dana Point Harbor Revitalization Plan required a series of subsequent approvals by the City of Dana Point and the CCC to modify existing regulatory documents, including the City's LCP. The Revitalization Plan and District Regulations therefore required an LCP Amendment (LCPA). The LCPA included an LUP component and an Implementation Plan (IP) component, which together establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the CCA. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was effectively certified with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

During the public and regulatory review and approval process with the City and the CCC, refinements to the LUP and IP components in the form of various suggested modifications were made to the proposed LCPA, all of which were subsequently adopted by the City Council and certified by the CCC. Some specific changes resulting from these suggested modifications made to the Revitalization Plan during the City's discretionary review process included reduction of Commercial Core area building heights, elimination of one dry stack storage building, and reconfiguration of the remaining proposed boat storage structure, elimination of the lighthouse, and the general reconfiguration of the Marine Services Commercial area of the Harbor.

The CCC approved the LCPA subject to a number of suggested modifications to bring the amendment into conformity with the policies of Chapter 3 of the CCA. The key suggested modifications accomplished included the following:

- Provide protection for land uses that are considered as priority uses in the CCA and allow only development (i.e., fishing, public access, water-oriented recreation and incidental commercial uses) that is consistent with the Tidelands Grant. The modifications also institute controls on the expansion of existing and potential construction of additional private (membership) yacht clubs on tidelands.
- Establish the goal for any dock replacement of the Harbor revitalization to be "no net loss" of slips in the Harbor harborwide, or a maximum loss not to exceed 155 slips. In addition, priority is to be given to the provision of slips that accommodate boats less than 25 feet (ft) in length, with the average slip lengths not to exceed an overall average of 32 ft throughout.

- Ensure that land area and parking facilities are maintained, enhanced, and prioritized for coastal-dependent and coastal-related land uses.
- Encourage the provision and use of public transit by having the OC Dana Point Harbor cooperate with the surrounding adjacent cities to determine the feasibility of and potentially implement a Tri-City Trolley.
- Establish tree-trimming policies and requirements to ensure bird breeding, roosting, and nesting protection under the Migratory Bird Treaty Act and the California Endangered Species Act for California bird species of special concern, wading birds (herons and egrets), and owls/raptors.
- Institute provisions for the protection of low-cost visitor-serving facilities and overnight accommodations and prohibit the conversion of existing, or the construction of new, Limited Use Overnight Visitor Accommodations on public tidelands in the Harbor.
- Protect scenic and visual coastal resources.
- Incorporate miscellaneous revisions to the maps, tables, and figures.

The waterside portion of the project is now proceeding through a separate, independent process for environmental clearance and approval. The Coastal Development Permit (CDP) process regulates all development in the Coastal Zone. Any projects proposed within the Coastal Zone are required to obtain a CDP prior to construction. Because the project area includes submerged lands, the CCC would issue the CDP for this project.

### **County of Orange**

Although the Harbor is located entirely in the Dana Point City limits, the Harbor is owned by the County. The County has the responsibility for development, maintenance, and operation of land uses within the Harbor. As noted previously, the County is the trustee of the Harbor for the people of the State of California, pursuant to the State Tidelands Grant. As landowner, all Harbor operations are managed by OC Dana Point Harbor. The marinas, hotel, and other operations such as charter facilities and boat rentals are managed under various operations, management, and/or lease agreements controlled by the County.

The Harbor is shown as a Regional Recreation area in the County General Plan. Development within the Harbor has been historically regulated and land uses defined by the County under the Dana Point Harbor Planned Community District Development Plan, adopted by the County Board of Supervisors on July 22, 1969.

The authority for implementing the LCP (including implementation provisions, development standards, procedures, and land use intensity restrictions) was approved by the CCC and transferred from the County to the City in 1991. The City's General Plan includes the land use plan components of the LCP and is further discussed below.

### **City of Dana Point**

**General Plan.** The City General Plan, adopted in 1989, and subsequently amended, lists various policies that guide future growth and development in the City. The General Plan includes the land use

plan components of the LCP. The General Plan is the primary planning policy document of the City. It identifies the location, density, and intensity of land uses, the basic design and function of circulation, and policies regarding open space, infrastructure, and public service needs for the entire City. The City's General Plan designates the waterside project area as Harbor Marine Water, and the adjacent landside areas as Harbor Marine Land.

The City's General Plan Land Use Element considers the Harbor one of the most significant resources in defining the character of this coastal community. The Harbor provides a unique blend of natural features and human-made amenities that include visitor/recreation commercial, community facilities, recreation/open space, and Harbor marine land and water uses.

**Zoning Ordinance.** In 1991 LCP authority for the entire City, including the Harbor, was transferred from the County to the City. As a result of that, and subsequent actions by the City, the LCP became part of the City's zoning ordinance, which includes the implementation provisions, development standards, procedures, and land use intensity restrictions required by the CCA. The City's Zoning Ordinance serves as the implementing program of the City's LCP. Although the Harbor is owned and operated by the County, it is subject to the City's LCP as a result of those actions. In 2006, the City amended the LCP and Zoning Code by adopting LCPA 06-03 for the Dana Point Harbor Revitalization Plan, which includes the Marina Improvement Project as an element.

### **Dana Point Harbor Revitalization Plan and District Regulations**

The Dana Point Harbor District Regulations provide zoning designations for the Harbor and establish regulations for specific land use development projects. The District Regulations address division of the Harbor into 12 planning areas and provide specific regulations, site development standards, and discretionary permit processes applicable to all of these areas.

As stated above, the overall Harbor Revitalization Project was approved by the County Board of Supervisors in 2006, and then forwarded to the City. The Dana Point Harbor Revitalization Plan and District Regulations are intended to replace the certified Land Use Plan and Implementing Actions Program components for the Harbor that is included in the Dana Point LCP. Therefore, as described above, the Revitalization Plan and District Regulations required an LCPA. The LCPA, which included an LUP component and an IP component, was subsequently submitted to the CCC for approval and certification, as described above. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

Based on CCC staff recommendations during the LCPA review and approval process, the land use categories described in the Dana Point Harbor Revitalization Plan and District Regulations were revised and a Supplemental Text was provided. The revised and adopted text incorporates the policies and descriptive information from the previously adopted and certified Dana Point LCP, in order to maintain continuity and consistency. The land use category for the Marina Improvement Project areas (PAs 8 through 12) in the Dana Point Harbor Revitalization Plan and District Regulations is identified as "Marinas (waterside)". The material changes recommended by the CCC staff in the Supplemental

text do not appreciably change the “Marinas (Waterside)” portion of the overall Harbor Master Plan for which this SEIR is being prepared.

As part of the CCC’s approval of the LUP component of the LCPA, a suggested modification was included to establish a goal for any dock replacement to attempt to achieve “no net loss” of slips harborwide or to limit the loss of boat slips to a maximum of 155 slips with an average slip length not to exceed 32 ft. In the event that the replacement of docks requires a reduction in the quantity of slips in existing berthing areas, the policy revision also requires that those slips be replaced, if feasible, in new berthing areas elsewhere in the Harbor.

### 4.1.3 METHODOLOGY

Impacts to land uses were determined by comparing goals and policies adopted in the CCA, the County General Plan, the City’s General Plan, and the Dana Point Harbor District Regulations with the proposed project.

### 4.1.4 THRESHOLDS OF SIGNIFICANCE

The impact significance criteria used for this analysis are based primarily on Appendix G of the State California Environmental Quality Act (CEQA) Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The project may be considered to have a significant effect related to land use and planning if implementation would result in one of more of the following:

- Physically divide an established community
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect
- Conflict with any applicable habitat conservation plan or natural community conservation plan

### 4.1.5 OVERVIEW OF PROGRAM FEIR LAND USE AND PLANNING ANALYSIS

**Impacts.** Implementation of the Marina Improvement Project does not include any permanent land use changes other than renovated and/or replaced marina docks and related infrastructure to better serve visitors, boaters, and existing Harbor uses. The Revitalization Project required that a LCPA be prepared and locally adopted by the City with input from the County and then certified by the CCC. The Program FEIR concluded that because the project required an LCPA, it was by definition “inconsistent” with the current LCP. This was, however, not considered a significant impact because approval of the LCPA would improve overall CCA compliance. All waterside improvements must be reviewed and approved by the CCC as part of a CDP prior to project construction. An application for a CDP will be submitted for approval by the CCC after certification of the SEIR and approval of the Marina Improvement Project by the County Board of Supervisors.

Due to temporary construction activities and/or long-term maintenance or operations, the Revitalization Project, including the Marina Improvement Project, may result in conflicts with Harbor facilities or land uses. In addition, the proposed Revitalization Project, combined with other future development, could increase the intensity of land uses in the area. However, the Program FEIR concluded that with implementation of Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs), no significant impacts are anticipated. Measures identified in the Program FEIR and applicable to the Marina Improvement Project are listed below.

During the subsequent approval process for the LUP component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

- PDF 4.1-1** Construction phasing for new development shall be designed to minimize the disruption of vehicular and pedestrian access routes and parking availability throughout the Harbor. In the event of temporary closures, alternate routes and clear directional signage will be provided. (LUP Policy 8.1.1-34)
- MM 4.1-1a** Land uses and new development in Dana Point Harbor shall be consistent with the Dana Point Harbor Land Use Plan and applicable policies and regulations contained in the Dana Point Harbor Revitalization Plan and District Regulations. (LUP Policy 2.3.1-1)
- MM 4.1-3a** Access to the Marine Services Commercial areas shall be maintained during all construction phases. A Construction Management Plan shall be prepared identifying the configuration of construction staging areas temporary access routes, and parking areas and will be submitted with development permit applications. (LUP Policy 4.4.1-6)
- MM 4.1-3b** A comprehensive signage program for public access shall be implemented in conjunction with the construction of the Commercial Core Area and subsequent Planning Areas within the Harbor to inform the public of the availability of and provide direction to public parking areas, coastal access and on-site recreational amenities. (LUP Policy 8.5.3-10)

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Land Use and Planning were identified in FEIR No. 591.

## **4.1.6 IMPACTS AND MITIGATION**

This discussion focuses on potential land use compatibility issues. Other issues related to and affecting adjacent and on-site land uses are discussed in the applicable SEIR sections, such as air quality, noise, traffic/parking, and aesthetics.

The Initial Study (IS) prepared by the County (Appendix A) determined that the project renovates the existing facilities contained within the Harbor and does not divide or alter any community or political boundary. The existing land use as a marina will continue with implementation of the proposed project. No new land uses will divide or otherwise separate the boaters, and the project does not preclude live-aboards. Therefore, the IS concluded that the proposed project would not have a significant impact with respect to physically dividing an established community. Additionally, because the project site is not located within a Habitat Conservation Plan (HCP) or Natural Communities Conservation Plan (NCCP) area, the IS determined that the project would not conflict with any HCPs or NCCPs. Therefore, these issues are not addressed further in this SEIR.

### **4.1.6.1 Less Than Significant Impacts**

#### **Compatibility With Land Use Plans**

The proposed project consists of renovations and improvements to the existing marina facilities. Specifically, these include the West and East Marina docks in the Harbor, and gangways and security gates to both marina areas. Additionally, new Embarcadero/Dry Boat Storage Staging docks and dinghy dock, along with renovations to the OC Sailing and Events Center Facility docks, guest docks, Harbor Patrol docks, Marine Services docks, commercial fishing docks, and sport fishing docks are included in the proposed Marina Improvement Project. In order to accommodate boaters during renovations, the project also includes a set of temporary docks to be located in the Harbor's Main Channel and along the eastern breakwater. Once renovations to all dock areas are completed, the temporary docks may become docks for some of the yacht brokers who currently have docks in the East and West Basins, subject to separate agency approvals.

As discussed further in Section 3.0, at project completion the total number of boat slips in the West and East Marinas under the County's preferred design may decrease from 2,409 to 2,293, resulting in a net loss of approximately 116 slips. In order to maximize the number of boat slips, the proposed project includes some doublewide slips, inner channel narrowing, and realigning the West Marina from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina.

The renovations to dock facilities throughout the Harbor and the modifications to boat slip size do not change the land use of the project site. Implementation of the Marina Improvement Project does not include any permanent land use change. The proposed project does not change the existing types of recreational uses in the marina or open space uses within the project site. The existing marina and related recreation uses have been ongoing at the site for nearly 40 years, and the proposed project would not change these uses. In addition, the proposed project would not disrupt or divide the placement of existing uses and activities that surround the marina, nor would it displace any businesses, residences, or other uses. The proposed Marina Improvement Project's relationship to the Dana Point Harbor Revitalization Project is further discussed below, under the Dana Point Harbor Revitalization Plan and District Regulations section.

Operationally, renovated and/or replaced marina docks and related dock infrastructure are proposed to better serve visitors, boaters, and existing Harbor uses. Implementation of the project would result in a slight increase in the average slip size from +/-30 ft to no more than 32 ft. This change in the average size of slips in the East and West Marinas would not change the existing land uses or the operations within those marinas; the site would continue to serve as a Harbor and marine-related recreational facility. Boater traffic safety is discussed in Section 4.4 of this SEIR.

The renovations to other docks, including the sport fishing, Harbor Patrol, and commercial fishing docks would not result in operational changes to these dock areas because they are not being relocated, no increase in capacity is planned, and no new uses are being introduced. With project implementation, the guest slips would be relocated adjacent to the Dana Wharf, which is intended to improve visitor access due to the proximity to the Commercial Core. A dinghy dock will also be provided near the Commercial Core and will create greater access for boaters wishing to visit commercial uses by using their dinghies rather than driving their cars to the commercial core area.

The OC Sailing and Events Center docks will be provided on the westernmost side of the facility near Baby Beach. The docks on the eastern side of the OC Sailing and Events Center will become part of the West Basin Marina. Operationally, the center will continue to use the docks for its sailing programs. The uses at the site are not changing and therefore there are no impacts related to land use.

The Marine Services docks currently contain 1,190 lf of dock space, which will be reduced to 896 lf with project implementation. The shipyard currently utilizes approximately 560 lf of this dock space for uses directly related to shipyard operations. The remainder of the dock space is used for monthly rental purposes (e.g. Jet Ski rentals). A portion of the dock space will eventually be allocated for use as staging docks for the Dry Boat Storage building that is a part of the Harbor Revitalization (landside) Project. The possible future reduction of dock space at the Marine Services docks will proportionally reduce the amount of boating activity at this location. The planned uses are consistent with the marina land use designations and will not significantly change from the existing and historic public access, marine repair, and Embarcadero dock land uses. Impacts are therefore considered to be less than significant.

The proposed project would not substantially affect any of the existing off-site land uses and activities, such as the open space along the Island, passive recreation areas within the Harbor, or the existing or planned commercial uses. The renovations to the dock and slip facilities do not change the land uses on the project site and any surrounding uses and activities would continue and would coexist with each other as they do presently, without disruption from the proposed project and with no change in the character of the area.

**State Sovereign Lands/State Tidelands Grant.** The proposed project will not conflict with the State Tidelands Grant. The proposed project does not entail the sale of any tidelands to a private entity, and the marinas will remain under the control of the County. In accordance with the conditions in the Tidelands Grant for Dana Point Harbor, the proposed project is the improvement of a Harbor and ensures that the lands will remain available for public use. Additionally, the proposed project will ensure that the recreation and commercial fishing uses continue, consistent with the Tidelands Grant requiring that actions associated with the Harbor are necessary or convenient to accommodate



commerce and navigation. Further, the proposed project is intended to comply with approved LUP Policy 3.2.1-1 that states, "Administer the use of the tidelands and submerged lands in a manner consistent with the tidelands trust and all applicable laws". Therefore, impacts related to consistency with the State Tidelands Grant are considered less than significant, and no mitigation is required.

**County of Orange.** As stated above, the Harbor is shown as a Regional Recreation area in the County's General Plan. The proposed Marina Improvement Project is a continuation of existing recreational marina-related uses and is consistent with the County's General Plan designation. Therefore, impacts related to consistency with the County's General Plan are considered less than significant, and no mitigation is required.

**City of Dana Point.** The City's General Plan designates the project area as Harbor Marine Water. The proposed Marina Improvement Project is a continuation of existing land uses and is consistent with the City's General Plan designation. As stated above, the Implementation Program component of the Dana Point Harbor LCP incorporates applicable sections of the City's zoning code as they relate to Coastal Permit processing. The Marina Improvement Project is an identified part of the Revitalization Plan and is designed to be consistent with the LCPA as adopted by the City for the Revitalization Plan.

The Land Use Plan component of the LCPA was effectively certified with suggested modifications by the CCC on October 8, 2009 and was adopted by the Dana Point City Council on February 8, 2010. The IP component of the LCPA was approved with suggested modifications by the CCC on January 12, 2011 and was and was adopted by the Dana Point City Council on June 13, 2011.

Therefore, impacts related to consistency with the City planning documents are considered less than significant, and no mitigation is required.

As further discussed below, the CCC retains jurisdiction over the waterside improvements because the Marina Improvement Project area includes submerged lands. As discussed in FEIR No. 591, all waterside improvements are subject to a CDP approval by the CCC prior to project construction.

**Dana Point Harbor Revitalization Plan and District Regulations.** The Dana Point Harbor Revitalization Plan and District Regulations were intended to replace the certified Land Use Plan for Dana Point Harbor that is included in the City's Land Use Plan of the LCP. The Revitalization Plan and District Regulations therefore required an LCPA, as discussed above. The proposed Marina Improvement Project is a part of the overall Revitalization Plan and is designed to be consistent with both the Plan and the District Regulations, as adopted and effectively certified.

As stated above, during the LCPA review and approval process, the land use categories described in the Dana Point Harbor Revitalization Plan and District Regulations were revised. The land use category for the Marina Improvement Project areas (PAs 8 through 12) in the Dana Point Harbor Revitalization Plan and District Regulations is identified as "Marinas (waterside)." All of the components contained in the proposed Marina Improvement Project are consistent with the marina land use category. Further, the Marina Improvement Project is intended to be fully consistent with all

approved LUP Policies for the Dana Point Harbor Revitalization Plan Land Use Plan. Therefore, because the proposed Marina Improvement Project does not change the land uses within the project area and because it is consistent with the approved LUP Policies, the impacts related to consistency with the Dana Point Harbor Revitalization Plan and District Regulations are considered less than significant, and no mitigation is required. Although FEIR No. 591 concluded that the Revitalization Project was by definition “inconsistent” with the current LCP because the project required an LCPA, the effective certification of the LUP and IP components of the LCPA by the CCC reconciles any inconsistencies between the project and the City’s General Plan.

**Local Coastal Program Consistency.** As indicated previously, the certified Dana Point LCP as approved for the Revitalization Plan includes the project area. However, the CCC retains jurisdiction because the project area is located within the Coastal Zone. As discussed in FEIR No. 591, all waterside improvements must be approved as part of a CDP by the CCC prior to project construction. An application for a CDP will be submitted for consideration by the CCC after certification of the SEIR by the County. Therefore, the appropriate standard for review is the project’s consistency with the CCA, which identifies Coastal Resources Planning and Management Policies (Chapter 3, Sections 30200 et al.) that address the following issue areas:

- Public Access
- Recreation
- Marine Environment
- Land Resources
- Development
- Industrial Development

Table 4.1.A outlines the applicable CCA policies and discusses the project’s consistency with each applicable policy. Several policies are not included in Table 4.1.A because they address issues that are not relevant to the proposed marina renovations and do not apply to an existing and operating marina facility. Policies not included in the discussion include the following: access and development policies for new development projects; development of private, upland, and agricultural lands; construction altering the natural shoreline; water supply and flood control projects; and policies related to industrial developments.

As indicated above, the policies in Chapter 3 of the CCA are intended to provide protection for suitable oceanfront lands to be used for water-oriented and recreational purposes. The proposed project is consistent with the intent of these policies. The project consists of the improvement of the existing water-oriented recreational and visitor-serving facilities within the marina areas of the Harbor. In addition, the proposed project would further increase public recreational opportunities by providing upgraded facilities that are ADA compliant. As indicated in Table 4.1.A, the proposed project is consistent with CCA policies, and impacts are considered less than significant. No mitigation measures are required.

**Table 4.1.A: Consistency with Coastal Act Policies**

Coastal Act Policies	Discussion/Analysis of the Proposed Project
<p><b>Section 30210:</b> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs, and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.</p>	<p>The proposed project provides for enhanced public access through the rehabilitation of the marina’s access facilities including docks and gangways. The project includes installation of ADA compliant facilities, including ramp access to the docks, thereby increasing public access and improving public safety. Therefore, the proposed project is consistent with Coastal Act Section 30210.</p>
<p><b>Section 30211:</b> Development shall not interfere with the public’s right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.</p>	<p>The project will not interfere with the public’s right of access to the sea and does not have any effect on the use of dry sand or rocky coastal beaches. The project will not interfere with or modify the public’s right of access to the Dana Point Harbor facilities. The proposed project will upgrade the existing marina facilities and provide additional access through the installation of new ADA compliant facilities. The project will maintain the existing coastal access for the public, which will serve local and regional visitors and enhance the existing public recreational opportunities for boaters as well as for those without boats who wish to access the same facilities. Therefore, the proposed project is consistent with Coastal Act Section 30211.</p>
<p><b>Section 30213:</b> Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.</p>	<p>As owner and operator of Dana Point Harbor, the County of Orange is committed to protect, encourage, and provide lower-cost visitor and recreational facilities. The Harbor currently provides a range of public recreational opportunities. The proposed project does not change the cost or availability of visitor and recreational facilities.</p> <p>The proposed project includes renovations to dock and slip facilities within the marina and does not remove or preclude the use of existing passive recreational activities currently available throughout the Harbor. The project will not impact or discourage the use of any existing free and/or low-cost recreational facilities, including access to Baby Beach, the OC Sailing and Events Center, the fishing pier, the Ocean Institute, kayaking, and picnic and scenic grass areas. In addition, through the renovation of the Harbor facilities, including the provision of ADA access that is currently not provided, the project ensures that public access to the dock and slip facilities is provided at</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
	<p>public use areas, including the Embarcadero/Dry Boat Storage Staging docks (the Dry Boat Storage was approved by the County and environmentally cleared by FEIR No. 591), the sport fishing docks, and the guest and dinghy docks. Therefore, because the proposed project ensures that the Dana Point Harbor will continue to provide public recreational opportunities through newly renovated and ADA compliant facilities, the project is considered consistent with Coastal Act Section 30213.</p>
<p><b>30220</b> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.</p>	<p>Dana Point Harbor provides a variety of water-oriented activities, including recreational boating, cruising, tours, fishing, and related activities focused on the ocean which, as a result, cannot readily be provided in inland water areas. Dana Point Harbor has been in operation since the late 1960s. Renovating the dock and slip facilities shows a commitment by the County to the long-term use of this area as a water-oriented recreational facility, consistent with Section 30220 of the Coastal Act.</p>
<p><b>30221</b> Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.</p>	<p>As owner and operator of the Dana Point Harbor, the County of Orange uses, protects and maintains the oceanfront land for long-term public and commercial recreational activities to complement other similar facilities along the Orange County coastline. The County utilizes the protected waters of Dana Point Harbor to provide long-term recreational uses to complement similar facilities along the Orange County coastline. As demand for water-oriented recreational facilities in Orange County remains high, conversion to other uses is not under consideration or very likely. This is consistent with Section 30221, protecting such recreational facilities for the long term.</p>
<p><b>30224</b> Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.</p>	<p>As owner and operator of the Dana Point Harbor, the County of Orange seeks to increase recreational boating use of coastal waters by developing dry storage areas, increasing public launching facilities, and providing upgraded docking space in the existing harbor. The proposed project would renovate the existing marina facilities and enhance the existing recreational boating facilities within the Harbor as intended during the preparation of the overall Dana Point Harbor Revitalization Project. The Harbor Revitalization Project Program EIR included a Dry Boat Storage building for approximately 400 boats and surface boat storage for 93 boats to accommodate the future needs of boaters. In addition, as a part of the overall Harbor program, the public</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
	<p>launch ramp was renovated in 2007 and is now ADA compliant, providing one additional floating dock.</p> <p>The waterside project now under consideration encourages increased recreational boating use by providing upgraded ADA-compliant facilities and accommodating changes in the boating needs of the public by providing slightly longer average slip lengths, demonstrated by the current shortage of adequately sized slips.</p> <p>The dock and slip facilities were developed more than 35 years ago when the average length of recreational boating slips was shorter than current boater demand. Although the proposed project may result in a reduction in the total number of boat slips, the marina facilities would provide increased recreational opportunities because the renovated facility would be designed to meet existing and anticipated future market needs, and would facilitate/continue public use within the coastal zone. As discussed in Section 3.0 of this SEIR, the number of slips vacated each year, also known as attrition, has absorbed the loss of slips due to project implementation. The County expects that no boaters will need to be relocated from the Harbor upon project completion because the expected number of vacancies over the last few years has exceeded the number of slips lost with the proposed plan. In addition, FEIR No. 591 included a Dry Boat Storage building that is expected to house more 493 boats, which will have access to the Harbor via the proposed Embarcadero/Dry Boat Storage Staging docks. This component, along with the recently renovated boat launch, is consistent with the Coastal Act Section 30234 to develop dry storage areas and increase public launching facilities. Further, the policy encourages the provision of additional berthing space in existing Harbors; although the number of slips will decrease, the addition of slightly longer slips will help reduce the wait list for longer slips. Additionally, the project does not involve any changes in land uses that would preclude boating. Therefore, the proposed project is considered consistent with the intent of Coastal Act Section 30234.</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
<p><b>Section 30230:</b> Marine resources shall be maintained, enhanced, and where feasible restored. Special protection shall be given to areas and species of special biological or economic significance. Use of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.</p>	<p>As outlined in this SEIR, a number of steps will be taken to protect the waters of Dana Point Harbor and the marine resources located within the Harbor and ocean waters. The proposed project provides for the protection of marine resources by requiring biological surveys to determine presence prior to any construction activities. If present, limitations on hours of construction will be implemented to ensure minimal noise disruptions to wildlife species (see Section 4.7, Biological Resources).</p> <p>Any loss of epibiota species during removal of docks and pilings will be short-term and is not considered significant. These subtidal species are expected to re-establish themselves to healthy populations following disturbance. No other marine species or resources will be adversely affected by the proposed project (see Section 4.7, Biological Resources), and therefore, no species would require restoration. Therefore, the proposed project is consistent with Coastal Act Section 30230.</p>
<p><b>Section 30231:</b> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.</p>	<p>See response to Section 30230. Harbor and coastal waters will be protected through continued participation in the Clean Marinas Program and implementation of the Water Quality Management Plan (WQMP), which includes best management practices (BMPs) for ongoing marina operations and will include implementation of BMPs for construction. BMPs as outlined in Section 4.3, Hydrology and Water Quality, of this SEIR are designed to ensure that water quality is not adversely impacted and that biological productivity is maintained. During construction, BMPs concentrate on preventing soil and sediment, construction debris, and chemicals from entering the marine environment.</p> <p>Dana Point Harbor is a Certified Clean Marina, as defined and administered by the Clean Marinas Program. The purpose of the program is to use BMPs in order to prevent or reduce pollution in the coastal waters. The program requires Certified Marinas to follow guidelines for marina activities including, but not limited to, emergencies, topside boat maintenance and cleaning, and underwater boat hull cleaning. The Dana Point Harbor Marina rules and policies prohibit certain activities that could contribute to poor water quality.</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
	<p>This includes prohibiting rebuilding, hull painting, and other major repairs, as well as restrictions for sanding, painting, and the use of chemicals on a boat while the boat is moored at the marina. Owners and contractors are required to follow policies that specify proper methods of in-water boat maintenance and require contractors to be registered and carry identification for any in-water repairs or maintenance services. These methods, required in order to retain the Clean Marinas Program certification, help to ensure that Dana Point’s coastal waters can maintain optimum populations of marine organisms and protect human health, consistent with Coastal Act Section 30231.</p> <p>The County believes that with the Clean Marina Program requirements, potential impacts to water quality as a result of in-water maintenance is negligible; however, to the extent that such activities are or become a concern, that could be addressed by the presence of a shipyard. There is a shipyard operating in the Harbor, and there is no plan for the Harbor that does not include shipyard uses. Shipyards are also subject to regulations designed to maintain and improve water quality. Marine maintenance services provided at the shipyard will continue to be provided with project implementation. The project will not relocate or change current maintenance operations; the potential for impacts to water quality related to in-water maintenance is expected to be less than significant.</p> <p>The marine environment is not significantly altered by the project since the replacement of docks and pilings will result in conditions similar to existing conditions after construction. Marine organisms displaced during the renovations are expected to return to preconstruction populations following disturbance. Therefore, the proposed project is consistent with Coastal Act Section 30231.</p>
<p><b>Section 30232:</b> Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.</p>	<p>The coastal waters around the project site are impaired by pollution associated with water runoff and other urban sources. However, accidental spillage of hazardous substances during construction will be controlled through implementation of an appropriate NPDES or other regulatory measures to ensure against any impacts resulting from accidental spills. In addition, as</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
	<p>discussed under Coastal Policy 30231, above, Dana Point Harbor is a Certified Clean Marina and is required to adhere to standards for containment and cleanup of accidental spills and maintain equipment and materials on site for such accidental spills.</p> <p>During operational activities, spillage of solvents and fuels on the project site can occur through spillage in the waterways. However, the uses on the project site are not changing and the project does not increase capacity. Prevention and clean-up would continue to be subject to the enforcement activities of the Dana Point Harbor Patrol. In addition, implementation of operational BMPs, adherence to the Clean Marina Guidelines, and enforcement of existing marina regulations regarding the transportation and disposal of such wastes would ensure effective containment of accidental spills. Therefore, the project is consistent with Coastal Act Section 30232.</p>
<p><b>Section 30233:</b> The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.</p>	<p>Appropriate permits for discharge of materials into jurisdictional waters and placement of piles during construction are required as mitigation by the project (see Section 4.8, Hydrology and Water Quality). Any replacement of the existing dock and slip facilities will require implementation of measures to minimize adverse environmental effects.</p> <p>The project is the renovation of existing structures and the goal to provide greater public safety and access to those facilities during operation. The replacement of the floating dock facilities is considered the least environmentally damaging alternative because potential impacts are confined to areas previously disturbed by the operation and original construction of the facility. In addition, expanding boating facilities to provide public access and recreational opportunities in open coastal waters is specifically allowed under Section 30233, as well as fill associated with restoration purposes.</p> <p>There is no alternative for the renovation of dock and slip facilities that would be less environmentally damaging and that would meet all of the project objectives. Alternative 3 eliminates the significant and adverse impacts due to shading associated with the project. However, Alternative 3 includes only ADA improvements in the East and West Basins and construction of the</p>



Coastal Act Policies	Discussion/Analysis of the Proposed Project
	<p>Embarcadero/Dry Boat Storage Docks, with one ADA gangway. Therefore, although Alternative 3 would be less environmentally damaging, it does not meet the project objectives because it does not renovate and replace any of the deteriorating docks and slips. The proposed project is therefore considered consistent with Coastal Act Section 30233.</p>
<p><b>Section 30234:</b> Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.</p>	<p>The renovations planned for the commercial fishing docks will extend the longevity/operations of the dock facilities and ensure that Dana Point Harbor continues to include commercial fishing uses. In addition, the sport fishing docks are utilized by many recreational boaters and fishermen. Therefore, the proposed project is consistent with the intent of Coastal Act Section 30234, and recreational boating facilities and commercial fishing uses would not be affected.</p> <p>The proposed project is the renovation and upgrading of recreational boating facilities, as specified in Section 30234. The preferred project design accommodates current changes in the boating needs of the public and responds to the local Dana Point Harbor existing boaters' needs for slightly larger slips. As previously discussed, the number of slips vacated each year, also known as attrition, has absorbed any potential loss of slips due to project implementation. The County expects that no boaters will need to be relocated from the Harbor upon project completion because the expected number of vacancies over the past few years has exceeded the number of possible slips lost with the proposed plan. Boaters with temporary agreements may need to vacate their slips.</p>
<p><b>Section 30234.5:</b> The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.</p>	<p>See response to Section 30234. Commercial and recreational fishing opportunities will be protected and preserved. Implementation of the proposed project would enhance the facilities within the marinas that support the existing fishing activities. Specifically, the new docks and gangways would be ADA compliant, thereby allowing more people to participate in recreational boating and fishing activities. In addition, the proposed improvements would ensure that commercial fishing activities would continue to be viable into the future, as the life of the facilities would be extended. No proposed project component will reduce existing fishing opportunities. Therefore, the proposed</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
	<p>project would not adversely affect the economic, commercial, and recreational importance of fishing activities and is considered consistent with Coastal Act Section 30234.5.</p>
<p><b>Section 30235:</b> Revetments, breakwaters, groins, harbor channels, seawall, cliff retaining walls, and other construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline and sand supply.</p>	<p>The proposed project does not include any new construction that would alter natural shoreline processes. The existing seawalls in the marina will be repaired as necessary in order to protect existing marina access and facilities. Therefore, the proposed project is consistent with Coastal Act Section 30235.</p>
<p><b>Section 30240:</b> Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.</p>	<p>The State Water Resources Control Board (SWRCB) has designated the Dana Point Harbor with a RARE (support of rare, threatened, or endangered species) beneficial use classification. As a result of the RARE beneficial use classification, the SWRCB has designated Dana Point Harbor an Environmentally Sensitive Area (ESA). The Orange County Drainage Area Management Plan (DAMP) also identifies the Harbor as an ESA.</p> <p>The project site itself is a recreational marina, and the project objective is to renovate the existing facilities to ensure the long term viability of the recreational facilities. The existing use as a marina will continue, with those uses being dependent on the waters and habitat areas of the Harbor. In addition, mitigation measures provided in Section 4.7, Biological Resources, are designed to prevent or lessen environmental impacts on biological resources. Because the uses on site will remain essentially the same as currently exist, operation of the proposed project would not degrade or be incompatible with existing habitat and recreational uses. Therefore, the proposed project is consistent with Coastal Act Section 30240.</p>
<p><b>Section 30244:</b> Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.</p>	<p>As discussed in the Initial Study, no archaeological and paleontological resources as identified on the California State Historic Resources Inventory would be impacted by project implementation. Therefore, the proposed project is consistent with Coastal Act Section 30244.</p>

Coastal Act Policies	Discussion/Analysis of the Proposed Project
<p><b>Section 30251:</b> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coast areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas and where feasible to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.</p>	<p>The proposed project does not affect the existing public vistas or any natural landforms. The West Marina would be realigned from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina. However, this change would not affect the visual quality of the Harbor and will open up the views from the boardwalk into the inner channel. The proposed marina facilities will be visually compatible with the character of the surrounding areas and similar to existing viewsheds in and around the marina. Preservation of the scenic marine character is consistent with the objectives of the California Coastline Preservation and Recreation Plan. Therefore, the proposed project is consistent with Coastal Act Section 30251.</p>
<p><b>Section 30253:</b> New development shall: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard, (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area, or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs, (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development, (4) Minimize energy consumption and vehicle miles traveled, and (5) where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.</p>	<p>The proposed project provides for implementation of marina improvements in a manner that minimizes risks to life and property through the implementation of site specific recommendations and specifications prepared by professional engineers and others. In addition, a geotechnical evaluation was prepared for the proposed project, which, in concert with compliance with the seismic requirements of the Uniform Building Code and the recommended engineering design measures, would assure stability, structural integrity, and protection of the improvements in liquefaction risk zones. Additional detail regarding geologic hazards is provided in Section 4.6.</p> <p>As discussed in Section 4.8, Aesthetics, the proposed project will protect new and existing coastal access, thereby enhancing visitor serving recreation opportunities.</p> <p>The project will be implemented consistent with federal, State, and local rules and regulations addressing public health and safety, including requirements from the South Coast Air Quality Management District (SCAQMD). Based on the above reasons, the project is consistent with Coastal Act Section 30253.</p>

<b>Coastal Act Policies</b>	<b>Discussion/Analysis of the Proposed Project</b>
<p><b>Section 30255:</b> Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal dependent developments shall not be sited in a wetland. When appropriate, coastal related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.</p>	<p>The proposed project is an improvement to an existing waterside marina use. No landside wetland is affected by the proposed project. The project enhances an existing coastal dependent recreational and visitor-serving use. The project will renovate and extend the usable life span of the existing marina facilities; this will support coastal-dependent marina-related uses, including but not limited to, recreational boating activities, marine retail businesses, commercial and recreational fishing, and Marine Services. Therefore, the proposed project is consistent with Coastal Act Section 30255.</p>

#### **4.1.6.2 Potentially Significant Impacts**

No potentially significant impacts have been identified.

#### **4.1.7 CUMULATIVE IMPACTS**

As defined in Section 15130 of the CEQA Guidelines, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for land use. Because the proposed Marina Improvement Project has little to no land use effect, the area of potential cumulative effect is very limited. Therefore, the cumulative impact study area is very limited. In addition, the Program FEIR for the Dana Point Harbor Revitalization Project area fully encompassed the Marina Improvement Project site.

The proposed project site is an existing Harbor and the immediate area surrounding the project site is largely built out. Currently, there are several projects that would be considered within the cumulative study area for land use impacts. The City of Dana Point has identified the following projects as projects that have been proposed or approved but are not yet fully constructed:

- The Headlands – Commercial 35,000 sf Retail/Office (CUP/CDP/SDP approved in 2007)
- The Headlands – Seaside Inn 90 Room Hotel (CDP not yet approved but included as part of HDCP approval)
- The Headlands – Custom Homes 118 SFD (CDPs approved, 25 building permits have been issued by the City)
- Dana Point Harbor Revitalization Plan (landside development)
- Doheny Hotel – 258-Room Hotel with conference room and restaurant facilities

The Headlands projects listed above were included in the cumulative analysis for the Program FEIR, and therefore, because the Marina Improvement Project is a part of the Program FEIR, the cumulative land use impacts associated with these projects have already been considered for the proposed project and were found not to be significant.

Proposed project improvements are intended to be fully consistent with all applicable CCA policies and with the City and County General Plans. The proposed improvements would not alter land use patterns or intensities in other areas of the City and would not contribute to cumulative land use impacts to the City's land use patterns and character. Therefore, the contribution of the proposed project to potential cumulative land use compatibility effects (aesthetics, noise, air quality, and traffic and circulation) with other projects in the study area is considered less than significant.

There are no incompatibilities between the proposed project and planned future projects. Therefore, the contribution of the proposed project to potential cumulative land use compatibility impacts in the project area is considered less than significant.

#### **4.1.8 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

No significant unavoidable adverse land use impacts have been identified.

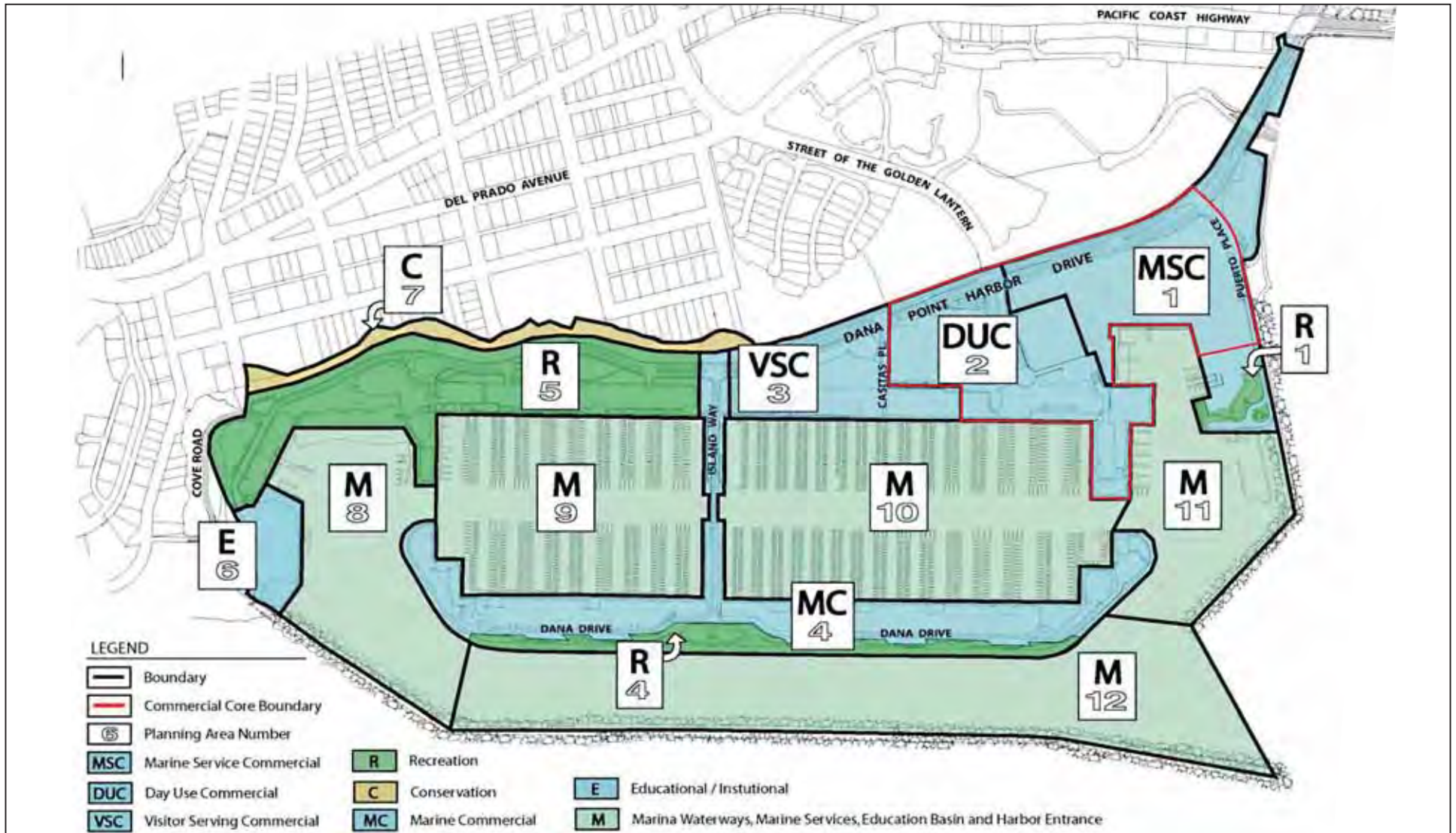
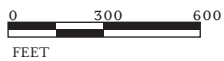
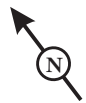


FIGURE 4.1-1

LSA



SOURCE: Dana Point Harbor Revitalization Plan & District Regulations Land Use Plan

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*Dana Point Harbor Marina Improvement Project*  
 Dana Point Harbor Revitalization Plan and  
 District Regulations Land Use Plan

## 4.2 GEOLOGY AND SOILS

This section provides a discussion of the existing geologic and soils environment and an analysis of potential impacts from implementation of the proposed project. This section also addresses the potential for structural damage due to the local geology underlying the proposed project site, as well as slope stability, ground settlement, soil conditions, and regional seismic conditions. This section summarizes information provided in the Final Environmental Impact Report No. 591 (FEIR No. 591) for the Dana Point Harbor Revitalization Project, the *Preliminary Geological/Geotechnical Assessment Report for the Dana Point Harbor Revitalization Project* (2006) prepared by GeoPantech, and the *Geotechnical Engineering Exploration and Analysis for the Proposed Renovations to Dana Point Harbor and Addendum Letter* prepared by Leighton Consulting, Inc. (January 2008). The Geotechnical Preliminary Evaluation and Addendum Letter prepared by Leighton Consulting, Inc. are included in Appendix B of this Subsequent EIR (SEIR).

### 4.2.1 EXISTING ENVIRONMENTAL SETTING

#### Geologic Setting

The project site and Harbor are located within the northwest-trending Peninsular Ranges in Southern California. The Peninsular Ranges province is an elongated area characterized by parallel fault-bounded mountain ranges and intervening valleys. The province extends southward from the Transverse Ranges at the northern side of the Los Angeles Basin southward into Mexico. The Harbor is situated at the southeastern corner of the San Joaquin Hills, one of these northwest-trending ranges.

#### Topography/Landform

The Harbor is a coastal reentrant (cove) protected by the Headlands at Dana Point. This cove is bordered on the north by steep, highly eroded sandy cliffs or bluffs that are approximately 100–200 feet (ft) in elevation. The existing Harbor topography gently slopes from the northwest to the southeast, with a grade change of approximately 20 ft from Dana Point Harbor Drive to the top of the bulkhead.

The protected cove owes its existence to differing resistance to wave erosion of the two bedrock formations exposed along a fault in the steep coastal bluff. Bedrock units include the Capistrano Formation and the San Onofre Breccia, both of which are exposed in the sea cliffs behind the Harbor, which are separated by the Dana Cove Fault. The weaker Capistrano Formation has been preferentially eroded, creating Dana Cove. More youthful sediments have been deposited in the Harbor, including colluvium, alluvium, beach deposits, landslide debris, talus, and artificial fill placed during construction of the Harbor in the late 1960s.



## Bedrock Units

**San Onofre Breccia.** The San Onofre Breccia is a Middle Miocene-age (approximately 11 to 16 million years old) formation of marine origin. It consists of a very coarse, reddish-brown to blue-gray, massive to crudely bedded breccia with interbeds of coarse, pebbly sandstone and siltstone. The soil is generally an earthy, poorly cemented silt, or a well-cemented angular sand. The San Onofre Breccia is exposed at the western end of the Harbor along the east-facing cliffs, where it is in fault contact with the Capistrano Formation. The San Onofre Breccia is a bedrock unit that is resistant to erosion and forms the Headlands at Dana Point.

**Capistrano Formation.** The Capistrano Formation is a Late Miocene to Early Pliocene-age (approximately 3.6 to 11 million years old) formation of marine origin. In the City of Dana Point (City) area, the Capistrano Formation is widespread, with a total thickness of nearly 2,400 ft. This marine (ocean-deposited) bedrock formation is divided into a few recognizable subunits: a siltstone facies, a sandstone facies, and sandstone with conglomerate and sedimentary breccia. These three facies of the Capistrano Formation are all exposed in the sea cliffs surrounding the project area, generally dipping and sloping northward. The siltstone facies is medium to dark gray and brownish-gray to dark greenish-gray, fine-grained, poorly to moderately consolidated, and massive to moderately fissile (capable of being split or divided in the direction of the grain or along natural planes of cleavage). The sandstone facies is yellowish-brown to pale yellowish-brown and medium gray to light gray, fine- to medium-grained, weakly cemented, and massive to poorly bedded. The sandstone and breccia facies are yellowish-brown and coarse-grained, weakly cemented to friable, with angular to rounded pebbles and cobbles of multiple origins, massive to poorly bedded and with interbeds of well-graded sand and silt. The bedrock encountered is from the siltstone facies of the Capistrano Formation. Capistrano Formation bedrock adjacent to the Dana Cove fault contact is sheared in a zone approximately 70–100 ft wide.

## Subsurface Soil Conditions

Geologic processes such as weathering and erosion break bedrock down into smaller particles of sediment. Sediments such as clay, silt, sand, gravel, and other loose deposits that lie on top of bedrock are grouped together in the general category of “surficial materials.” These materials are not soils; they are the deeper earth materials that lie between the soil zone and the underlying bedrock. Soils commonly develop by weathering of the uppermost part of these materials.

Artificial fill, beach sand, and alluvial deposits underlie the Harbor. The sea cliffs surrounding the Harbor to the north and west are cut into marine sedimentary rocks. The rocks exposed in the sea cliff are capped by marine and nonmarine terrace deposits, and the slopes along the sea cliff consist of landslide debris and talus deposits.

Leighton Consulting, Inc. performed a preliminary geotechnical investigation (2008) of landside locations that were preselected to evaluate access for heavy equipment. The results indicate the presence of fill in landside areas to depths that varied from approximately 10–20 ft on the cove side of the Harbor to depths of approximately 23–30 ft below the island side of the Harbor. The fill that underlies the cove side of the Harbor typically consisted of fine- to medium-grained sands with varying clay content that exhibited loose to medium relative thickness. The fill material encountered

below the island side of the Harbor also consisted primarily of sand with greater silt and occasional clay content. Field tests indicated the presence of oversize (cobble and boulder) material within the fill. The presence of oversize material is not considered to be inconsistent with the manner in which the island was created.

The fill was underlain by native soils comprised of loose relative density sands with varying clay content to a depth of approximately 17–25 ft on the cove side of the Harbor. Native soils were generally not identified at the boring located on the island side of the Harbor.

The bedrock was encountered at a depth of 17–25 ft below grade in the cove region of the Harbor and at greater depths below the island region. The bedrock contact appeared to be shallower along the north side of the island, where bedrock was encountered at depths of 23–28 ft as compared to the south side of the island, where bedrock was encountered at a depth of 37 ft.

Bedrock of the Capistrano formation was encountered below the fill and native soils at the depths described above. The bedrock typically consisted of interbedded layers of sandstone and siltstone.

### **Groundwater Conditions**

Landside groundwater was typically encountered at depths of 9–16 ft below grade. The groundwater table was, however, considered to exist at depths of 6–10 ft below grade on the basis of the relative moisture contents of the recovered soil samples. Groundwater in the areas of the seawalls is expected to be subject to tidal fluctuation.

### **Faults and Seismic History**

Historic records of earthquakes in California have been compiled for approximately the past 200 years. More accurate instrumental measurements have been available since 1933. As demonstrated by historic seismicity, earthquakes generated by displacement along regional faults within an approximately 62-mile (mi) radius are considered capable of generating ground shaking of engineering significance at a particular site.

A fault is described as the area where two tectonic or continental plates meet. An “active” fault is defined by the State of California as having had surface displacement within Holocene time (i.e., within the last 11,000 years). The San Andreas Fault, where the western Pacific plate meets the eastern North American plate, is the State’s largest and most active fault. Seismologists have determined that the San Andreas Fault is moving at a rate of approximately two inches per year. A “potentially active” fault is defined as showing evidence of surface displacement during the Quaternary time (i.e., during the last 1.6 million years). These terms are used by the State primarily for use in evaluating the potential for surface rupture along faults and are not intended to describe possible seismic activity associated with displacement along a fault. These definitions are not applicable to blind thrust faults that have only limited, if any, surface exposures.

Orange County, like most regions that border the Pacific Ocean, is a region of high seismic activity, and therefore is subject to potentially destructive earthquakes. Earthquakes are the result of an abrupt release of energy stored in the earth. Major earthquakes are commonly accompanied by foreshocks

and aftershocks, which are usually less intense and represent local yielding and adjustments of rock masses along the main zone of faulting. Earthquakes create two types of hazards: primary and secondary. Primary seismic hazards include ground shaking, ground displacement, subsidence, and uplift due to seismic episodes. Primary hazards can, in turn, induce secondary hazards. These include the following: ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, seismically induced water waves (tsunamis and seiches), movement on nearby independent faults (sympathetic fault movement), and dam failure.

Active or potentially active faults of seismic concern in the region include the Dana Cove Fault, Newport-Inglewood Fault Zone/South Coast Offshore Zone of Deformation, San Joaquin Hills Fault, Oceanside Blind Thrust Faults, Whittier-Elsinore Fault, the San Andreas Fault, the Palos Verdes Fault, the San Clemente Fault, and the Rose Canyon Fault. Figure 4.2-1 shows the project site proximity to the surrounding fault systems. A brief discussion of each of the fault systems most likely to affect the project area is presented below.

**Dana Cove Fault.** This well-defined fault zone passes diagonally through the Harbor, directly under and nearly parallel to the existing West Basin Pier (bearing approximately 43 degrees west of north). The seaward projection is estimated to be approximately 250 ft wide, consisting of sheared breccia and contorted siltstones and sandstones. No seismic activity has been reported along this fault, which has been classified as inactive.

**Newport-Inglewood Fault Zone/South Coast Offshore Zone of Deformation.** A nearby active fault close enough to affect the project area is the South Coast Offshore Zone of Deformation (SCOZD), which is approximately 3.4 mi (5.5 kilometers [km]) southwest of the project area. The SCOZD represents the likely offshore connection between the Newport-Inglewood Fault Zone located to the northwest and the Rose Canyon Fault Zone located further to the south, forming the Newport-Inglewood–Rose Canyon Fault Zone. Local northwest-to-west-trending folds in the shallower horizons are also associated with this zone. The SCOZD extends approximately 42 mi from its northern terminus, located offshore approximately 5 mi south of Newport Beach, to its southern terminus, located offshore southwest of Oceanside.

The SCOZD appears to reflect a tectonic style similar to that of the onshore portion of the Newport-Inglewood Fault, which extends onshore from the east-west Malibu-Santa Monica Fault Zone at the southern front of the Transverse Ranges to the northwest, to offshore between Newport Beach and Laguna Beach at the San Joaquin Hills Structural High. The Newport-Inglewood Fault is characterized by short, discontinuous, northwest-trending en-echelon, right-lateral faults, relatively shallow drag fold anticlines, and subsidiary normal and reverse faults. Scientists from the United States Geological Survey (USGS) also interpret recent faulting at the base of the slope between Dana Point and Oceanside to be related to a strand of the Newport-Inglewood Fault.

**San Joaquin Hills and Oceanside Blind Thrust Faults.** In addition to surface faults, blind thrust faults are also believed to exist in the region. These blind thrust faults are not expressed at the surface, but are inferred to exist based on indirect information such as seismicity and folded stratigraphy. Two recently postulated fault sources, the San Joaquin Hills Blind Thrust (SJHBT) and the Oceanside

Blind Thrust (OBT), are judged to be potentially significant seismic sources in the project area. The SJHBT is the closest active fault to the project area, located approximately 1.7 mi from the Harbor and is capable of generating a maximum moment magnitude ( $M_w$ ) 6.8 offshore earthquake.

**Whittier-Elsinore Fault.** The Whittier-Elsinore Fault Zone is one of the largest fault zones in Southern California. The Whittier-Elsinore Fault Zone extends from near the United States-Mexico border northwesterly to the northern Santa Ana Mountains. At the northern end, the zone of mapped faults branches into two segments west and east: the Whittier Fault and the Chino-Central Avenue Fault. The Whittier Fault generally runs from State Route 91 northwest along the foothills of Yorba Linda to the mouth of Tonner Canyon and on to the Whittier Narrows Recreation Area. This fault created the Puente-Chino Hills. The last major release near this fault was a magnitude 5.9 in 1987.

**San Andreas Fault.** The San Andreas Fault runs a length of roughly 800 mi through western and Southern California. The fault, a right-lateral strike-slip fault, marks a transform (or sliding) boundary between the Pacific Plate and the North American Plate.

**Palos Verdes Fault.** The northwest-trending Palos Verdes Fault Zone extends from Santa Monica Bay across the northeast side of Palos Verdes Peninsula to a location offshore from San Clemente, a distance of approximately 60 mi.

## Seismic Mapping

Beginning in 1997, the California Division of Mines and Geology (CDMG) has produced “Seismic Hazard Evaluation Reports” for the areas shown on selected USGS topographic maps (7.5-minute series) within the State. The stated purpose of these reports/maps is to identify potential seismic hazards for use by city and county planning agencies in their permitting and land use planning processes. The project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone.

## Seismic Hazards

**Ground Shaking and Surface Fault Rupture.** The primary seismic effects associated with earthquakes are ground shaking and surface fault rupture. As stated above, the Dana Point Marina Improvement Project is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and no Special Studies Zones have been designated within the City. The Alquist-Priolo Earthquake Fault Zones are areas determined by the State of California Geologist as affected by potentially and recently active traces of earthquake faults.

Ground shaking and surface fault rupture would typically be considered to have the greatest potential for damage associated with earthquakes. Ground shaking is characterized by the physical movement of the land surface during and subsequent to an earthquake. Surface fault rupture occurs when fault displacement breaks the ground surface along the historic trace of a fault. These seismic events have the potential to cause destruction and damage to buildings and property, including damage resulting

from damaged or destroyed gas or electrical utility lines; disruption of surface drainage; blockage of surface seepage and groundwater flow; changes in groundwater flow; dislocation of street alignments; displacement of drainage channels and drains; and possible loss of life. In addition, ground shaking and surface fault rupture can induce several types of secondary ground failures, including liquefaction and landslides.

The site is likely to experience strong ground shaking during the life of the development. Peak horizontal ground acceleration (PHGA) is generally used to characterize the amplitude of ground motion. A probabilistic seismic hazard analysis was performed to estimate the PHGA value at the site for all active or potentially active faults from results of a search within a 62-mile radius of the site. The approach takes into account site-specific response characteristics, historical seismicity, and the geological characteristics of all faults under consideration. The results suggest that the estimated PHGA with a 10 percent probability of exceedance in 50 years is approximately 0.38 (recurrence interval of 475 years) for the site.

**Ground Failure.** Secondary earthquake hazards such as liquefaction, lateral spreading, dynamic settlement, and landsliding are generally associated with relatively high intensities of ground shaking. Liquefaction, lateral spreading, and dynamic settlement are associated with shallow groundwater conditions and loose, sandy soils or alluvium.

**Liquefaction.** Soil liquefaction is a phenomenon that occurs during strong ground shaking, most commonly in generally low- to medium-density, saturated, low-cohesion soils, where the soils experience a temporary loss of strength and behave essentially as a fluid. In extreme cases, the soil particles can become suspended in groundwater, resulting in the soil becoming mobile and fluid-like. Liquefaction generally occurs as a “quicksand” type of ground failure caused by strong ground shaking. The primary factors influencing liquefaction potential are groundwater, soil types, relative density of the sandy soils, confining pressure, and the intensity and duration of ground shaking.

When a soil beneath a structure liquefies, the structure loses its integrity as the ground becomes unstable. Surface soils on slopes move downward, and ground oscillation occurs on areas of flat topography. Loss of bearing strength under structures is potentially most damaging because it leads directly to losses in the strength of the structure’s foundation and endangers people and property.

The project area is located in a zone designated as having a potential for liquefaction based on the Seismic Hazard Zones Liquefaction Map for the USGS *Dana Point, California 7.5-minute quadrangle* (refer to Figure 4.2-2). The Seismic Hazard Zone Report (SHZR) 049 notes that “in the Dana Point Quadrangle, artificial fill areas large enough to show at the scale of mapping consist of engineered fill for elevated freeways, the Harbor, and some of the mass graded areas. Since these fills are considered to be properly engineered, zoning for liquefaction in such areas depends on soils conditions in underlying strata.”

**Lateral Spreading.** Lateral spreading is the horizontal movement of soil masses caused by seismic waves moving through the ground; this movement is usually toward an open face slope or a steep slope that has been weakened by saturation. It occurs as a result of liquefaction of the subsurface soils. The occurrence of liquefaction and the potential for slope instability indicate lateral displacement of the Harbor's seawall is likely through the phenomenon of lateral spreading should a significant seismic event occur.

**Subsidence.** Subsidence refers to broad-scale changes in the elevation of the land. Common causes of land subsidence are pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils (hydrocompaction). Subsidence is also caused by heavy loads generated by large earthmoving equipment. The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction.

**Landslides and Slope Instability.** Although no significant slopes exist within the proposed project site, the cliffs behind the project area have been historically subject to landsliding. Slope repair and landslide mitigation on the historic landslide areas have been accomplished by shotcrete and rock anchors. Periodic slumping of cliff materials may also be anticipated due to continued erosion of the friable Capistrano Formation sandstones along this sea cliff. Factors that have been identified as contributing to the landsliding hazard for these slopes include bluff face instability, seepage, block falls, and adverse bedding.

## Seawall

Within the West and East Basins on the cove side, upland soils are retained by a reinforced concrete quay wall. The total bulkhead length of the project area on the cove side is approximately 5,100 linear feet, including an approximately 230 ft boat ramp section. The concrete quay wall is cast in place with either riprap or concrete panel slope protection, depending on the location of the bulkhead within the Harbor. Approximately 2,300 linear feet of the bulkhead is protected by concrete panels while the remaining 2,570 linear feet is stabilized with riprap. The quay wall is a gravity wall system, meaning that it relies on its own weight, the weight of the soil over the heel, and the friction between the supporting soil and the footing to resist the tendency of the wall to slide and overturn. The primary purpose of the quay wall/slope protection system is to retain the fill soils and provide the necessary physical and visual separation requirements between the waterside and the landward development. In short, the bulkhead system was designed to allow elevated and developable land close to the water's edge.

The seawall system along the north and south island sides of the basins of the Harbor consists of a cantilever retaining wall that is located at the crest of a slope that descends at an inclination of 1.5H:1V into the adjacent basins. The face of this descending slope is covered by a revetment, which consists of a series of cast-in-place concrete panels. A reinforced concrete thrust beam is located at the toe of the revetment panels to resist the tendency for the panels to slide down the slope. The panels, which are 10 ft wide and 20 ft long with a 1.5-inch gap between successive panels, are tied together by a thrust block. The panels are reported to be approximately 6 inches in thickness and

include steel reinforcement. The seawall system that exists in the boat launch area and along the eastern access channel of the marina generally consists of a similar retaining wall with riprap revetment covering the descending slope. The retaining structure along the south side of the boat launch ramp consists of a cantilever retaining wall of varying heights.

The overall structural condition of the exposed portions of the quay wall and concrete revetment in the basin area appears to be relatively good; however, select areas of the quay wall and the concrete revetment panels show signs of deterioration and distress. Damage of the concrete panel revetment slabs was first noted in February 1971, eight months after the filling of the Harbor. A subsequent underwater inspection performed in 1974 revealed that the maximum displacement of the panels had occurred within the intertidal zone adjacent to the base of the quay wall.

The *Bulkhead Structural Evaluation* prepared by the BlueWater Design Group (December 2003) observed overall area settlement of 1 to 2 inches throughout the site. This includes areas significantly beyond the wall, including the parking areas and concrete drainage swales. Based on the observed uniformity, settlement has likely occurred throughout the entire site, rather than just within the local proximity of the wall. Settlement is suspected because of the use of loose unconsolidated fill material that was subsequently flooded after construction (when the cofferdams were breached). There is also a low-velocity flow of water during tidal fluctuations that may cause some movement of soil. It is not clear, based on field observations, when the settlement occurred over the life of the current facilities. There is evidence of grinding and placement of concrete transition strips on the sidewalks where differential movement has occurred. The quay wall and revetment slope are designed to retain the earth of the upland side and provide a transition from the uplands area to the marina. Lateral load is imposed by the wedge of soil being retained as well as by surcharge from transient or live loads on the surface (such as vehicles).

## 4.2.2 METHODOLOGY

This section addresses the potential for structural damage due to the local geology underlying the proposed project site, as well as slope instability, ground settlement, unstable soil conditions, and regional seismic conditions. Geologic/geotechnical conditions affecting the site are summarized from compiled information and analyses, including referenced documents/publications and a site-specific program of geotechnical exploration, sampling, and laboratory testing. The Preliminary Geotechnical Investigation prepared for the project site is included in Appendix B of this SEIR.

## 4.2.3 THRESHOLDS OF SIGNIFICANCE

The impact significance criteria used for this analysis are based primarily on Appendix G of the State CEQA Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The project may be considered to have a significant effect related to Geology and Soils if implementation would result in one of more of the following:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other

- substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- Strong seismic ground shaking
  - Seismic-related ground failure, including liquefaction
  - Landslides
  - Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
  - Be located on expansive soils, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property
  - Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater

#### **4.2.4 OVERVIEW OF PROGRAM FEIR GEOLOGY AND SOILS ANALYSIS**

**Impacts.** The Program FEIR concluded that soil conditions such as collapsible and expansive soils, soil erosion, and subsidence would have some effect on implementation of the Revitalization Project. Because the Revitalization Project is located in a region that experiences seismic activity, the Program FEIR concluded that development would expose people and structures to effects associated with seismic activity. However, analysis concluded that with compliance with the County Zoning Code, the Uniform Building Code,<sup>1</sup> Standard Conditions of Approval (SCA), Project Design Features (PDFs), and Mitigation Measures (MMs), the impacts would be less than significant. Measures identified in the Program FEIR and applicable to the Marina Improvement Project are listed below.

During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

#### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

- MM 4.3-4** Site safety requirements shall address specifications of the Occupational Safety and Health Administration (OSHA). Applicable specifications prepared by OSHA related to earth resources consist of Section 29 CFR Part 1926, which are focused on worker safety in excavations.

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<sup>1</sup> Currently referred to as the California Building Code.



- MM 4.3-6** If cranes and pile-driving equipment are required, adequate setbacks shall be observed from bulkhead areas to prevent failures due to increased lateral and surcharge loads. (LUP Policy 8.6.7-9)
- MM 4.3-9** Conformance with the latest Uniform Building Code, California Building Code, or International Building Code and County Ordinances can be expected to satisfactorily mitigate the effect of seismic ground shaking. Conformance with applicable codes and ordinances shall occur in conjunction with the issuance of Building Permits in order to ensure that over excavation of soft, broken rock and clayey soils within sheared zones will be required where development is planned. (LUP Policy 8.6.7-13)
- MM 4.3-14** Engineering design for all structures shall be based on the probability that new structures will be subjected to strong ground motion during the lifetime of development. Construction plans shall be subject to the County review and shall include applicable standards, which address seismic design parameters. (LUP Policy 8.6.7-14)
- MM 4.3-15** Mitigation of earthquake ground shaking shall be incorporated into the design and construction in accordance with Uniform Building Code requirements and site-specific design. (LUP Policy 8.6.7-15)
- MM 4.3-19** Further investigation and detailed characterization of the existing fill conditions is required to identify the extent of the potential for liquefaction and includes:
- Recommended new building setback distances from the quay wall ranging from 2 to 3 times the height of the bulkhead wall for localized liquefaction and lateral spreading failure to several times the height of the revetment slope and bulkhead system for global seismic instability, to be considered during the planning and design phases of the project;
  - Supporting proposed structures on deep foundations extending into bedrock;
  - Stiffened floor slab designs;
  - Total or partial removal of the potentially liquefiable soils and replacement with compacted fill;
  - Soil remediation and site improvement. (LUP Policy 8.6.7-11)
- MM 4.3-20** Further evaluation of lateral spreading potential is required. If it is found that the lateral spreading potential is high, then Mitigation Measures shall include:
- New building setback distances from the quay wall ranging from 2 to 3 times the height of the bulkhead wall;
  - Repair or replacement of existing seawall for site containment;
  - Total/partial removal of the potentially liquefiable soils and replacement with compacted fill; and/or
  - Soil remediation and site improvement.

**Level of Significance after Mitigation.** No significant impacts related to Geology, Soils, or Seismicity were identified following implementation of mitigation measures and/or compliance with applicable standards and policies of the County Grading Code and Manual.

#### 4.2.5 IMPACTS AND MITIGATION

Potential geologic hazards include surface fault rupture, seismic shaking, liquefaction, seismically induced settlement, landsliding, acute erosion, subsidence, and collapsible/expansive soils. An evaluation of the potential impacts on the site from these potential geologic hazards is summarized below.

##### Less Than Significant Impacts

**Fault Surface Rupture.** No known active or potentially active faults are mapped through the site; therefore, the site is not located within a currently designated Alquist-Priolo Earthquake Zone. Based on this, the potential for surface fault rupture at the site is considered low. Therefore, fault surface rupture impacts are not expected with development of the proposed project, and no mitigation is required.

**Subsidence.** The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction. Therefore, significant subsidence impacts are not expected with development of the proposed project, and no mitigation is required.

**Landsliding.** No significant slopes exist within the proposed project site. Therefore, the potential for on-site landsliding is not considered a potential impact for the proposed project. The proposed project is not anticipated to impact or contribute to the factors causing a landsliding hazard for the slopes behind the project area due to the substantial distance from the project area to the bluff face. Due to the distance, the surrounding cliffs pose no significant threat to the proposed project, and no mitigation is required.

**Soil Erosion.** No soil erosion or loss of topsoil is anticipated. However, soil disturbance could occur for the following purposes: lighting improvements; utility connections; and gangway/landside connections. The proposed platforms for the ADA gangways will require excavation of approximately 189 cubic yards of soil material. However, the excavated soils would be stockpiled on site, and source control Best Management Practices (BMPs) outlined in the project's Erosion and Sediment Control Plan and Water Quality Management Plan (WQMP) would be used to prevent soil erosion. The mitigation measures presented in Section 4.3, Hydrology and Water Quality, require soil erosion control plans and erosion control measures during construction that will ensure that soil erosion impacts will be reduced to a less than significant level. No additional mitigation measures are required.

## Potentially Significant Impacts

**Seismic Shaking.** Southern California is a seismically active region that can be expected to experience strong seismic shaking from future earthquakes generated by various active or potentially active faults. The Harbor could be subjected to strong ground shaking during a significant earthquake on a nearby or regional fault. Earthquakes that can produce strong shaking at the site may occur on mapped active (e.g., the Newport-Inglewood Fault Zone) or other postulated active faults (e.g., SCOZD) in the region, or on faults with little or no surface expression, such as the SJHBT and OBT Faults. Although the project site is not located within a designated Alquist-Priolo Earthquake Fault Zone, the region has experienced earthquake activity in the past. A major earthquake associated with any of the faults in the region could result in moderate to severe ground shaking. As with most areas in Southern California, damage to marina facilities and infrastructure could be expected as a result of significant ground shaking during a strong seismic event in the region. However, due to the nature of the project being floating docks and slips, impacts to dock facilities due to earthquakes are expected to be minimal. In addition, one of the project's primary objectives is to renovate the deteriorating marina facilities in accordance with current codes, seismic requirements and ADA requirements which would improve ingress and egress in an emergency.

All structures must comply with the seismic requirements of the International Building Code (IBC), the California Building Code (2010), and recommended engineering design measures. The project would incorporate current codes and seismic requirements in the replacement and/or renovation of the docks and pilings. Although compliance with these standards is anticipated to limit hazards from seismic ground shaking to less than significant levels, Mitigation Measure 4.2-1 has been proposed to ensure that potential seismic ground-shaking impacts to ADA platforms proposed for landside access to the floating docks are reduced to less than significant levels.

**Liquefaction.** Liquefaction can be defined as a significant and relatively sudden reduction in stiffness and shear strength of saturated sand soils caused by a seismically or statically induced increase in pore water pressure. Potential for seismically induced liquefaction exists whenever saturated relatively loose sand soils exist where the potential for seismic shaking is adequately high. In general, the consequences of liquefaction tend to be greater as the depth of saturated sandy soils become shallower and their volume becomes larger. Also, the site consequences of liquefaction become greater when a site has an open face, which is the case in the Harbor.

As shown in Figure 4.2-2, the Harbor is located in a zone designated as having a potential for liquefaction based on the Seismic Hazard Zones Liquefaction Map for the *Dana Point, California* USGS 7.5-minute quadrangle.

The potential for liquefaction to occur has been evaluated based upon subsurface data collected to provide general characterization for the overall Harbor facility. The liquefaction analysis was conducted on the basis of maximum moment magnitude of 6.8. The analysis indicated there is the potential for liquefaction to occur with the fill and alluvial soils that comprise the Island as well as the small peninsula adjacent to the sport fishing docks in the eastern region of the Harbor and in the peninsula area of the OC Sailing and Events Center in the western region of the Harbor. Liquefaction potential was determined to exist in either relatively thin layers or significantly thicker zones,

typically on the order of 10 to 15 ft in thickness. The liquefaction potential was found to be significantly less extensive throughout the Cove side of the Harbor.

The proposed renovation includes the construction of nine new pedestrian platforms that comply with ADA specifications at various locations throughout the Harbor. The platforms are intended to provide access from the boardwalk to the gangways that extend to the floating docks. The liquefaction potential of the soils and the potential for instability of the slopes will affect the design of the platform foundations, requiring specific engineered foundations to ensure reasonable safety. To reduce the impact of liquefaction, the platforms are proposed to consist of a reinforced structural concrete slab supported by a fixed foundation that will be situated behind (landside) the existing seawall, with the slab cantilevering to the gangway, a distance of approximately 8 ft from the Harborside face of the wall. The foundations will be supported within the soils that underlie the site along the perimeter of the marina. Excavation of the soils may encounter groundwater at depths below 6 ft. Therefore, a groundwater dewatering permit will be required, as listed in Section 4.3. Implementation of Mitigation Measure 4.2-1 will ensure that liquefaction impacts associated with the ADA platforms will be reduced to less than significant levels.

**Seawall Stability Due to Liquefaction and Seismically Induced Slope Displacements.** The primary seismic hazard associated with the seawall is the potential for liquefaction and the potential for slope instability. The results of the liquefaction analysis indicated that several strata were susceptible to liquefaction. The stability of the slopes that support the retaining wall of the seawall system was analyzed based on liquefied conditions.

The results of the liquefaction analysis indicated that several strata were susceptible to liquefaction in the cove region, but the slope stability analysis indicated an adequate factor of safety for slope stability. In summary, the seawall along the cove region may be considered to be generally stable with respect to the overall stability for static, pseudostatic, and liquefied conditions. Although the potential for slope instability was not considered to be of significance along the cove side of the Harbor, the consolidation of the liquefiable deposits indicates the potential for settlement and distortions to the seawall. The magnitude of this settlement was estimated to be on the order of 1–2 inches. Slope instability appears to be of significance for the area analyzed in the western region of the island, the peninsula area adjacent to the sport fishing docks, and the OC Sailing and Events Center, where the potential for liquefaction to occur is expected to result in severe slope instability and large lateral displacements. Estimation of the potential lateral displacement suggests displacements on the order of several feet.

Lateral pressures from superimposed loads such as from automobiles or construction equipment, can add to the load imposed upon the wall if the surcharge is located at a distance from the back of the wall equal to or less than the height of the wall. The magnitude of the surcharge load depends on the size of the surface area that is subjected to a vertical load relative to the wall height and distance from the wall. Construction equipment used in demolition or to construct the proposed project has the potential to impact the stability of the seawall if the load is not properly set back from the wall. Implementation of Mitigation Measure 4.2-2, which requires appropriate setbacks from the wall, will reduce the load impacts on the seawall to less than significant levels.

The guide piles that will be installed within the marina will be primarily subjected to lateral loading conditions associated with minor wave action, wind, and more significantly, by the impact loads associated with boats that dock at the platforms. In addition, the slope movements that may occur as a result of liquefaction could impart significant additional lateral load on the guide piles within the zone of slide movement. Therefore, the embedded piles should be in continuous contact with the adjacent soils and bedrock to provide lateral load resistance. The preferred method of pile installation is piles that are drilled and set in place within predrilled boreholes to facilitate pile driving. In-situ construction techniques will minimize disturbance and yet allow proper continuity between the piles and boreholes to achieve lateral load resistance. Therefore, it is anticipated that the piles will be set in a borehole of slightly greater dimension in which the pile is secured by grout injection around the perimeter of the pile, filling the annular space. The use of predrilled boreholes to facilitate pile driving will present difficulties with borehole stability where the seafloor sediments are of significant thickness. In these cases predrilling is recommended to be performed such that the borehole diameter is no larger than the diameter of a circular pile or the width of a square pile so that once driven to the design tip elevation, sufficient continuity exists between the pile and the adjacent soils and bedrock. Implementation of Mitigation Measure 4.2-1 will ensure that lateral load impacts associated with the piles will be less than significant.

The proposed project area is subject to liquefaction potential in the event of an earthquake as an existing condition prior to implementation of the proposed project. The proposed project neither contributes to nor lessens the impacts associated with liquefaction. However, in the event of an earthquake that is capable of producing liquefied conditions, the potential for liquefaction to impact the seawall, gangways, and platforms is considered potentially significant. Although the proposed project does not include remedial improvements to the seawalls, no permanent inhabitable structures are proposed as part of the Marina Improvement Project. Therefore, the Geotechnical Evaluation and Addendum Letter (Leighton and Associates 2008) concluded that remedial actions to the subsoil or the design of the foundation systems are not required. Although the liquefaction potential is an existing condition, the potential for liquefaction to impact the seawalls, gangways, and platforms is considered a significant unavoidable impact. This impact is not a direct project impact, but rather an existing condition of the project site. Implementation of Mitigation Measures 4.2-1 and 4.2-2 will lessen the potential liquefaction impacts but cannot fully mitigate the existing conditions.

## **Mitigation Measures**

The following measure would reduce potential seismic ground-shaking impacts to the ADA platforms and lateral load impacts associated with pile installation to less than significant levels.

- 4.2-1** To reduce potential seismic ground-shaking impacts associated with the Americans with Disabilities Act (ADA) platforms, OC Dana Point Harbor and the Director, OC Public Works (OC PW)/Building Permit Services shall, prior to issuance of building permits, review and approve final design plans to ensure that recommendations contained in the Geotechnical Evaluation prepared for the proposed project (Leighton Associates, Inc., January 2008) are incorporated into final site drawings. The potential damaging effects of regional earthquake activity shall be considered in the design of each structure. The seismic evaluation shall be based on basic data, including the Uniform Building Code (UBC) Seismic Parameters.

Structural design criteria shall be determined in consideration of building types, occupancy category, seismic importance factors, and possibly other factors. Design construction shall be performed in conformance with the latest UBC, California Building Code, or International Building Code and County Ordinances. Conformance can be expected to satisfactorily mitigate the effect of seismic groundshaking (refer to FEIR No. 591, Mitigation Measures 4.3-9 and 4.3-12).

The following measure would reduce potential lateral load impacts from construction equipment on the seawall to a less than significant level.

- 4.2-2** To reduce potential lateral and surcharge load impacts from construction equipment near the seawall, OC Dana Point Harbor shall review and specifically approve contract provisions requiring equipment and/or storage setbacks from the seawall prior to issuance of any contract to demolish or construct within the project area. To reduce potential impacts associated with the instability of the seawall due to increased lateral loads imposed by construction equipment, adequate setbacks shall be observed from bulkhead areas for cranes, pile-driving equipment, or any other heavy construction equipment. (refer to FEIR No. 591, Mitigation Measure 4.3-6).

#### **4.2.6 CUMULATIVE IMPACTS**

Impacts on geology and soils are generally localized or site specific and generally do not result in or from regionally cumulative impacts, with the exception of sedimentation and subsidence due to subsurface withdrawal. The cumulative study area for geology and soils is the project site, the immediately adjacent properties that physically abut the project site and other projects whose activities could directly or indirectly affect the geology and soils of the proposed project site.

While the entire Los Angeles region is susceptible to seismic hazards, it is also notable that many of the hazards are highly localized, such as those areas in the Harbor that may be susceptible to liquefaction. Although the proposed project would neither contribute to nor lessen the potential impacts associated with liquefaction since it is an existing condition, the potential for liquefaction to impact the seawall, gangways, and platforms is considered a significant unavoidable adverse impact. This impact, however, is not a direct project impact, but rather an existing condition and is therefore not considered cumulatively significant. The proposed project, in combination with other planned projects such as construction of the Commercial Core, would not compound or increase geological impacts.

As discussed above, there are no geotechnical conditions on site that will prohibit construction and no activities associated with the project that would contribute to any incremental effects such as risk of ground failure, slope failure, or settlement problems in the project vicinity. In addition, there is no subsurface withdrawal of water or oil that could produce subsidence.

Mitigation Measures 4.2-1 and 4.2-2 have been proposed to ensure that recommendations contained in the Geotechnical Evaluation prepared for the proposed project are incorporated into final project plans, and adequate setbacks will be implemented to ensure no project construction activities contribute to seawall failure. Furthermore, sedimentation will be controlled through project design and mitigation included in the Hydrology and Water Quality section of this SEIR. Incorporation of

these mitigation measures will minimize or avoid potential hazards due to on-site and off-site geologic factors and ensure that the project's geological impacts are considered less than cumulatively considerable. As stated in the analyses included in Section 4.2.4 above, the project would not contribute to any regional or localized geologic or soil-related risks.

#### **4.2.7 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

The mitigation measures described above will reduce the project's potential geologic, seismic, and soils-related impacts and contribution to cumulative geology, seismic, and soils impacts to below a level of significance. However, liquefaction, which is an existing condition on site, will continue to have the potential to impact the seawall and gangway platforms in select locations in the event of an earthquake capable of producing liquefied conditions. Therefore, impacts associated with liquefaction are significant unavoidable adverse impacts of the proposed project related to geology and soils.

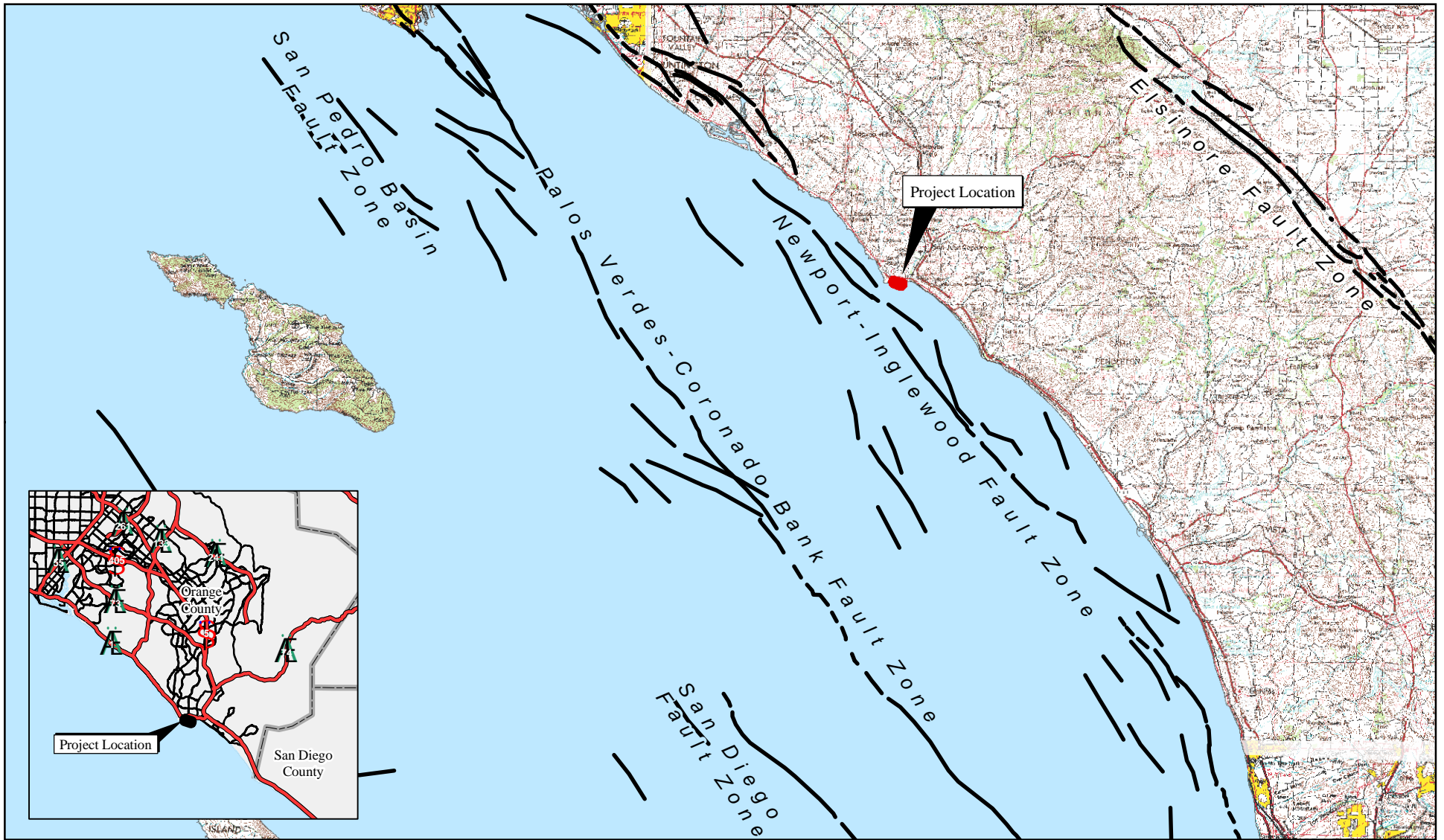
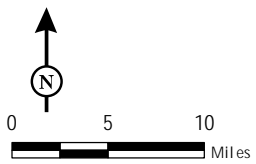


FIGURE 4.2-1

LSA



LEGEND

- Project Location
- Fault Lines

*Dana Point Harbor Improvement Project*  
 Earthquake Fault Lines

SOURCE: California Seismic Hazard Mapping Program (2002), USGS 250K QUAD (1980).

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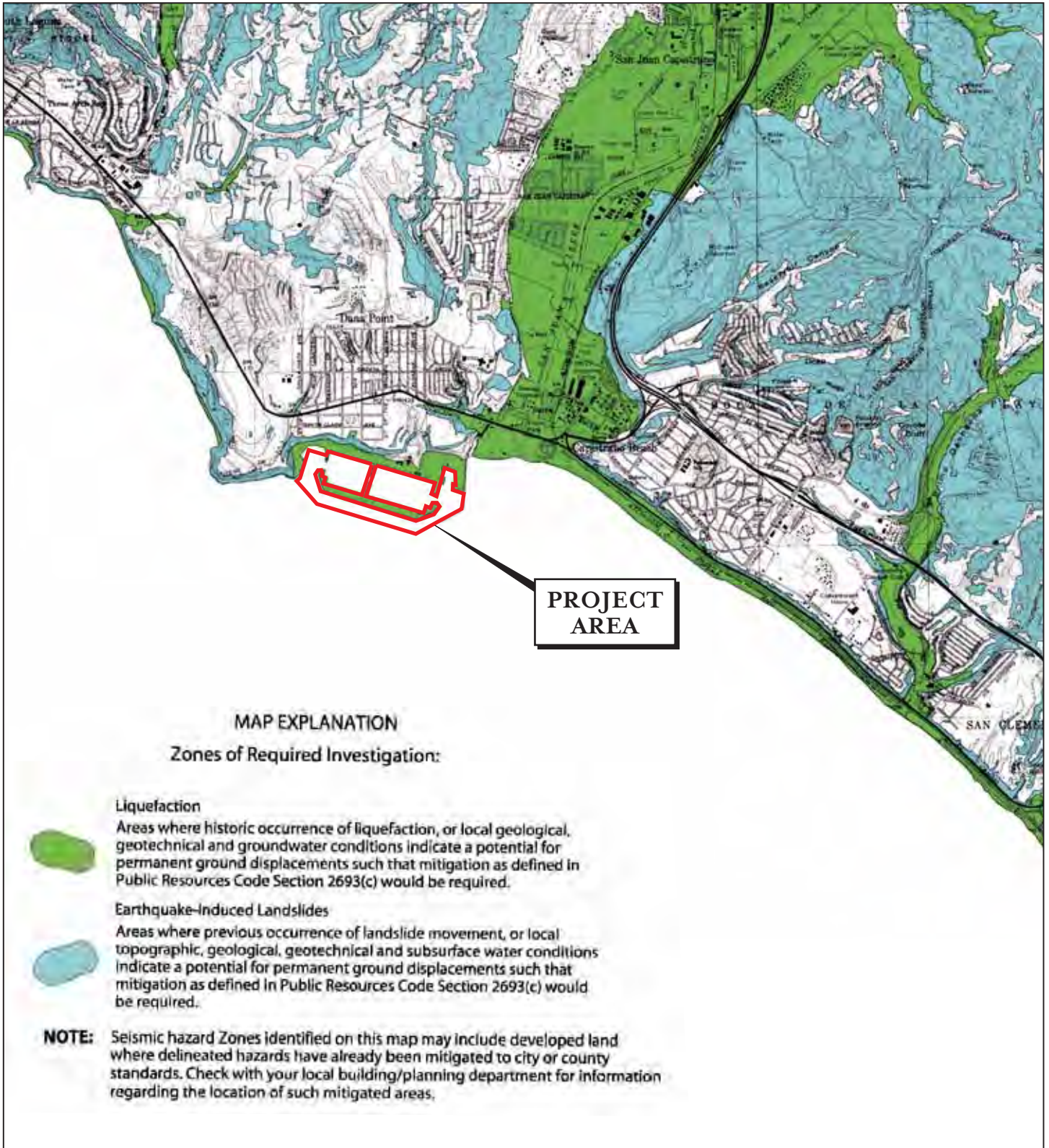
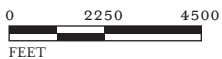


FIGURE 4.2-2

LSA



SOURCE: State of California Seismic Hazard Zones, Dana Point Quadrangle, Dec. 21, 2001

*Dana Point Harbor Marina Improvement Project*

**Seismic Hazards**

## 4.3 HYDROLOGY AND WATER QUALITY

This section addresses potential impacts to hydrology and water quality resulting from implementation of the proposed project. This project is required to meet drainage and water quality requirements for surface water runoff. Documents reviewed and incorporated as part of this analysis include: the Final Program Environmental Impact Report for the Dana Point Harbor Revitalization Project, 2006; Water Quality Management Plan, Dana Point Revitalization Project, November 2004 (Fusco Engineering, Inc.); the San Diego Regional Water Quality Control Board (RWQCB) Basin Plan, 1994, with amendments effective prior to April 25, 2007; the State Water Resources Control Board California Ocean Plan, 2001; the State Water Resources Control Board 2010 Integrated Report; and the California RWQCB, San Diego Region, Order No. R9-2009-0002, National Pollution Discharge Elimination System (NPDES) No. CAS0108740, Statewide Construction General Permit (Order No. 2009-0009-DWQ), Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of Orange, the Incorporated cities of Orange County, and the Orange County Flood Control District (OCFCD) within the San Diego Region, and the Orange County Drainage Area Management Plan.

### 4.3.1 EXISTING SETTING

#### Project Location

Dana Point Harbor (Harbor), located within the City of Dana Point (City), is within the Dana Point hydrologic subarea (HSA) (901.14) of the San Juan hydrologic unit (901), within the San Diego Basin. The Marina Improvement Project lies within the San Juan Creek Watershed (Watershed), which ultimately drains to the Pacific Ocean. More specifically, the Marina Improvement Project lies within the Dana Point Coastal Streams Watershed, a subwatershed of the San Juan Creek Watershed. The Dana Point Coastal Streams receiving water is the Harbor.

The Harbor is bordered by the Pacific Ocean to the south, Dana Headlands and Dana Point Marine Life Refuge to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north.

#### San Juan Creek Watershed

The San Juan Creek Watershed covers 133.9 square miles and includes portions of the cities of Dana Point, Laguna Hills, Laguna Niguel, Mission Viejo, Rancho Santa Margarita, and San Juan Capistrano. Its main tributary, San Juan Creek, originates in the Santa Ana Mountains district of the Cleveland National Forest in the easternmost part of Orange County.<sup>1</sup> A number of coastal drains discharge to the Pacific Ocean through Dana Point Harbor. San Juan Creek and its main tributaries, Arroyo Trabuco Creek and Oso Creek, flow into the Pacific Ocean, south of the Harbor. Salt Creek

<sup>1</sup> Orange County Watershed and Coastal Resources Division Web site, <http://www.ocwatersheds.com/watersheds/sanjuan.asp>, accessed April 20, 2007.

and its tributaries Arroyo Salado Creek and San Juan Canyon Creek discharge to Salt Creek Beach, north of Dana Point Harbor.

The Dana Point Coastal Streams watershed is almost fully developed. Remaining undeveloped areas include open space within the Aliso and Wood Canyons Regional Park in the upper watershed and the Salt Creek Corridor Regional Park in the eastern part of the watershed.

### **Harbor Drainage Pattern**

**Harbor Off-Site Drainage Facilities.** Existing storm water conveyance facilities in Dana Point Harbor convey drainage from existing off-site commercial and residential development, as well as the Harbor and portions of Street of the Golden Lantern, Cove Road, Santa Clara Avenue, Street of the Blue Lantern, Dana Point Harbor Drive, Scenic Drive, and the adjoining off-site properties in the vicinity of Dana Point Harbor. Drainage is conveyed to the Pacific Ocean via a series of various-sized storm drains. Most of the runoff from the off-site properties above the Harbor is collected within the existing storm drain system in the Street of the Golden Lantern and Cove Road. Bluff top surface storm water is conveyed by a series of existing V-ditches that are located at the back of (north of) the Harbor parking lots, at the base of the bluffs. Between there and the outlet location, the pipe accepts runoff from various inlets located in the Harbor parking lots and Dana Point Harbor Drive. A minor portion of sheet flow runoff originating from Dana Point Harbor Drive enters the Harbor from Casitas Place, Street of the Golden Lantern, and Embarcadero Place, but most off-site flows are collected within the curb and gutters of Dana Point Harbor Drive and conveyed into the regional (County) storm drain facilities that run into the Harbor marinas.

**Harbor On-Site Drainage Facilities.** Within Dana Point Harbor, most on-site runoff from the parking lots, structures and facilities enters a series of drain inlets and catch basins prior to discharging into the Harbor marinas. Some of these systems tie into the County storm drains running underground into a collection system which drains into the Harbor, while others discharge directly into the Harbor marinas through smaller pipe outfalls. For example, runoff from the parking lot at the southern end of the East Marina within the Commercial Core enters a 24-inch (in) grate inlet and discharges directly into the East Basin through an outfall adjacent to the County of Orange (County) 60 in reinforced concrete pipe (RCP). This localized drainage system is typical of the existing parking lots throughout the Harbor.

Rooftop drainage from the existing buildings immediately north of the boat launch ramp area is collected by a series of 4 to 6 in pipes and confluence into a larger pipe that discharges directly into the Harbor. This system is also typical of other rooftop collection systems throughout the Harbor.

In summary, all on-site flows and a portion of off-site runoff from the surrounding streets collects at a series of grate inlets, catch basins, and roof drainage pipes, all of which discharge directly into the Harbor marinas through a series of local outfall pipes, storm drains, and/or direct sheet flow from sloped sidewalks and hardscape areas.

**East and West Marinas.** East Marina receives runoff from three existing storm water outfalls, located in the quay wall approximately 5 to 10 feet (ft) below the water surface. Two 18 in pipes discharge runoff from an area near the Harbor and surrounding bluffs. One is located at the boat launch ramp, and the other is located east of Island Way. The Golden Lantern Storm Drain discharges runoff from a 60 in pipe from a storm drain network that extends farther inland into the City. At the County maintenance yard area and shipyard, the runoff sheet flows across the surface and adjacent parking lots and enters Dana Point Harbor adjacent to the boat-launch ramp. As part of the recent boat-launch improvements, constructed in 2007, a trench drain system was installed along the ramp apron to collect runoff and treat it via an in-line storm water filtration vault. The treated runoff then continues to the existing storm drain that discharges into the Harbor marina. In addition, a filtered catch basin was installed at the boat wash area to screen boat wash runoff and direct it to the sanitary sewer system for treatment.

The West Marina receives runoff from five storm water pipes. There are two 18 in pipes that discharge runoff from areas adjacent to the Ocean Institute dock and Ensenada Place. The 51 in El Encanto Storm Drain discharges runoff from a storm drain network that extends beyond the Harbor. A small 15 in pipe discharges runoff from Dana Point Harbor Drive, west of Island Way, and a 24 in pipe discharges drainage from the Baby Beach West Storm Drain.

The existing Harbor storm water pipe system and drainage areas are summarized in Table 4.3.A.

**Table 4.3.A: Existing Storm Drain Facilities**

Pipe Location	Drainage Area (DA)	Pipe Size (inches)	Watershed (Drainage) Area (acres)
<b>East Marina</b>			
Boat Launch Ramp	1	18	10.4
Golden Lantern Storm Drain	2	60	247
East of Island Way	3	18	10.7
<b>West Marina</b>			
West of Island Way, Dana Point Harbor Drive	4	15	5.3
El Encanto Storm Drain	5	51	195
Ocean Institute dock	6	18	4.63
Baby Beach West Storm Drain	7	24	34.1
Ensenada Place	8	18	14.7

Source: Dana Point Revitalization Project FEIR No. 591

**Surface Water Quality**

The majority of the runoff into the Harbor is localized to the adjacent Harbor facilities and access roads near the base of the surrounding bluffs. The Dana Point Harbor facilities include numerous restaurants, shops, parking areas, and boat service facilities (e.g., boat storage and maintenance areas, fuel dock and supply stores); picnic areas (including a grass/landscaped area bordering Baby Beach); the OC Sailing and Events Center (east side of Baby Beach); and the Ocean Institute and Brig Pilgrim & Spirit of Dana Point (schooner) complex (west side of Baby Beach), all of which contribute surface

water pollutants to the Harbor and impact water quality. The substantial recreational boat traffic may also represent a potential contaminant source.

Other factors that likely influence water quality in the Harbor region include fecal droppings by birds and mammals (e.g., skunks, rats, feral cats, and dogs). Birds in particular, mainly seagulls and pigeons, but including Brewer's blackbirds, ravens, and brown pelicans, can number in the hundreds to thousands in the Baby Beach region. There are strong seasonal variations (e.g., more gulls in the winter). Some bird control measures, such as netting under the fishing pier near the Ocean Institute to discourage nesting by pigeons, which appear to have reduced fecal droppings near Baby Beach.<sup>1</sup>

**Baby Beach Water Quality.** Baby Beach has experienced many beach closure dates inside the Harbor during the dry season due to water quality impairments. This occurs mainly because untreated urban runoff is discharged directly into the Harbor marinas. The Orange County Health Care Agency Environmental Health Division samples for coliform bacteria and enterococcus at several locations within Dana Point Harbor during the dry season months of April to October.

Baby Beach has had numerous problems with bacteria impairment. High fecal bacteria concentrations have been found in the Harbor since 1996. To address this impairment, Orange County Health Care Agency implements Reporting Programs in accordance with State of California Water Resources Control Board standards. California Health and Safety Code, Section 115910 requires that all violations of the AB 411 Ocean Water-Contact Sports Standards between April 1 and October 31 must be reported to the State of California Water Resources Control Board by all California coastal counties on a monthly basis. The water quality monitoring program runs year-round, and water samples are obtained in several locations throughout Dana Point Harbor. In addition, seven special bacteriological investigations have been undertaken in accordance with the Clean Beach Initiative to address the bacteria contamination and potential ways to decrease bacteria levels. Four primary potential sources of bacteria contamination in Baby Beach have been identified for which best management practices (BMPs) have been implemented:

- Contaminated discharges from urban runoff
- Bacteria resident in beach sediments
- Limited near-beach water circulation
- Bacterial contamination from birds

A project recently completed to help improve water quality at Baby Beach was the Baby Beach Storm Drain to Sanitary Sewer Diversion and Filtration Project. This was one of several planned water quality improvement projects for Baby Beach. The Diversion and Filtration Project cut and removed a section of the concrete storm drain. A concrete manhole structure was cast around the storm drain. A 1.5 ft high concrete dam was cast inside the manhole structure to divert the low flows (nonstorm flows) into an 18 in diameter hole in the side of the manhole. The 18 in diameter pipe flows approximately 90 ft to a series of screens that trap trash and debris. After the screens, the flow enters

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<sup>1</sup> Data Mining Task for State of the Beach Report: Evaluation of Bacteriological Data and Associated Parameters for Baby Beach, Dana Point Harbor, CA, prepared by Science Applications International Corporations, January 2003.

a 50 ft, 4 in diameter polyvinyl chloride (PVC) pipe and flows to the existing sanitary sewer. There are backflow preventers to prevent sewage water from entering the storm drain in the event the sewer plugs.

During the winter season, a valve on the 4 in diameter diversion line to the sewer is turned to close down the diversion to ensure that storm water does not enter the sewer system. During a storm event, the “first flush” will exit the storm screens and travel in an 18 in pipe a distance of approximately 140 ft to the upper parking lot (across Dana Point Harbor Drive). There, the “first flush” storm flows will enter two 11 x 26 ft concrete vaults containing 150 storm filters that will further clean the water. After the “first flush” storm water exits the storm filters, the flow will enter a 200 ft long 18 in diameter pipe (crossing Dana Point Harbor Drive) and then reenter the storm drain a few feet from the sea wall.

The Baby Beach Storm Drain to Sanitary Sewer Diversion and Filtration Project has resulted in a reduction in the frequency of bacteria postings at Baby Beach. The Baby Beach Storm Drain to Sanitary Sewer Diversion and Filtration Project addresses a known source of bacteria input to Baby Beach. Bacteria generated by the large population of birds that frequent Baby Beach contributes significantly to the bacteria problems at Baby Beach. Studies have shown that some bacteria may regrow once it has entered the sediment between high tide and low tide around Baby Beach. Studies have also shown that this bacteria has the ability to survive for many months and may even reproduce.

As part of an ongoing water quality improvement program, the County has installed 41 FossilFilters™ throughout the public areas of Dana Point Harbor. The City has storm drain inserts installed along Dana Point Harbor Drive between Pacific Coast Highway and Street of the Golden Lantern. The City and County share maintenance responsibilities and currently conduct inspections and preventative maintenance of these storm drain inserts every two weeks and replace the filter once annually. FossilFilters™ are trough-type inserts filled with granular amorphous alumina silicate media to remove pollutants by sorption. They are configured to remove sediment, constituents absorbed to sediment, and oil and grease. Gross pollutants such as trash and green waste are also captured by the trough design. The use of these filters and inserts throughout the various areas of the Harbor provides treatment of dry weather nuisance flows and initial storm flows.

## **Sediment Quality**

The following discussion presents the results of investigations that have been conducted to evaluate sediment quality in the Harbor marinas.<sup>1</sup> The investigations included analysis of sediment samples representative of the material that exists throughout the Harbor. This information is used to determine water quality impacts resulting from sediment disruption from construction activities of the proposed project.

The Harbor was divided into three testing areas based on sediment grain size characteristics and geographic location.<sup>2</sup> Area A, consisting of the West Anchorage and Main Channel West, contains predominantly coarse-grain material. Area B consists of the Baby Beach, West Turning Basin, West

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<sup>1</sup> Dredge Material Evaluation, Dana Point Harbor Maintenance Dredging, Moffatt & Nichol, March 2007.

<sup>2</sup> Ibid.

Basin Channel, and Pilgrim Moorage. Area C consisted of the Boat Launch Ramp Basin, East Basin Channel, and East Basin Outfall. Areas B and C consisted of predominantly fine-grained sediments.

The study concluded that sediments from Area A contain relatively low values of contaminants; contaminant concentrations in Area A sediments are similar to or only slightly elevated above contaminant concentrations in the Capistrano and Baby Beach reference samples. Polycyclic aromatic hydrocarbon (PAH) concentrations in Area A samples range from 4 to 100 times higher than the reference samples, but are still considered relatively low.

Contaminants were not found in Area B in excess of Effects Range Low (ERL) screening values. Several contaminants (copper, total chlordane compounds, acenaphthene, benzo(a)pyrene, benzo(a)anthracene, total high molecular weight PAHs and total PAHs) were found in Area C in excess of lower effects-based screening values. However, the study concluded that overall sediment contamination in Areas B and C will most likely not cause toxicity to benthic organisms. The bulk of the observed contamination in Area C can be attributed to the shoaled area in front of the 60 in storm water outfall entering the East Basin.

### **Groundwater Conditions**

Based upon the geotechnical report prepared for the proposed project, groundwater was typically encountered at depths of 9 to 16 ft below grade. The groundwater table was, however, considered to exist at depths of 6 to 10 ft below grade on the basis of the relative moisture contents of the recovered soil samples. Groundwater in the areas of the seawalls is expected to be subject to tidal fluctuation.

## **4.3.2 REGULATORY SETTING**

Discharges into waters of the United States are subject to the regulatory authority of the United States Army Corps of Engineers (Corps) under Section 404 of the federal CWA and Section 10 of the Rivers and Harbors Act; the State Water Resources Control Board (SWRCB) and the applicable RWQCB under Sections 303, 401, and 402 of the CWA and the California Porter-Cologne Water Quality Act.

### **Federal Requirements of the Clean Water Act**

**Section 303.** Section 303 of the CWA requires that the State adopt water quality objectives for surface waters. The San Diego RWQCB Water Quality Control Plan (Basin Plan) contains water quality objectives that are considered necessary to protect the specific beneficial uses it identifies. Section 303(d) specifically requires the State to develop a list of impaired water bodies and subsequent numeric total maximum daily loads (TMDLs)<sup>1</sup> for any constituents that impair a particular water body. These constituents include inorganic and organic chemical compounds, metals, sediment, and biological agents.

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<sup>1</sup> The TMDL is the total amount of a constituent that can be discharged while meeting water quality objectives and protecting beneficial uses. It is the sum of the individual load allocations for point source inputs (e.g., an industrial plant), load allocations for nonpoint source inputs (e.g., runoff from urban areas), and natural background, with a margin of safety.

The State Water Board approved the 2010 Integrated Report on August 4, 2010. The 2010 Integrated Report includes changes to the 2006 Clean Water Act Section 303(d) list of impaired water bodies and Clean Water Act Section 305(b) report on the quality of waters in California. On November 12, 2010, the United States Environmental Protection Agency (EPA) approved the inclusion of all waters to California’s 2008–2010 Section 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The EPA did not include any additional waters in San Diego Region 9. The EPA is providing the public an opportunity to review its decision to add waters and pollutants to California’s 2008–2010 Section 303(d) list.

According to the State Water Board approved 2010 Integrated Report, Dana Point Harbor is impaired for copper, toxicity, and zinc. The Pacific Ocean shoreline at Baby Beach is impaired for enterococcus and total coliform (both are pathogens). Table 4.3.B summarizes the receiving waters and their classifications by RWQCB Region 9.

**Table 4.3.B: 303(d) Impairments of Downstream Water Bodies**

Receiving Water	Hydrologic Unit Code	303(d) Impairment	Size Affected
Dana Point Harbor – Bay and Harbor	901.14	Copper Toxicity Zinc	119 acres
Pacific Ocean Shoreline – Dana Point HSA, at Dana Point Harbor at Baby Beach	901.14	Enterococcus Total Coliform	- miles

Source: California’s 2010 Integrated Report, approved by the United States Environmental Protection Agency on November 12, 2010.  
 HSA = hydrologic subarea

There are no TMDLs currently approved for Dana Point Harbor that could regulate contributions of surface runoff into impaired water bodies; TMDLs for Baby Beach and Dana Point Harbor are pending. There are no existing target design constituents in the San Juan hydrologic unit.

**Section 401.** Section 401 of the CWA specifies that any applicant for a federal license or permit to conduct any activity, including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters, shall provide the federal licensing or permitting agency a certification from the State in which the discharge originates or will originate from the State agency with jurisdiction over those waters (San Diego RWQCB) that the project will comply with water quality standards, including beneficial uses, water quality objectives, and the State antidegradation policy.



**Section 402.** Direct discharges of pollutants into waters of the United States are not allowed, except in accordance with the NPDES program established in Section 402 of the CWA. The main goal of the NPDES program is to protect human health and the environment. Pursuant to the NPDES program, permits that apply to storm water discharges from municipal storm drain systems, specific industrial activities, and construction activities (1 acre [ac] or more) have been issued. NPDES permits establish enforceable effluent limitations on discharges, require monitoring of discharges, designate reporting requirements, and require the permittee to perform BMPs. Industrial (point source) storm water permits are required to meet effluent limitations; municipal permits are governed by the maximum extent practicable (MEP) or the Best Available Technology (BAT)/Best Control Technology (BCT) application of BMPs.

**Section 404.** The United States Army Corps of Engineers (Corps) regulates discharges or fills into waters of the United States under Section 404 of the CWA via the Nationwide Permit (NWP) or Individual Permit program. There are several categories of NWPs, which can be utilized for projects that fall under specific categories. A Preconstruction Notification (PCN) to the Corps district engineer is required for most activities that result in the loss of greater than 0.1 ac of waters of the United States. The Corps reviews the PCN on a case-by-case basis to determine whether the adverse effects of the proposed work on the aquatic environment are minimal. The Corps will also determine whether a particular drainage is considered waters of the United States and subject to regulation under Section 404.

**Section 10 of the Rivers and Harbors Act.** Section 10 of the Rivers and Harbors Act requires authorization from the Corps for the creation of any obstruction to the navigable capacity of any of the waters of the United States. Corps approval is necessary to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, Harbor, canal, navigable river, or other water of the U.S. In addition, Corps approval is necessary to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of any port, roadstead, haven, Harbor, canal, lake, Harbor of refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the U.S.

### **State Water Quality Regulations**

**Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code).** The Porter-Cologne Act establishes a regulatory program to protect water quality and to protect beneficial uses of State waters. It empowers the Regional Boards to formulate and adopt, for all areas within the regions, a Basin Plan that designates beneficial uses and establishes such water quality objectives that in its judgment will ensure reasonable protection of beneficial uses. Each Regional Board establishes water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of nuisance. The Water Code provides flexibility for some change in water quality, provided that beneficial uses are not adversely affected.

## State Requirements under Section 402 of the CWA

**California Ocean Plan.** The SWRCB has adopted a Water Quality Control Plan (WQCP) for ocean waters of California called the California Ocean Plan. With the exception of wildlife habitat, the Ocean Plan identifies the same beneficial uses as the San Diego Basin Plan. The Ocean Plan has similarly established water quality objectives for bacteriological, physical, chemical, radioactive, and biological characteristics. The Plan also incorporates general requirements for the management of wastes discharged directly into the ocean, effluent quality requirements for waste discharges directly into the ocean, discharge prohibitions, and general provisions. The Ocean Plan is incorporated by reference into the San Diego Basin Plan.

**General Construction Permit.** On September 2, 2009, the SWRCB adopted the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Construction Permit); Order 2009-0009-DWQ; NPDES No. CAS000002. In accordance with NPDES regulations, the State of California requires that any construction activity disturbing 1 ac or more of soil comply with the General Construction Permit. To obtain authorization for proposed storm water discharges pursuant to this permit, the landowner (discharger) is required to submit a Notice of Intent (NOI) to the SWRCB, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement BMPs detailed in the SWPPP during construction activities. Dischargers are required to implement BMPs meeting the technological standards of BAT and BCT to reduce or eliminate storm water pollution. BMPs include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. Permittees must also maintain BMPs and conduct inspection and sampling programs as required by the permit. Dischargers are also required to comply with monitoring and reporting requirements to ensure that discharges comply with the numeric action levels and numeric effluent limitations specified in the permit.

The proposed project is not subject to the requirements of this permit because it will disturb less than 1.0 ac of soil.

## Local Requirements under Section 402 of the CWA

Construction and operation of the proposed project is subject to requirements of the following local permits and regulations.

**Municipal NPDES Permit.** Orange County is the principal permittee for the Municipal NPDES Permit for the San Diego Region, Order No. R9-2009-0002 (NPDES No. CAS0108740), titled "Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of Orange, the Incorporated Cities of Orange County, and the Orange County Flood Control District within the San Diego Region." The NPDES Permit prohibits discharges, sets limits on pollutants being discharged into receiving waters, and requires implementation of technology-based standards.

Under the NPDES permit, the County is responsible for the management of storm drain systems within its jurisdictions. The County is required to implement management programs, monitoring programs, implementation plans, and all BMPs outlined in the Orange County Drainage Area

Management Plan (DAMP) and to take any other actions as may be necessary to protect water quality to the MEP.

**Orange County DAMP.** The DAMP implements the Municipal NPDES Permit requirements and is the principal policy and guidance document for the County’s NPDES program. The DAMP satisfies the requirements of the NPDES urban runoff permit program and identifies measures intended to reduce the discharge of pollutants to the MEP, using BMPs, control techniques and systems, engineering methods, and other appropriate provisions.

Permittees within the San Diego RWQCB jurisdiction are required to inventory a set of predetermined high-priority commercial facilities/activities. The DAMP provides a list of those commercial facilities/activities that are automatically considered “high priority” within the San Diego RWQCB jurisdiction. The DAMP predetermines that marinas are high-priority commercial sites. Marinas are a potential pollutant-generating activity; the potential pollutants generated by marina facilities are identified in Table 4.3.C. The DAMP also identifies the Harbor as an Environmentally Sensitive Area (ESA) because it is a 303(d) listed water body and because it is designated with a RARE (support of rare, threatened, or endangered species) beneficial use classification by the SWRCB. Because the proposed project is located within a designated ESA and is part of the overall Harbor Revitalization Project, it is considered a priority project.

**Table 4.3.C: Potential Pollutants Generated by Marinas**

Activity	Sediments	Nutrients	Metals	Organics and Toxicants	Floatable Materials	Oxygen Demanding Substances	Oil and Grease	Bacteria	Pesticides
Marinas			X	X	X	X	X	X	

Source: 2003 Orange County Drainage Area Management Plan.

The 2003 DAMP requires that each permittee, including the County, prepare a Local Implementation Plan (LIP) as an appendix to the DAMP. The County’s LIP describes the activities that the County has previously undertaken and is currently undertaking to meet the requirements of the permit and to make meaningful improvements to urban water quality.

As listed in the DAMP, all construction projects, regardless of size or priority, are required to implement BMPs to prevent discharges into the storm drain system or watercourses. DAMP Section 8.4.4.1 specifies minimum requirements for all projects and specific site management requirements for high- and medium-priority projects. All construction projects are required, at a minimum, to implement and be protected by an effective combination of erosion and sediment controls and waste and material management BMPs. A description of the minimum requirements for all construction sites under the DAMP is provided in Table 4.3.D. These minimum requirements are conveyed to construction contractors as part of the permit conditions and plan notes.

**Table 4.3.D: Minimum Requirements for All Construction Sites**

Category	Minimum Requirements
Erosion and Sediment Control	Sediments from areas disturbed by construction shall be retained on site using an effective combination of erosion and sediment MEP controls, and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities, or adjacent properties via runoff, vehicle tracking, or wind.
Waste and Materials Management Control	Construction-related materials, wastes, spills, or residues shall be retained on site to minimize transport from the site to streets, drainage facilities, or adjoining property by wind or runoff.

Source: County of Orange, DAMP, Minimum Requirements for all Construction Sites, July 2003.

**Dana Point Harbor Revitalization Water Quality Management Plan (WQMP)**

The Revitalization Project Program Environmental Impact Report (PEIR) included a Program WQMP, which addresses construction storm water runoff management for Dana Point Harbor in its entirety to satisfy the regulatory requirements of the County, City, and other agencies having jurisdiction over water quality control. Development and individual revitalization projects within the Harbor will rely upon a site-specific approach (all or a portion of a Planning Area) for the site design, source control, and treatment control BMPs to mitigate storm water runoff pollution conditions. The Program WQMP recommends categories of treatment BMPs applicable to the specific land use within planning areas to be considered at the time of Coastal Development Permit approval. The existing Program WQMP will be amended to include source control BMPs for the proposed project during construction for staging areas and any area of soil disturbance. The platforms associated with the ADA gangway connections have been designed to drain away from the marina waters into parking areas where the pre-discharge treatment can occur. Specific site design and treatment control BMPs are not applicable to the waterside improvements. However, a number of site design and treatment control BMPs are included in the overall Revitalization Project, which will improve the quality of water discharging to the Harbor.

**Beneficial Uses**

The San Diego RWQCB’s Basin Plan identifies beneficial uses of water as necessary for the survival or well being of humans, plants and wildlife. The Basin Plan also establishes implementation programs to achieve water quality objectives to protect beneficial uses and requires monitoring to evaluate the effectiveness of the programs. Table 4.3.E presents the beneficial uses of water as recognized by the San Diego Basin Plan.

**Table 4.3.E: Beneficial Water Uses in San Diego Water Basin**

<b>Beneficial Use</b>	<b>Beneficial Use Description</b>	<b>Dana Point Harbor</b>	<b>Pacific Ocean</b>
AQUA	Includes the uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.		X
BIOL	Includes uses of water that support designated areas of habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance, where the preservation or enhancement of natural resources requires special protection.		X
COMM	Commercial or recreational collection of fish, shellfish, or other organisms for human consumption or bait.	X	X
IND	Uses of water for industrial activities that do not depend primarily on water quality	X	X
MAR	Uses of water to support marine ecosystems.	X	X
MIGR	Support of habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms.	X	X
NAV	Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.	X	X
RARE	Support of habitats necessary for the survival and maintenance of rare, threatened, or endangered species.	X	X
REC-1	Recreational uses of water involving body contact with the water.	X	X
REC-2	Nonrecreational uses of water	X	X
SHELL	Support of aquatic habitats suitable for the collection of filter-feeding shellfish.	X	X
SPWN	Support of aquatic habitats suitable for reproduction and the early development of fish.	X	X
WILD	Support of terrestrial ecosystems.	X	X

Source: San Diego Regional Water Quality Control Board, Basin Plan, 1994.

As a result of the RARE (support of rare, threatened, or endangered species) beneficial use classification for Dana Point Harbor, the SWRCB has designated Dana Point Harbor an Environmentally Sensitive Area (ESA).

### Water Quality Objectives

As required by the Porter-Cologne Act, the San Diego RWQCB has developed water quality objectives for ocean waters within its jurisdiction to protect the beneficial uses of those waters and published them in the Basin Plan. The Basin Plan also establishes implementation programs to achieve these water quality objectives and requires monitoring to evaluate the effectiveness of these programs. Water quality objectives must comply with the State antidegradation policy (SWRCB Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected. Ocean water quality objectives for the San Diego region are listed in Table 4.3.F.

**Table 4.3.F: Ocean Waters Water Quality Objectives**

Constituent	Objective
Dissolved oxygen	The dissolved oxygen concentration in ocean waters shall not at anytime be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen-demanding waste materials.
Hydrogen ion concentration (pH)	The pH value shall not be changed at anytime more than 0.2 pH units from that which occurs naturally.

Source: San Diego Regional Water Quality Control Board, Basin Plan, 1994.

**4.3.3 THRESHOLDS OF SIGNIFICANCE**

The impact significance criteria used for this analysis are based primarily on Appendix G of the State CEQA Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The Initial Study contained in Appendix A determined that the proposed project would not have a significant impact with respect to the following: would not alter the existing drainage pattern of the site or area, thereby increasing erosion/siltation; would not exceed the capacity of existing or planned storm water drainage systems; would not provide substantial additional sources of polluted runoff; and would not place housing or structures within a 100-year flood, which would impede or redirect flood flows. Therefore, these issues are not addressed further in this SEIR.

The project may be considered to have a significant effect related to water quality if implementation would result in one of more of the following:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Have a significant adverse impact on groundwater quality or otherwise substantially degrade water quality;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Cause inundation by seiche, tsunami, or mudflow

### 4.3.4 OVERVIEW OF PROGRAM FEIR HYDROLOGY AND WATER QUALITY ANALYSIS

**Impacts.** The Program FEIR concluded that grading, excavation, and construction activities associated with the proposed Revitalization Project could impact water quality due to erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. These areas include the entire project study area subject to this SEIR. It was determined that operation of the Revitalization Project could alter drainage patterns and increase erosion and runoff amounts, thereby causing long-term impacts on the quality of storm water and urban runoff. Additionally, the Program FEIR stated that the project site could be subject to flood hazards from San Juan Creek. Cumulatively, the Revitalization Project, along with other future development, could increase hydrology and drainage impacts in the area. However, the Program FEIR analysis concluded that drainage and water quality impacts would be reduced to a less than significant level with incorporation of best management practices (BMPs), Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs). Measures identified in the Program FEIR and applicable to the Marina Improvement Project are listed below.

During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

#### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

- SCA 4.4-4** OC Dana Point Harbor Department shall obtain coverage under the NPDES Statewide Stormwater Permit for General Construction Activities from the State Water Resources Control Board. Evidence of receipt of permit approval must be presented prior to the issuance of a Grading Permit. (LUP Policy 7.6.1-2)
- SCA 4.4-5** As required for obtaining any Grading or Building Permits, OC Dana Point Harbor shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Manager, RDMD/Building Permit Services. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and available for review on request. (LUP Policy 7.6.1-3)
- SCA 4.4-8** As required for obtaining any Grading or Building Permit (whichever comes first), OC Dana Point Harbor shall prepare a Water Quality Management Plan (WQMP) and/or a project-specific amendment specifically identifying Best Management Practices (BMPs) that will be used onsite to minimize the volume, velocity and pollutant load of runoff, including measures to prevent, eliminate and/or otherwise effectively address dry weather nuisance flow. The WQMP shall follow

the model WQMP prepared by the County Flood Control District, July 1, 2003 or the most recent version available. This WQMP or amendment thereto shall also demonstrate conformance with the policies and provisions governing Water Quality and Hydrology identified in Chapter 2 of the Dana Point Harbor Revitalization Plan, Resource Protection section including applicable provisions from the Project Design Features and Requirements section. The WQMP may include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the Harbor);
- Address and include Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas, and conserving natural areas;
- Include the applicable Routine Source Control BMPs and where necessary Treatment Control BMPs as defined in the DAMP; and;
- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary. (LUP Policy 7.6.1-5)

**SCA 4.4-9** As required for obtaining any Grading or Building Permits (whichever comes first), OC Dana Point Harbor shall include in the WQMP the following additional Priority Project information:

- Include post-construction Structural Treatment Control BMP(s) as defined in the DAMP; and
- Include a conceptual Operation and Maintenance (O&M) Plan that (1) describes the long-term operation and maintenance requirements for the post-construction Treatment Control BMP(s); (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced Treatment Control BMP(s); and (3) describes the proposed mechanism for funding the long-term operation and maintenance of the referenced Treatment Control BMP(s). (LUP Policy 7.6.1-6)

**SCA 4.4-10** As required for obtaining a Certificate of Use and Occupancy, OC Dana Point Harbor shall confirm compliance with the WQMP, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project’s WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;
- Demonstrate that OC Dana Point Harbor has complied with all non-structural BMPs described in the project’s WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP; and



- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants (LUP Policy 7.6.1-7)

**MM 4.4-1** OC Dana Point Harbor shall prepare an assessment of the potential impacts of inundation from a tsunami taking into account future sea-level rise on the existing and proposed building structures along the seawall. (LUP Policy 8.6.2-9)

**MM 4.4-2** OC Dana Point Harbor shall prepare an assessment of the potential wave run-up from a seiche or tsunami near the Harbor during a major seismic event including but not limited to an event on the Newport-Inglewood Fault and/or San Jacinto Mountains Faults prior to submittal of the first coastal development permit for development of the Commercial Core. (LUP Policy 8.6.3-6)

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Hydrology and Water Quality were identified in the Program FEIR.

### 4.3.5 IMPACTS AND MITIGATION

This section addresses the potential impacts related to the removal of nearly all floating docks and piles; reconstruction of portions of the quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. This section also addresses the effects of operational changes resulting from project implementation.

#### Less Than Significant Impacts

**Dam Inundation.** The potential hazard for dam inundation and seismically induced flooding is generally associated with seismically induced failure of a reservoir located on drainages upstream of a site. The project area is not located downstream or downslope of any reservoir or water storage facilities that could adversely affect the project area in the event of earthquake-induced failures. Therefore, the potential for seismically induced flooding is considered remote.

#### Seiche and Tsunami

A tsunami is a sea wave generated by a large submarine landslide or an earthquake-related ground deformation beneath the ocean. Historic tsunamis have been observed to produce a run-up on shore of several tens of feet in extreme cases. Seiches are large oscillating waves generated in enclosed bodies of water in response to ground shaking. Because of the partially enclosed configuration of the Harbor, there is a possibility of seiche occurring within the Harbor.

The tsunami hazard in Southern California has been qualitatively calculated as "moderate" south of Palos Verdes to San Diego. It was predicted that a 100-year tsunami event could result in a run-up of approximately 4 ft above mean sea level in the vicinity of Laguna Beach and the Dana Point coast. The Harbor is partially shielded from tsunami waves by the headlands, which deflect ocean waves approaching the shore from the west. However, the Harbor could incur significant damage in the event that a tsunami generated in the southern Pacific Ocean strikes Dana Point. Inundation maps are

currently being developed for California under the United States National Tsunami Hazard Mitigation Program. Preliminary estimates for tsunami run-up heights on the Southern California coast have been predicted to range from 6–18 ft for a tectonically triggered tsunami event. Inundation maps showing site-specific wave run-ups at the Harbor have not yet been published.

Although extremely rare, a tsunami or seiche could cause damage to the marina facilities and boats docked at the Harbor. However, the Marina Improvement Project would not change or worsen these existing conditions, and there is an established warning system in place that would provide early notification of an advancing tsunami that would allow for evacuation. Therefore, potential impacts to public safety due to inundation by a tsunami or seiche would be less than significant.

Although people would be evacuated in the event of a tsunami, there could be property damage due to inundation and swamping of small vessels. However, tsunamis or seiche are extremely rare, and there would not be a substantial change from existing conditions with regard to marina facilities and the number of boats docked at the Harbor. Therefore, potential impacts related to damage to structures and boats would also be less than significant.

### **Operational Impacts**

The Harbor drainage pattern (off-site and on-site drainage facilities) would not be altered as part of the proposed project. The reconfiguration of the boat slips in West and East Marinas would result in a net decrease in floating dock area of approximately 32,990 square feet due to the new configuration. However, the docks are not considered an impervious area, as typically defined, because of the gaps in the docks that are over open marina waters. Therefore, the project would not increase storm water flows into the West and East Marinas since there is no increase in the impervious area or capacity of the marina. Because the proposed project is not increasing the capacity of the marina or adding a new use to the Harbor, there will be no increase in pollutants generated on site above existing conditions. As a result, the drainage pattern, runoff volumes, and pollutants from on and off the site would remain essentially the same as in the existing condition. Therefore, potential drainage impacts as they relate to drainage pattern, runoff volumes, and pollutants are considered less than significant, and no mitigation is required.

### **Potentially Significant Impacts**

**Water Quality Impacts.** Implementation of the Marina Improvement Project may result in short-term water quality impacts associated with temporary construction staging area(s), excavation associated with the construction of new ramp structures and waterside improvements associated with the removal of the docks and piles, and construction of the new docks and piles. Each of these impacts is discussed in more detail below.

The County would be required to obtain a Section 10 Permit from the Corps for placement of piles in navigable waters and a Section 404 Permit from the Corps for the discharge of material. In addition, the County would be required to obtain an RWQCB water quality certification for the federal permits listed above.

An RWQCB water quality certification would specify methods for ensuring the protection of water quality during construction activities in the Harbor. In addition, specific conditions would include the use of BMPs to minimize the discharge of construction materials from landside construction equipment, control of floating debris, discharge of displaced water produced during construction of the concrete pilings to minimize discharge of pollutants to the Harbor, placement of fueling activities such that they would not affect water quality, and provision of spill containment and cleanup equipment to control potential accidental spills.

**Pile Replacement.** Proposed marina improvements would be made over eight phases, during which vessels would be relocated to available berths in the Marina or moved to the temporary dock, as necessary. Within each area, the phases will include removal of the existing dock and piles and installation of the new dock and piles. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut 2–3 ft below the mudline. The old piles will be lifted from the water using a crane and then trucked off site. The last phase would be placement of the piles. The preferred method of pile installation is to predrill boreholes to facilitate pile driving. Prestressed concrete piles will then be driven into these holes and grouted with cement or sand.

Removal and replacement of pile structures could temporarily affect water quality if water quality protection measures were not implemented. Proposed pile removal and replacement in the Harbor would result in the short-term disturbance of localized Harbor sediments. As is typical for marina projects, disruption to sediments could adversely affect water quality by temporarily resuspending sediments, thereby increasing turbidity. In addition, chemicals that are present in the sediments could be released to the water column during resuspension, which could temporarily degrade water quality. Further, suspended sediments in the water column can lower levels of dissolved oxygen, increase salinity, increase concentrations of suspended solids, and possibly release chemicals present in sediments into the water.

The degree of turbidity resulting from the suspended sediments would vary substantially with the quantity and duration of the construction activity and would also depend on the methods used, the quality of equipment, and the care of the operator. Higher turbidity is expected to be confined to the specific area of dock improvements.

Substantially depressed oxygen levels resulting from high turbidity (i.e., below 5 milligrams per liter [mg/L]) can cause respiratory stress to aquatic life, and levels below 3 mg/L can cause mortality. However, oxygen levels resulting from project construction activities are not expected to remain low for long periods. Nonetheless, while the impacts are expected to be short term and have a less than significant impact on water quality within each specific phase, the project will be conducted over a period of several years. Thus, site-specific turbidity levels may be above ambient levels within a portion of the Harbor for an extended period. BMPs and Mitigation Measures are proposed to limit the spread of the turbidity plume outside the specific work area. As a result, increased turbidity levels would be relatively short-lived and generally confined to within a few hundred yards of the activity or within the area of containment outside the specific work area. After initially high turbidity levels within the specific work area, sediments would disperse, and background levels would be restored within hours of disturbance. In addition, tidal currents would slowly dissipate the oxygen-poor water mass and replenish ambient oxygen levels

within one to several tidal exchanges. Therefore, only temporary water quality impacts related to suspended solids and depressed oxygen levels in the water column of the specific work area would be expected. As a result, turbidity and sedimentation impacts would remain confined to within the Harbor marinas. Beaches outside of the Harbor, such as Doheny Beach or Capistrano Beach, would not be impacted by turbidity and sediment disruption within the marinas.

Proposed construction activities of the OC Sailing and Events Center facilities would occur adjacent to Baby Beach, which is impaired for bacteria. The proposed improvements to the OC Sailing and Events Center pilings and docks would not increase bacteria loadings into Baby Beach. The proposed improvements would disrupt the sediments, which could adversely affect water quality by temporarily resuspending sediments, thereby increasing turbidity, as stated above. However, implementation of BMPs would reduce these impacts to less than significant levels.

Sediment testing for the Dana Point Harbor Dredge Material Evaluation (Kinnetic Laboratories and Moffatt & Nichol 2007) indicated that fine sediments in one particular zone near the 60 in storm drain in the East Basin contain elevated levels of copper and total dichloro-diphenyl-trichloroethane (DDT) compared to other sites tested. Consequently, pile removal and replacement in the vicinity of this one zone may result in the resuspension of material that could temporarily degrade water quality. This has a potential to result in a potentially short-term adverse impact to water quality within the East Basin. Mitigation Measures to reduce the level of impact to less than significant are provided below.

Implementation of BMPs would reduce water quality impacts associated with pile removal and replacement. Common BMPs utilized during marina projects include silt curtains,<sup>1</sup> turbidity curtains, and gunderbooms.<sup>2</sup> Silt curtains and turbidity barriers are designed to deflect and contain sediment within a limited area. They provide time for soil particles to fall out of suspension and help prevent these particles from being transported to other areas. Therefore, although temporary water quality impacts related to suspended solids in the water column would be expected, impacts related to resuspension of sediments would be reduced to a less than significant level with implementation of Mitigation Measures 4.3-1 and 4.3-2, which require that the appropriate permits are obtained and that water quality BMPs are incorporated into the project and ensure that impacts related to pile removal and replacement are less than significant.

**Dock Removal and Replacement.** Removal of the existing dock system consists of separating the slips in the water and floating the structures to the west side cove staging area, where landside construction equipment would remove the slip structures from the water via crane and transport

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<sup>1</sup> Silt curtains are intended to allow suspended sediment at a site to settle out of the water column in a controlled area, minimizing the area that is affected by the increased suspended sediment. A silt curtain is an impermeable barrier. It is constructed of a flexible reinforced thermoplastic material. The upper hem has flotation material and the lower hem has ballast material. Silt curtains are most effective when used on a project where they are not opened and closed to allow equipment access to the area. Silt curtains are also limited to project locations with less than 1–2 knot currents.

<sup>2</sup> Gunderbooms are designed to allow water to flow through the curtain while filtering suspended sediment from the flow. Gunderbooms are similar to silt curtains but are constructed of permeable geotextile fabrics. They are also designed to extend from the water surface to the project bottom.

the discarded material off site for proper disposal. This process does create some debris that has the potential to impact water quality if it is not contained and disposed of properly. Implementation of a trash and debris containment boom, as described in Mitigation Measure 4.3-3, will contain the dock debris within the waterside construction area, where the material can be easily recovered for proper disposal. Implementation of Mitigation Measure 4.3-4 will ensure that impacts related to trash and debris from dock removal and replacement are less than significant.

OC Dana Point Harbor is also considering alternative methods for disposing the existing piles. There is a potential to reuse the removed piles to create off-shore artificial reefs as an alternative to trucking them off site. Pier pilings have been utilized successfully for many artificial reefing projects from Alaska to Florida. When randomly piled to a height of 10 to 15 feet, pier pilings tend to preserve the underlying seafloor while providing good vertical relief. Regardless of the ultimate destination for the removed piles, Mitigation Measures 4.3-3 and 4.3-4 would be required in order to ensure that dock debris does not adversely impact water quality.

**Landside Excavation and Construction Equipment.** The proposed renovation includes the construction of nine new pedestrian platforms that comply with Americans with Disabilities Act (ADA) specifications at various locations throughout the Harbor. Current plans indicate that construction of the nine ADA platforms will require excavation of approximately 189 cubic yards of soil. The foundation for the platform consists of a mass concrete pour to fill the excavation that will be required to establish a consistent bearing grade between the seawall and the platform foundation. The mass concrete pour foundation will be approximately 7 ft perpendicular to the wall by 10 ft parallel to the wall and at least 6.5 ft below current grade.

Shallow groundwater was encountered at the site during the geotechnical investigation, and groundwater dewatering may be required during excavation activities and platform foundation installation. Discharge of groundwater into storm drains and receiving waters has the potential to significantly impact water quality. Construction dewatering on the proposed Marina Improvement Project also may be required if water has been standing on site and needs to be removed for construction, vector control, or other reasons.

Any dewatering or construction-related non-storm water discharges would be controlled in compliance with the Construction General Permit and the State permit for dewatering or an individual permit (Mitigation Measure 4.3-4). These permits require permittees to conduct monitoring of dewatering discharges and adhere to effluent and receiving water limitations contained within the permit so that water quality of surface waters is ensured protection. Compliance with the applicable dewatering permit would further assure that the impacts of these discharges are appropriately addressed.

Excavation and construction activities associated with the proposed project could impact water quality during construction due to sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. Construction controls are considered separately from other types of water quality management because the measures are temporary and specific to the type of construction. Construction of the proposed project could produce typical pollutants such as sediments, nutrients, heavy metals, toxic chemicals related to construction and cleaning, waste

materials (including washwater, paints, wood, concrete, and sanitary wastes), fuel, and lubricants. These pollutants can leak from heavy equipment, be spilled, or can be eroded by rain from exposed stockpiles. Once released, they may adsorb onto sediment particles and can be transported into the aquatic environment, where they may become available to enter aquatic food chains, cause fish toxicity problems, contribute to algal blooms, and impair recreational uses. Excavation and construction equipment impacts shall be analyzed and controlled through the preparation of an Erosion and Sediment Control Plan and WQMP prior to the issuance of any construction permits. Subject to the findings of the various plans, the proper construction-related BMPs, which prevent degradation of water quality, shall be determined. Implementation of MMs 4.3-5 and 4.3-6 will ensure that impacts related to construction equipment discharging to a waterway are less than significant.

### **Mitigation Measures**

The following measures would reduce water quality impacts related to pile removal and replacement to a less than significant level.

- 4.3-1** To reduce water quality impacts related to pile removal and replacement, OC Dana Point Harbor shall verify, prior to the issuance of any construction permits, that authorization has been obtained from: (1) the United States Army Corps of Engineers (Corps) under the Section 404 Permit program for the discharge of material into jurisdictional waters; and (2) the Corps, under Section 10 of the Rivers and Harbors Act for the placement of piles. In addition, standard conditions of the Corps permits require Section 401 water quality certification by the Regional Water Quality Control Board (RWQCB). In order to obtain these authorizations, the County shall develop a mitigation plan subject to review and approval by the appropriate resource agencies (Corps, United States Fish and Wildlife Service [USFWS], National Marine Fisheries Service [NMFS], California Department of Fish and Game [CDFG], and RWQCB).
- 4.3-2** To reduce water quality impacts related to pile removal and replacement, OC Dana Point Harbor shall verify, prior to the issuance of any construction permits, that best management practices (BMPs) for all pile removal and replacement activities have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable in a manner meeting the approval of the OC Public Works (OC PW) Director. The construction contractor shall be responsible for performing and documenting the application of silt curtains and other BMPs identified in this document.

The following measure would reduce impacts related to trash and debris from dock removal and replacement to a less than significant level.

- 4.3-3** Prior to the issuance of any construction permits, OC Dana Point Harbor shall verify that a trash and debris containment boom has been incorporated into project plans and will be implemented during all dock removal and replacement activities in order to reduce impacts to water quality to the maximum extent practicable in a manner meeting the approval of the OC Public Works (OC PW) Director. The construction contractor shall be responsible for performing and documenting the application of the trash and debris containment boom.

The following measure would reduce impacts related to dewatering or construction-related nonstorm water discharges to a less than significant level.

- 4.3-4** To reduce impacts related to dewatering or construction-related non-storm water discharges, the construction contractor shall determine, prior to commencement of grading activities, whether dewatering of groundwater will be necessary during project construction. Any dewatering will require compliance with the State General Permit for discharges to land with a low threat to water quality or a dewatering permit from the San Diego Regional Water Quality Control Board (RWQCB), consistent with National Pollutant Discharge Elimination System (NPDES) requirements. Once it receives and reviews the Notice of Intent (NOI), the RWQCB will decide which permit is applicable and whether sampling is required. A copy of the permit shall be kept at the Marina Improvement Project, available for City and/or RWQCB review upon request.

The following measures would reduce impacts related to water quality during landside construction to a less than significant level.

- 4.3-5** To reduce impacts related to water quality during landside construction, the Construction Contractor shall prepare an Erosion and Sediment Control Plan (ESCP) for approval by the Director, OC Public Works (OC PW)/Building Permit Services to demonstrate compliance with local and State water quality regulations for construction activities. The ESCP shall be approved prior to the issuance of any construction permits and shall identify how all construction materials, wastes, or demolition debris, etc., shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion, or dispersion. The ESCP shall also describe how the applicant will ensure that all best management practices (BMPs) will be maintained during construction. A copy of the current ESCP shall be kept at the offices of OC Dana Point Harbor and be available for review on request (refer to FEIR No. 591, Standard Conditions of Approval [SCA] 4.4-7).
- 4.3-6** To reduce impacts related to water quality during landside construction, the Construction Contractor shall submit for review and approval by the Director, OC Public Works (OC PW)/Inspection Services Division, an Amendment to the Dana Point Harbor Conceptual Water Quality Management Plan (WQMP) specifically identifying best management practices (BMPs) that will be used on site to control predictable pollutant runoff. Any required Amendment to the Conceptual WQMP shall be approved prior to the issuance of any construction permits. The WQMP will specifically identify BMPs that will be used on site to minimize the volume, velocity, and pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively address dry weather nuisance flow control predictable pollutant runoff. The WQMP shall follow the model WQMP as outlined in Exhibit 7.1 1 of the 2003 Drainage Area Master Plan, prepared by the County of Orange Flood Control District on July 1, 2003, or the most recent version available. This WQMP shall also demonstrate conformance with the policies and provisions governing Water Quality and Hydrology identified in Chapter 2 of the Dana Point Harbor Revitalization Plan, Resource Protection section, including applicable provisions from the Project Design Features and Requirements section. The WQMP shall identify, at a minimum, the routine structural and nonstructural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the project);
- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas and conserving natural areas;
- Include the applicable Routine Source Control BMPs and where necessary, Treatment Control BMPs as defined in the DAMP; and
- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary (refer to Land Use Plan [LUP] I-6.1-6).

#### 4.3.6 CUMULATIVE IMPACTS

For cumulative analysis related to Hydrology and Water Quality, the study area evaluated is the Dana Point Coastal Streams Watershed since the project site is the end receiving water for this subwatershed. This subwatershed is mostly built out, except for open space areas, which are not proposed for development. Urbanization of the Dana Point Coastal Streams Watershed has caused increases in urban runoff to the Dana Point Harbor receiving waters.

New development and redevelopment can result in increased urban pollutants in dry weather and storm water runoff from project sites. Likewise, urbanization leads to an increase in impervious area, which leads to increased peak storm flows and runoff velocity without drainage control measures in place. However, each project within the Dana Point Coastal Streams Watershed must comply with the Orange County Municipal NPDES permit, the DAMP, and the Orange County Hydrology Manual, and must include applicable BMPs to prevent adverse water quality and drainage impacts.

The proposed project site is an existing Harbor, and the immediate area surrounding the project site is largely built out. Currently, there are several projects that would be considered within the cumulative study area for hydrology/water quality impacts. The following projects are projects that are proposed or approved but are not yet fully constructed:

- The Headlands – Commercial 35,000 sf Retail/Office (CUP/CDP/SDP approved in 2007)
- The Headlands – Seaside Inn 90 Room Hotel (CDP not yet approved but included as part of HDCP approval)
- The Headlands – Custom Homes 118 SFD (CDPs approved, 25 building permits have been issued by the City)
- Dana Point Harbor Revitalization Plan (landside development)
- Doheny Hotel – 258-Room Hotel with conference room and restaurant facilities

The Headlands projects listed above were included in the cumulative analysis for the Program EIR, and therefore, because the Marina Improvement Project is a part of the Program EIR, the cumulative impacts associated with these projects, along with the landside development of the Revitalization Project, have already been considered for the proposed project. With implementation of proposed mitigation for the Marina Improvement Project and the Headlands projects, impacts related to Hydrology and Water Quality would be considered less than cumulatively significant.



The Commercial Core Project associated with the Dana Point Harbor Revitalization Project or the Doheny Hotel Project could potentially be under construction at the same time as the Marina Improvement Project. Those projects have the potential to contribute debris and sediment from demolition, grading, and construction activities associated with the redevelopment. However, the Commercial Core Project is required to adhere to the mitigation measures in the Program FEIR, and both projects are required to adhere to the standards in the Orange County Hydrology Manual and DAMP. Current NPDES regulatory requirements, such as the DAMP requirement, are designed to restore the quality of existing receiving waters as well as prevent any further degradation. That is, the intent of NPDES regulations is to improve water quality while taking into account inevitable development/redevelopment in a particular area. The overall Harbor Revitalization Project, as noted in the Program FEIR, prepared a Water Quality Management Plan (WQMP) that identified a number of source control, treatment control, and sediment and erosion control BMPs for implementation during each specific project. Overall, the Harbor Revitalization Project is making a number of improvements to the drainage and treatment of the surface water on site. Therefore, implementation and operation of the Revitalization Projects would result in a positive impact on water quality. The Doheny Hotel and Revitalization Projects' compliance with the DAMP and WQMP, and with the additional requirements included in the Program FEIR, would reduce cumulative impacts associated with construction and operation to less than significant levels.

The proposed project would be required to prepare a WQMP, in compliance with the DAMP, which would mitigate the project's contribution to drainage and erosion impacts to less than significant levels. Therefore, no adverse cumulative impacts related to Hydrology and Water Quality would result from the proposed project when it is combined with other foreseeable projects that are planned or expected to occur in the Dana Point Coastal Streams Watershed.

#### **4.3.7 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

Implementation of Mitigation Measures 4.3-1 through 4.3-6, described above, would reduce potential project and cumulative hydrology and water quality impacts to less than significant levels. Therefore, there are no significant unavoidable adverse impacts of the proposed project related to hydrology and water quality.

## 4.4 TRANSPORTATION AND CIRCULATION

This section of the Subsequent Environmental Impact Report (SEIR) addresses both vehicle traffic and boater traffic changes resulting from the proposed project. The vehicle traffic analysis provides a discussion of transportation, circulation and parking in the existing setting and identifies the project's potential short- and long-term impacts on vehicle traffic conditions and parking. The following analysis recommends mitigation measures to reduce the significance of potential impacts pursuant to the California Environmental Quality Act (CEQA).

The traffic discussion includes information provided in both the Program Final EIR (FEIR No. 591) and the Dana Point Harbor Boat Traffic Study (Moffat and Nichol, November 2007), which are included in Appendix C to this SEIR.

### 4.4.1 EXISTING SETTING

Interstate 5 (I-5), located approximately two miles east of the Harbor runs north-south through the City and provides regional access to the Harbor. The Harbor is primarily accessible from Pacific Coast Highway and the Street of the Golden Lantern via Dana Point Harbor Drive. Secondary access is provided by Cove Road and the Pacific Ocean.

The proposed project is primarily composed of renovation of the West and East Marinas and the gangways and security gates to both Marina areas. Additionally, new Embarcadero/Dry Boat Storage Staging docks and a new dinghy dock, along with renovations to the Marine Services docks, OC Sailing and Events Center docks, guest slips, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed project. It should be noted that the proposed project does not include additional recreation facilities that would increase the capacity or attraction of users to the project area. In addition, no increased boating capacity is included in the project, as previously discussed in Chapter 3.0, Project Description.

### Harborwide Existing Trip Generation

Automobile traffic is currently generated by people traveling to and from various uses in the Harbor area, including boating-related activities, but also including other recreational uses (e.g., sightseeing and activities within the retail and commercial areas). The Dana Point Harbor Revitalization Project Program FEIR No. 591 estimated the existing daily traffic volumes for the Harbor using trip generation rates from the Institute of Transportation Engineers (ITE Trip Generation Manual, 7th Edition, 2003). The Program FEIR estimated that all Harbor uses currently generate approximately 19,198 average daily trips (ADT). Of this, it was estimated that the existing Marina areas (Planning

Areas 8, 9, 10, 11, and 12), generate approximately 7,373 ADT,<sup>1</sup> based on an existing slip count of 2,491 and a trip generation factor of 2.96 trips per slip.

The Dana Point Harbor Marina Improvement Project addressed in this SEIR includes a total existing slip count of 2,409 slips in the West and East Marinas plus 65 existing slips (42 guest slips, 8 Harbor Patrol slips and 15 commercial fishing slips) and 4,196 existing linear feet (lf) of dock space in the additional project areas: Embarcadero/Dry Boat Storage Staging docks; Marine Services docks; sport fishing docks; and OC Sailing and Events Center docks. The Program FEIR assumed an existing slip count of 2,491 slips and did not include a tabulation of dock linear footage for any uses. The areas where this SEIR includes linear footage were previously accounted for by the land use associated with them and the number of square feet of that land use. Therefore, traffic associated with the 4,196 lf of dock space would have been accounted for in the trips associated with each land use analyzed in the Program FEIR. For example, the Program FEIR included a 6,000 square foot (sf) Harbor Patrol Building that would generated an ADT of 66 trips based on a land use generation rate of 11.01 trips per 1,000 sf.

This SEIR analyzes traffic based on a total existing slip count of 2,474 (2,409 plus 65) which is a worst-case scenario that assumes 100 percent slip occupancy. As described above, the linear feet of existing dock space were included in the landside traffic analysis based on the associated land uses (trailer parking, shipyard, Harbor Patrol building, etc). Table 4.4.A compares the ADT for existing slip counts from the Program FEIR to the SEIR project, as well as the ADT based on those existing slip counts.

**Table 4.4.A: Existing Slip Count and ADT Comparison**

	<b>Total Number of Existing Slips</b>	<b>ADT</b>
Program FEIR	2,491	7,373
SEIR Project	2,474	7,323
<b>Net Difference</b>	<b>-17</b>	<b>-50</b>

Note: Trip generation based on a factor of 2.96 trips per slip, consistent with the Program FEIR.

ADT = average daily trips

For consistency purposes and ease of comparison, the Program EIR ADT of 7,373 will be used as an existing ADT volume for the following traffic analysis. The net difference of an additional 50 ADT is considered minor and does not affect the overall analysis in this SEIR.

**Existing Parking**

To determine the Harbor parking capacity, the Program FEIR divided the Harbor into five parking zones (A through E), counted all parking spaces within each Zone and summarized the on-site

<sup>1</sup> Dana Point Harbor Revitalization Project, Program Environmental Impact Report, Table 4.5-2, *Existing Trip Generation (Harborwide and Commercial Core)*, RBF, January 2006.

parking requirements for existing land uses based on County of Orange (County) and City of Dana Point parking requirements. The State Department of Boating & Waterways (DBW) parking guideline for boat slips is 0.6 parking spaces per boat slip, which was used to calculate the required boat slip parking quantity. The Program FEIR determined that there was an off-street parking requirement for 1,467 designated boater parking spaces based on the existing total number of recreational boat slips, in the East and West basins.<sup>1</sup> The Program FEIR concluded that there was an excess of parking spaces provided in all Harbor parking zones, except for the commercial area. Since certification of the Program FEIR, and based on suggested modifications from the California Coastal Commission Staff during the Local Coastal Program Amendment (LCP) process, the existing parking analysis was re-organized. The five parking zones mentioned above (A through E) were modified to adjust the configuration of the zones serving the commercial core area of the Harbor and are now identified as roman numerals I through V. Updated slip counts were also performed and it was determined that there was an off-street parking requirement of 1,444 designated boater parking spaces, based on the current number of recreational boat slips (2,409) in the East and West basins. Figure 4.4-1 depicts the existing Parking Zones I through V. Table 4.4.B depicts the existing parking requirements throughout the Harbor.

### **Boater Traffic**

The Dana Point Harbor Boat Traffic Study (Moffat and Nichol, November 2007) was prepared to analyze boat traffic conditions in the inner channel under existing conditions and with the proposed renovation configuration. The study analyzed historical boat traffic data from similar Marinas and conducted observations of boat traffic on a summer Saturday in the Harbor. The modeled boat traffic counts were calibrated based on the measured and observed boat traffic from the summer weekend day. The results indicate that the typical summer weekend boat traffic is comprised of approximately 18 percent of berthed vessels.

### **4.4.2 METHODOLOGY**

The proposed project was analyzed for potential impacts resulting from two sources: construction activities and boater trips. Because the project does not contain any landside uses and is specifically the renovation of dock facilities in the water, no changes in land use (landside uses) traffic were analyzed. The project will relocate some ADA parking spaces so that they are located next to the proposed ADA gangways. In addition, approximately 150 parking spaces will be used for the construction staging area during project construction. These parking spaces would become available once construction activities are finished. However, the Marina Improvement Project does not include any other permanent changes to surface parking lots throughout the Marina; therefore, impacts to parking are analyzed on the basis of potential conflicts with construction staging and construction-related traffic.

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<sup>1</sup> Dana Point Harbor Revitalization Project, Program Environmental Impact Report, Table 4.5-5, *Existing Parking Requirements*, RBF, January 2006.

**Table 4.4.B: Dana Point Harbor Existing Parking Requirements Summary**

Parking Zone	Planning Area	Description	Land Use	Parking Requirement	Existing		
					Existing Size	Required Spaces	Provided Spaces
I	1	Surface Boat Storage	Boat Use <sup>2</sup>	0.25 per boat	516 Boats	129	
	1	Dry Stack Boat Storage	Boat Use	0.25 per boat	0	0	
	1	BSB X	Office	1 per 250 sf of gfa	2,500 sf	10	
	1	Shipyards Building	Motor Vehicle Sales & Repair	1 per 400 sf of gfa	5,000 sf	13	
	11	Recreational Boat Slips (Rental Boats)	Boat Use <sup>5</sup>	0.6 per boat slip	32	19 <sup>4</sup>	
	2	BSB 1	Office	1 per 250 sf of gfa	2,000 sf	8	
	2	Retail/Restaurant – Retail Component	Retail	1 per 200 sf of gfa	26,600 sf	133	
	2	Retail/Restaurant – Restaurant Component	Restaurant	1 per 100 sf up to 4,000 sf plus 1 per each 80 sf above 4,000 sf	61,500 sf (includes outdoor dining/dining dining)	666	
	11	Sport Fishing	Boat Use	Measured Use		125 <sup>4</sup>	
	11	Charter Boat Concessions	Boat Use	1 space per 3 passengers	49	16 <sup>4</sup>	
	10	Rec. Boat Slips	Boat Use	0.6 per boat slip	119	71 <sup>4</sup>	
		<b>Total</b>				<b>1,191</b>	
II	11	Catalina Ferry	Boat Use	Measured Use		120 <sup>4</sup>	
	3	Hotel	Hotel	1 per guest room	136 rooms	136	
	3	BSB 2	Office	1 per 250 sf of gfa	1,800 sf	7	
	3	BSB 3	Office	1 per 250 sf of gfa	1,800 sf	7	
	3	BSB 4	Office	1 per 250 sf of gfa	2,500 sf	10	
	10	Rec. Boat Slips	Boat Use	0.6 per boat slip	609	365 <sup>4</sup>	
		<b>Total</b>				<b>645<sup>4</sup></b>	

**Table 4.4.B: Dana Point Harbor Existing Parking Requirements Summary**

Parking Zone	Planning Area	Description	Land Use	Parking Requirement	Existing		
					Existing Size	Required Spaces	Provided Spaces
III	9	Rec. Boat Slips	Boat Use <sup>5</sup>	0.6 per boat slip	512	307 <sup>4</sup>	
	9	Charter Boat Concessions	Boat Use	1 space per 3 passengers	49	16 <sup>4</sup>	
	5	OC Sailing & Events Center	Union Halls, Lodges, Clubs	1 per 75 sf of gfa	11,000 sf	147	
	5	BSB A	Office	1 per 250 sf of gfa	1,800 sf	7	
	5	BSB B	Office	1 per 250 sf of gfa	1,800 sf	7	
	5	BSB C	Office	1 per 250 sf of gfa	1,800 sf	7	
	6	Ocean Institute <sup>3</sup>				20	
	<b>Total</b>					<b>512</b>	
IV	9 & 10	Rec. Boat Slips	Boat Use <sup>5</sup>	0.6 per boat slip	1,169	701 <sup>4</sup>	
	10	Commercial Boat Slips	Boat Use <sup>5</sup>	2 per boat slip	15 slips	30	
	4	Harbor Patrol Building	Office	1 per 250 sf of gfa	6,000 sf	24	
	4	General Marine Commercial	Yacht Broker/ Office	1 per 250 sf of gfa	10,000 sf	40	
	4	BSB D – Dana West Yacht Club	Yacht Club & Storage <sup>2</sup>	4 per 1,000 sf	1,800 sf	7	
	4	BSB E	Office	1 per 250 sf of gfa	1,800 sf	7	
	4	BSB F	Office	1 per 250 sf of gfa	1,800 sf	7	
	4	BSB 5 – Aventura Sailing Association	Yacht Club & Storage <sup>2</sup>	4 per 1,000 sf	2,000 sf	8	
	4	BSB 6	Office	1 per 250 sf of gfa	1,800 sf	7	
	4	BSB 7	Office	1 per 250 sf of gfa	1,800 sf	7	
	4	BSB 8	Office	1 per 250 sf of gfa	1,800 sf	7	
	4	Dana Point Yacht Club	Yacht Club & Storage <sup>2</sup>	4 per 1,000 sf	12,400 sf	50	
	<b>Total</b>					<b>895<sup>4</sup></b>	

**Table 4.4.B: Dana Point Harbor Existing Parking Requirements Summary**

Parking Zone	Planning Area	Description	Land Use	Parking Requirement	Existing		
					Existing Size	Required Spaces	Provided Spaces
V	6	Ocean Institute <sup>3</sup>				110 <sup>4</sup>	
	<b>Total</b>					<b>110</b>	<b>110</b>
	<b>Totals</b>					<b>3,428<sup>4</sup></b>	<b>3,962</b>

<sup>1</sup> This does not include the car with trailer spaces provided for the boat launch ramp, or the on-street parking along a portion of Dana Point Harbor Drive and Street of the Golden Lantern.

Additionally, the Boater service Buildings parking requirement is based on the office portion of the building gross floor area.

<sup>2</sup> For comparative purposes, rates are based on City of Los Angeles Planning and Zoning Code, Section 12.21, 9/13/2000 revision, and California Department of Boating and Waterways standards.

<sup>3</sup> Total number of spaces required, based on "Traffic and Parking Study for the OC Marine Institute Expansion" (January 27, 2000)

<sup>4</sup> Information has been updated since FEIR No. 591.

<sup>5</sup> Rates are based on California Department of Boating and Waterways standards.

<sup>6</sup> The parking requirement is calculated on a restaurant-by-restaurant basis, not an aggregate total. The restaurant square footage includes outdoor patio/dining areas.

<sup>7</sup> On-street parking is also available on Dana Point Harbor Drive (62 spaces) and Street of the Golden Lantern (65 spaces). These spaces are not included in the "Provided Spaces" column.

BSB = Boater Service Building

sf = square feet

gfa = gross floor area

#### 4.4.3 THRESHOLDS OF SIGNIFICANCE

The impact significance criteria used for this analysis are based primarily on Appendix G of the State CEQA Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The project may be considered to have a significant effect related to traffic and circulation if implementation would result in one of more of the following:

- Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access
- Result in inadequate parking capacity
- Conflict with adopted policies, plan or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)

#### 4.4.4 OVERVIEW OF PROGRAM FEIR TRANSPORTATION/CIRCULATION ANALYSIS

**Impacts.** The Program FEIR concluded that construction activities associated with the proposed Revitalization Project would generate additional vehicle trips on adjacent roadways and impact existing parking facilities, thus affecting the level of service (LOS) at intersections and roadways and parking capacities. Operation of the Revitalization Project could generate additional trips on the adjacent roadways, thus affecting the LOS at intersections and roadways identified in the Program FEIR. The Program FEIR further concluded that operation of the Revitalization Project would also generate additional parking demand. However, the Program FEIR analysis determined that traffic and parking impacts would be reduced to a less than significant level with incorporation of the Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs). Measures identified in the Program FEIR and applicable to the Marina Improvement Project are listed below.

During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified, and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.



### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

- PDF 4.5-1** The construction phasing plan for the Commercial Core includes early construction of the parking deck and ramp, augmenting parking for Harbor visitors and boaters.
- PDF 4.5-2** A seasonal water taxi service may be incorporated throughout the Harbor to reduce average daily trips (ADTs) during peak Harbor usage days. (LUP Policy 6.2.3-11)
- PDF 4.5-4** Designated boater drop-off areas and parking shall be provided in the Commercial Core. (LUP Policy 6.2.5-11)
- SCA 4.5-1** Prior to the approval of any Coastal Development Permit or Grading Permit for Revitalization Plan Improvements, OC Dana Point Harbor shall prepare a construction-phase Parking Management Plan (PMP) that ensures public access will be retained to the extent it can be safely provided and to reduce construction congestion/conflicts. (LUP Policy 6.2.5-13)
- MM 4.5-2** OC Dana Point Harbor shall provide a construction sign program to direct Harbor visitors and boaters to available parking. (LUP Policy 8.5.3-9)
- MM 4.5-3** Access to the Marine Services Commercial areas shall be maintained during all construction phases. A Construction Management Plan shall be prepared identifying the configuration of construction staging areas, temporary access routes and parking areas and will be submitted with development permit applications. (LUP Policy 4.4.1-6)
- MM 4.5-7** OC Dana Point Harbor shall prepare a Traffic Management Plan (TMP) to include a provision for use of offsite locations for parking for peak Harbor use periods as necessary. (LUP Policy 6.2.5-14)

**Level of Significance after Mitigation.** No unavoidable significant impacts related to traffic and circulation impacts were identified in the Program FEIR.

### **4.4.5 IMPACTS AND MITIGATION**

The Initial Study (IS) prepared by the County (Appendix A) determined that the project is not located in the immediate vicinity of any airport and thus would not result in a permanent change to air traffic patterns. In addition, replacement of the dock and slip facilities does not include any long-term improvements to circulation or transportation facilities and would not create hazardous conditions related to transportation design features. The project is not anticipated to conflict with any policies, plans, or programs supporting alternative transportation. In addition, no alternative transportation facilities such as bus turnouts or bicycle racks will be impacted with implementation of the proposed project. Therefore, these issues are not addressed further in this SEIR.

## Less Than Significant Impacts

**Marina Trip Generation.** Because the proposed project may result in a reduction in the overall number of slips through the Harbor, no increase in traffic due to boater usage is anticipated. However, in order to verify these assumptions, the number of vehicle trips as they relate to the number of slips was analyzed.

As stated above, automobile traffic is currently generated by people traveling to and from various uses in the Harbor, including boating-related activities, but also other recreational uses (e.g., sightseeing and activities within the retail and commercial areas). However, because the proposed project is strictly associated with the renovation and number of slips, this analysis focuses primarily on project-related changes to automobile trips generated by boaters. The level of automobile traffic related to other uses in the Harbor is not expected to increase under the marina project conditions and is not anticipated to be affected by the change in the number of slips in the Harbor.

In order to calculate trips generated by a project site, transportation planners and engineers utilize published trip generation rate sources such as the Institute of Transportation Engineers (ITE) Trip Generation. It should be noted that ITE trip generation rates for Marina uses are not defined by the individual size of slips, but only by the number of slips/berths. It is anticipated that overall trips to and from the Marina would decrease during and after construction (operational conditions) due to the overall reduction in number of slips. The ITE Trip Generation Rates are the accepted professional methodology, and there are no existing standards or reliable studies by which to estimate the number of boat users/vehicle trips based on different slip sizes. Therefore, any analysis of impacts related to the size of the slips and/or boats is considered too speculative and unreliable to warrant further discussion, in accordance with CEQA Guidelines Section 15145.

The ITE manual contains a trip generation rate of 3.22 ADT per slip for Marina land uses for a weekend day (Saturday). However, the ITE trip generation rates for Marina land uses are defined in the ITE manual as applicable to both public and private Marina facilities, with some facilities having social and club activities, along with retail and restaurant uses. Therefore, the number of trips accounted for in the generation rates is attributable to slip usage as well as ancillary Marina uses such as retail and restaurant. The Program FEIR calculated the number of vehicle trips based on a lower ITE rate of 2.96 vehicle trips per slip, typical for weekday traffic, and concluded that the existing Marina slips generate approximately 7,373 ADT. No change in the number of slips was analyzed in the Program FEIR, and the assumed future traffic generated by the slips remained 7,373 ADT. Using the higher ITE trip generation rate of 3.22 vehicle trips per slip typical for a Saturday condition, the traffic generated based on the 2,491 slips analyzed in the Program FEIR would be 8,021 ADT.

At project completion, the proposed Marina Improvement Project assumes the total number of slips may decrease from 2,409 to 2,293 slips in the East and West Marinas, a decrease of approximately 116 slips based on the currently proposed schematic design. The number of slips in the additional Marina areas would increase by 4 (at the guest docks), for a total of 69 slips (42 guest slips, 8 Harbor Patrol Slips and 15 commercial fishing slips), resulting in an overall Harbor total of 2,362 slips (2,293 plus 69) with project implementation. In order to present the worst-case scenario and to represent the maximum of trips assigned per slip, the daily generation rate of 3.22 trips per slip, a typical rate for Saturdays, is used for this SEIR analysis. This is not, however, an accurate portrayal of trips related

solely to slips since the ITE generation rates include ancillary Marina uses such as retail and restaurant, as described above.

Based on the trip generation rate of 3.22 trips per slip and an overall project total of 2,362 slips, an estimated ADT of 7,606 vehicle trips would be generated at project completion, as shown on Table 4.4.C. Based on the higher ITE rate that estimated 8,021 ADT were actually being generated under existing conditions, the Marina Improvement Project’s ADT of 7,606 represents a reduction of 415 trips per day. The reduction in the number of slips results in fewer vehicle trips than under the conditions analyzed in the Program FEIR.

The vehicle rates used in the analysis are considered conservative since the number of traffic trips assumes that every slip in the Harbor is generating traffic on any given day. The Dana Point Harbor Boat Traffic Study (Moffat and Nichol, September 2007) estimated that approximately 18 percent of the slips are utilized on a typical summer day. Applying this factor of 18 percent (to a total of 2,362 slips), 425 boats would be in use, which would significantly reduce the number of vehicle trips under ongoing operational project conditions from 7,606 ADT to 1,369 ADT. To provide a more conservative, worst-case analysis, if 25 percent of the total boats (591 slips) were assumed to be used on any one day, the operational vehicle trips would be reduced from an estimated 7,606 ADT to 1,903 ADT.

Based on the above analysis, impacts related to vehicle traffic generated from the Marina Improvement Project are considered less than significant, and no mitigation is required.

**Table 4.4 C: Traffic Volumes With Project**

	Existing ADT <sup>1</sup>	Buildout ADT	Buildout ADT with 25% slip usage
<b>Program FEIR</b>	8,021	8,021	2,006
<b>Proposed SEIR Project</b>	7,966	7,606	1,903
<b>Net Difference</b>	<b>-55</b>	<b>-415</b>	<b>-103</b>

<sup>1</sup> Based on ITE trip generation rate of 3.22.  
 ADT = average daily trips

**Boater Vessel Traffic–Harborwide.** Project impacts related to boater traffic were analyzed in the Dana Point Harbor Boat Traffic Study (Moffatt and Nichol, November 2007). The preferred project analyzed in the 2007 study included a reduced design width of the West and East Basin inner channels by up to a 20-foot (ft) encroachment (from each side) and a 52.5 ft encroachment (from each side) into both inner channels near the Island Bridge. The current preferred design includes a 20 ft encroachment on both the north and south sides of both the West and East Basins (for a total of 40 ft), with only a 20 ft encroachment at the entrances of the East and West Basins (refer to Figure 3.13, Project Description). The encroachment tapers back to 0 ft adjacent to the Island Bridge to allow vessels to more easily turn around at the bridge, if needed. The Boat Traffic Study based on the previous design concluded that there is little to no present inner channel congestion and that there will be no significant change in the congestion on a regular basis due to the proposed design. Because the current preferred design results in less overall encroachment (due to the tapered encroachment design), the Boat Traffic Study’s conclusion that there will be no significant change in the congestion on a regular basis due to the proposed design remains valid.

The boat traffic model is based on the concept of LOS, which relates the capacity of the channel to the volume of boat traffic under different conditions and is represented by a scale of service levels from A to F, with A being the best condition. The LOS of channels is analogous to the traffic modeling concept and is a direct function of usage and channel capacity. The levels are set based on factors including numbers and sizes of boats, their speed and maneuverability, and channel size and geometry.

The capacity of the inner channel in the Harbor was assessed based on the navigable width of the channel and the amount of boater traffic. The Boat Traffic Study concluded that the daily use factor on a typical summer day was approximately 18 to 25 percent of berthed vessels in use. Boat traffic was also adjusted to account for boats from the West Basin that pass under the Island Bridge as opposed to going around to the Main Channel. Volume-to-capacity (v/c) ratios were then developed based on typical usage factors. The results indicated that although project implementation would result in a slight decrease in the LOS for both basins, the amount of change is considered to be so small that it would not result in any perceptible change in operations.

**Boater Vessel Traffic–Embarcadero/Dry Boat Storage Docks and Marine Services Docks.** The Embarcadero/Dry Boat Storage Staging docks will be located adjacent to the future Dry Boat Storage facility in the basin area adjacent to the boat launch ramp. The Embarcadero/Dry Boat Storage Staging docks will accommodate a varying number and size of boats on a fluctuating basis. These docks will continue to provide dock space for Embarcadero Marina operations, as well as for staging boats as they are taken in and out of the storage facility. Operations related to the Embarcadero Marina are anticipated to remain similar to existing conditions, with boat rentals, sailing lessons, and operation of one hoist for boats on trailers or stored in surface spaces. With the implementation of the Dry Boat Storage facility, it is anticipated that the intensity of boating operations in this area will remain consistent with existing and historic levels. Boats will be staged at the docks by Embarcadero staff as part of the Dry Dock Storage service, which will help eliminate potential boater loading/unloading conflicts and congestion in the staging area. No significant changes in the volume or level of service in this area are anticipated as a result of the Marina Improvement Project.

A portion of the Marine Services docks (294 lf) will be redesignated with project implementation. However, this is not expected to affect operations for Marine Service operators such as the Marine Services docks because this existing dock space is currently subleased to other independent businesses, such as a jet ski rentals and other non-shipyard related uses. This portion of the dock space will be allocated for use by the Dry Boat Storage facility, which is a part of the Harbor Revitalization Project. Operational conditions are expected to remain similar to existing conditions.

Operational impacts related to boat traffic in these areas are therefore considered to be less than significant and no mitigation is required.

**Boater Vessel Traffic–Temporary/Yacht Broker Docks.** In order to accommodate boaters during dock and slip renovations, the project includes one set of temporary docks along the east breakwater. Once renovations to all dock areas are completed, the temporary dock may become docks for some yacht brokers who currently have docks in the East and West Basins. The temporary docks are

intended to accommodate yacht broker vessels upon project completion, and are located in an area not currently used for slips (the East Turning Basin). Any permanent placement of docks in this area would require future permits from the Army Corps as they are located within a federal Anchorage area. The Boat Traffic Study indicated that the reduced inner channels would not result in any perceptible change in operations, and therefore, it can be assumed that the dock placement into the East Turning Basin, which is a significantly larger and wider area than the inner channels, would not significantly impact boat traffic.

**Boater Vessel Traffic–Construction.** Proposed marina improvements would occur in 17 phases over 8 years during which vessels would be relocated to available berths in the Marina or moved to the temporary dock, as necessary. Within each area, the phases will include removal of the existing dock and piles and installation of the new dock and piles. Removal of the existing dock system consists of separating the slips in the water and floating the structures to the west side cove staging area, where landside construction equipment would remove the slip structures from the water via crane and transport the discarded material off site for proper disposal. Installation of the new dock system would be done in reverse. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut 2–3 ft below the mudline. The old piles will be lifted from the water using a crane and then trucked off site. The last phase would be placement of the piles and docks. The preferred method of pile installation is to predrill boreholes to facilitate pile driving. Prestressed concrete piles will then be driven into these holes and grouted with cement or sand.

During construction, boats normally berthed in areas where construction is taking place will be relocated to the temporary docks or open slips throughout the Marinas. The County estimates that the number of slips vacated in the last few years, also known as attrition, has offset the loss of slips due to project implementation. As of August 14, 2011, there has been a slip attrition of over 950 boats. As a result, the County expects that no boaters will need to be relocated from the Harbor upon project completion because the number of vacancies through attrition over the last few years exceeds the number of slips lost with the proposed plan. Therefore, boat traffic will be dispersed to a larger area during construction, reducing congestion. The on-water construction equipment required for the proposed project will generally be localized within the dock areas where construction activities are being conducted. Therefore, impacts to boater traffic during construction are anticipated to be less than significant.

#### 4.4.5.2 Potentially Significant Impacts

**Boater Vessel Traffic–East and West Basins.** The following discussion regarding boater traffic in the East and West Basins includes potential impacts resulting from improvements to the East and West Marinas, the OC Sailing and Events Center, Harbor Patrol, commercial fishing, and guest and dinghy dock areas.

Renovations to the Harbor Patrol and commercial fishing docks would not result in operational changes to these dock areas because they are not being relocated, and no increase in capacity is planned. With project implementation, the existing guest slips would be relocated from the far west cove side of the West Marina to the East Marina near the Commercial Core in order to improve visitor access. A dinghy dock will also be provided near the Commercial Core and will create greater

access for boaters wishing to visit commercial uses by using their dinghies instead of their cars. This could potentially reduce boater vehicle trips within the Harbor.

Renovations to the OC Sailing and Events Center docks result in similar linear footage when compared to the existing facility. Operationally, the OC Sailing and Events Center will continue to use the docks for sailing programs. The uses at the site are not changing, and therefore, no impacts related to boating use in this area are anticipated.

Implementation of the project would result in fewer, and on average slightly longer (less than 2 ft on average), slips in the Harbor. However, the change in the average size of slips in the East and West Marinas would not change the operations within those Marinas; daily usage of boats would continue to be approximately 18 to 25 percent. In addition, reconfiguration of the docks includes a 20 ft encroachment on each side in both the East and West Marina inner channels (for a total of 40 ft), with a 20 ft encroachment at the entrances of the East and West Basins, tapering to a 0 ft encroachment near the Island Bridge (refer to Figure 3.13, Project Description). The Dana Point Harbor Boat Traffic Study analyzed the project, including inner channel narrowing, and concluded that there would be no significant change in boat congestion in the East and West Basins due to the proposed design. Even though there will be no substantial congestion created by channel narrowing, additional boat-to-boat conflicts may arise. In order to reduce any potential operational impacts related to channel narrowing, the Dana Point Harbor Boat Traffic Study recommended several measures to reduce boat-to-boat conflicts in the inner channels. Mitigation Measure 4.4-1 requires enforcement of existing rules regarding speed limits, along with continuation of recently implemented education and guidelines for human-powered craft rentals. Mitigation Measure 4.4-1 is proposed to ensure that impacts related to boat traffic in the inner basin channels will be reduced to a less than significant level.

**Construction Traffic.** Although the proposed Marina Improvement Project would not create additional traffic, construction traffic associated with the renovations could create short-term and intermittent traffic and circulation impacts on site. Construction would occur on Mondays through Saturdays in accordance with County standards, and staging of construction equipment and material would occur on the cove side of the West Marina. The intensity and nature of construction activity would vary over the construction period, and the effects of added truck traffic on area roadways would likewise vary. Because truck trips would be spread over the work day, the temporary impact on traffic flow would be less than significant. During project construction, construction workers would use parking spaces in the Harbor areas, which on weekdays are available in ample supply.

In addition to the 189 cubic yards of excavated material that would be removed for installation of the Americans with Disabilities Act (ADA) platforms, project implementation will require removal of all floating dock systems and pilings, as well as delivery of the new dock systems and pilings to the project site. Due to the lengthy construction period (estimated to be completed over eight years), and given that the exact construction methods or the mode of travel by which materials and workers would be transported to and from the site have not yet been established (i.e., truck vs. barge), it would be premature to quantify the number of truck trips and construction worker trips, and such quantification would likely be inaccurate. Therefore, because the impacts of construction traffic on the Harborwide circulation and parking conditions could be potentially significant, a Construction Management Plan (CMP) shall be required. The Program FEIR included a mitigation measure (MM

4.5-3) requiring the preparation of a CMP to address potential traffic conflicts during construction and to establish access locations for construction equipment separate from those used by the general public. This Mitigation Measure is applicable to the proposed project and will be carried forward and incorporated into the proposed Marina Improvement Project. Implementation of this measure (MM 4.4-2) will reduce potential construction-related traffic impacts to a less than significant level.

Due to the length of construction related to implementation of the Marina Improvement Project, it is possible that construction of the proposed project could occur at the same time as portions of the Dana Point Harbor Revitalization Project Commercial Core component. Due to the close proximity of these two projects within the same Harbor, construction traffic from the combined projects could result in a potentially significant circulation impact. Therefore, in the event that construction of these two Harbor projects occurs at the same time, implementation of Mitigation Measure 4.4-3 is proposed, requiring that the truck route and circulation effects of the two projects be addressed by one Construction Management Plan. Implementation of this measure would reduce potential construction traffic impacts to a less than significant level. It should be noted that the LCPA regulations and California Coastal Commission (CCC) suggested modifications also require a Parking Management Plan to be prepared during the Commercial Core area Coastal Development Permit approval process.

**Construction Parking.** The staging area for the duration of project construction will be located in the West Cove parking lot. The construction staging area will result in the loss of approximately 150 parking spaces for the duration of construction activities. The parking spaces would become available once construction activities are finished. The Program FEIR concluded that the number of parking spaces provided Harborwide with the Revitalization Plan would exceed the County's parking requirements.<sup>1</sup> Specifically, the construction staging area is located in the West Cove parking lot, which was identified as Parking Zone C (now known as Zone III) in the Program FEIR. The Program FEIR concluded that 443 parking spaces were required for Zone C, with 652 spaces provided under the Revitalization Plan. Based on this surplus of 209 parking spaces, the loss of approximately 150 spaces during construction of the Marina Improvement Project is considered a less than significant impact. In the revised parking analysis prepared for the CCC, Parking Zone C is now referred to as Parking Zone III. The only physical change to this boundary was the addition of the Cove Road Parking Lot to this zone. Under existing conditions, Zone III was determined to have 224 surplus spaces, based on the County and California Department of Boating and Waterways (DBW) requirements.

The construction staging area will extend all the way to the quay wall, which will require that the boardwalk be rerouted or detoured around it for the entire construction period. During each phase, there will be periods of time when the boardwalk will be detoured and parking may be restricted or impacted by the boardwalk detour. In order to reduce impacts related to parking and walkway conflicts with construction equipment, Mitigation Measure 4.4-2 has been proposed, which requires OC Dana Point Harbor to prepare a Construction Management Plan. Implementation of Mitigation Measure 4.4-2 will ensure that operational impacts related to parking during construction are reduced to a less than significant level.

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<sup>1</sup> Dana Point Harbor Revitalization Project, Program Environmental Impact Report, Table 4.5-37, *Dana Point Harbor Proposed Project Parking*, RBF, January 2006.

**Operational Long-Term Parking.** The proposed Marina Improvement Project does not involve any permanent changes to the number of parking spaces located in the Harbor. The DBW parking guideline for boat slips is 0.6 parking spaces per boat slip. Similarly, the modifications to the Dana Point Harbor LUP certified by the CCC include the adoption of a parking standard of 0.6 space per boat slip and 1 space per 3 passengers for sport fishing, charter boat, and passenger ferry operations. The Program FEIR concluded that the number of parking spaces provided with the Revitalization Plan would exceed the County's parking requirements.<sup>1</sup> In addition, implementation of the project does not increase the number of slips in the Harbor and therefore does not create a need for additional parking spaces. Even if the "no net loss" of slips is achieved, the LUP modifications to the parking regulations include a requirement to reserve adequate land areas to provide parking for 2,409 slips (the "no net loss" policy). Further, the LUP parking regulations include a requirement to provide boater parking spaces within 300 ft of the land/dock connection or a maximum of 600 ft from the connection.

One temporary dock is planned along the eastern breakwater near the County's metered parking lot and will be accessible to boaters from Puerto Place. Once renovations are complete, the temporary dock may be used on a permanent basis as a yacht broker dock; however, any permanent use within this federal anchorage area would require approval by the United States Army Corps of Engineers. This dock is anticipated to accommodate approximately 62 boats owned by yacht brokers. Because these docks will be utilized by yacht brokers, parking for these docks will be provided in the designated boater lots near each particular yacht broker's building. If needed, customers will be shuttled to the temporary dock by boat or car by the yacht broker staff.

Mitigation Measure 4.5-7, included in the Program FEIR, requires OC Dana Point Harbor to prepare a Traffic Management Plan (TMP) to minimize operational parking conflicts during peak Harbor use periods, which would also be applicable to the Marina Improvement Project. Although the Marina Improvement Project does not result in significant operational impacts related to parking conditions, Mitigation Measure 4.4-2, as discussed above, is proposed to ensure that potential parking conflicts during construction are reduced to a less than significant level.

## **Mitigation Measures**

The following measure would increase the level of safety and reduce potential impacts related to boat congestion in the East and West Basins to a less than significant level.

- 4.4-1** To reduce potential boat congestion in the East and West Basins, OC Dana Point Harbor (Harbor) shall, beginning at the start of construction and in the areas of construction activity, provide education and outreach to ensure that the slow speed/no wake policy is adhered to and to ensure that speeds in the Inner Channel are maintained at 4 to 5 knots in order to maintain boat traffic flow and steerage. Additionally, no construction shall be permitted to block the main navigational channels in the Harbor and should minimize the disruption or loss of existing docks by providing temporary facilities to the greatest extent feasible (refer to Implementation Plan [IP] II-3 Special Provision [SP] No. 3).

<sup>1</sup> Dana Point Harbor Revitalization Project, Program Environmental Impact Report, Table 4.5-37, *Dana Point Harbor Proposed Project Parking*, RBF, January 2006.



The following measures would reduce parking, public access, and circulation conflicts during construction operations to a less than significant level.

- 4.4-2** Public and boater access shall be provided to all Harbor facilities and businesses to the extent that they can be safely accessed during construction activities and reduce parking congestion/conflicts. To reduce parking, public access, and circulation conflicts during construction operations, OC Dana Point Harbor shall prepare a Construction Management Plan (CMP) that establishes access and staging locations for staging areas, temporary access routes, and parking areas that are separate from those used by the general public. The CMP shall also include the locations for shuttle drop-off areas, the relocations of public transit facilities, and provisions for valet service (in the event that construction activities do not allow for convenient parking adjacent to existing businesses).

The CMP shall be prepared and approved prior to issuance of any construction or building permits and shall include a construction sign program to direct Harbor visitors and boaters to available parking during all phases of construction (refer to FEIR No. 591, Mitigation Measures 4.5-3 and 4.1-3a, Land Use Plan [LUP] I-4.4.1-6 A, Implementation Plan [IP] II-14.6e, and IP II-3 Special Provisions [SP] No. 3).

- 4.4-3** Construction phasing for implementation of all Dana Point Harbor Revitalization Plan improvements shall minimize the disruption of vehicular and pedestrian access routes and parking availability to the maximum extent feasible. Access to the Marine Services Commercial areas shall be maintained during all construction phases. To reduce parking, public access, and circulation conflicts during construction operations, OC Dana Point Harbor shall prepare a coordinated construction truck route and parking program should the Dana Point Harbor Revitalization Plan Commercial Core construction occur at the same time as construction of the Marina Improvement Project.

In the event of temporary closures, alternative routes and clear directional signage shall be provided. Any temporary parking loss during construction shall be replaced prior to its removal and shall be located in reasonable proximity to the uses it serves to the maximum extent feasible. Temporary replacement parking spaces, located in reasonable proximity to the uses they serve, to the maximum extent feasible shall be provided prior to the removal of any existing parking spaces due to construction, in accordance with an approved Construction and Temporary Operations Plan (refer to Implementation Plan [IP] Section II-14.6e).

The coordinated program shall be approved by the Director, OC Public Works/Building Permit Services, prior to the issuance of any construction permits, and shall identify construction haul routes, the hours of construction traffic, traffic controls and detours, and off-site vehicle staging areas and address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes.

#### **4.4.6 CUMULATIVE IMPACTS**

The proposed project would retain the existing marine and Harbor recreational uses of the project site, and no increased capacity would occur. Any changes in patterns of use are expected to be negligible as a result of project implementation. In addition, the ADT associated with the proposed project is 50 vehicle trips fewer than the project as analyzed in the Program FEIR. Therefore, the traffic levels resulting from operation of the proposed project are not anticipated to worsen as a result of the proposed project, and no cumulative operational traffic impacts would occur.

The proposed project site is an existing Harbor and the immediate area surrounding the project site is largely built out. Currently, there are several projects that would be considered within the cumulative study area for traffic impacts. The City of Dana Point has identified the following projects as projects that have been proposed or approved but are not yet fully constructed:

- The Headlands – Commercial 35,000 sf Retail/Office (CUP/CDP/SDP approved in 2007)
- The Headlands – Seaside Inn 90 Room Hotel (CDP not yet approved but included as part of HDPC approval)
- The Headlands – Custom Homes 118 SFD (CDPs approved, 25 building permits have been issued by the City)
- Dana Point Harbor Revitalization Plan (landside development)
- Doheny Hotel – 258-Room Hotel with conference room and restaurant facilities

The Headlands projects listed above were included in the cumulative analysis for the Program FEIR, and therefore, because the Marina Improvement Project is a part of the Program FEIR, the cumulative traffic impacts associated with these projects have already been considered for the proposed project and were found not to be significant.

Construction activity for portions of the proposed project and construction of the Dana Point Harbor Revitalization Plan Commercial Core or the Doheny Hotel may occur at the same time. Should this occur, Mitigation Measure 4.4-3 is included to reduce impacts to a less than significant level. Commercial Core or Doheny Hotel construction workers and equipment and haul vehicles working in the vicinity of the proposed project may utilize the same haul route. Therefore, when combined, these projects have the potential to contribute to cumulative construction-related traffic impacts. With implementation of Mitigation Measure 4.4-3 and Mitigation Measures included in the Program FEIR, as listed above, potential cumulative impacts would be less than cumulatively significant.

#### **4.4.7 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

Implementation of Mitigation Measures 4.4-1 and 4.4-2 will ensure that construction-related traffic and boating impacts are reduced to a less than significant level. In addition, Mitigation Measure 4.4-3 and the Mitigation Measures included in the Program FEIR (should construction activities for portions of the two projects overlap) would reduce cumulative construction traffic impacts to a less than significant level. All other traffic and circulation impacts are considered less than significant. No significant unavoidable adverse impacts have been identified.

## 4.5 AIR QUALITY

This section discusses the potential project effects on air quality based upon the Air Quality Analysis (LSA Associates, Inc., June 2008; updated June 2010) report prepared for the proposed Marina Improvement Project. This section describes the physical setting of the project area and the regulatory framework for air quality; evaluates potential short- and long-term air quality impacts associated with the proposed project; and identifies Standard Conditions of Approval (SC) and mitigation measures recommended to address potentially significant adverse air quality impacts of the proposed project. The construction emissions calculations are provided in Appendix D.

### 4.5.1 EXISTING SETTING

Dana Point Harbor (Harbor) is located in southern Orange County (County), which is in the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The air quality assessment for the proposed Project includes estimating emissions associated with short-term construction and long-term operation of the proposed Project.

#### Regional Air Quality

The State of California and the federal government have established health-based ambient air quality standards (AAQS) for ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>), particulate matter with a diameter of 2.5 microns or less (PM<sub>2.5</sub>), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These AAQS are designed to protect the health and welfare of the populace with a reasonable margin of safety.

The State has established episode criteria for O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. The Air Quality Analysis describes the potential health effects of air quality pollutants by calculating the project's contribution of these emissions into the atmosphere.

The California AAQS (CAAQS) are more stringent than national AAQS (NAAQS). Among the pollutants for which AAQS have been identified, O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> are considered regional pollutants, while the other pollutants are considered to result in more localized effects.

#### Local and Regional Climate and Meteorology

Air quality in the SCAB is affected by both various emission sources (mobile, industry, etc.) and by atmospheric conditions, including wind speed, wind direction, temperature, and rainfall. The combination of topography, low mixing height, abundant sunshine, and emissions in the SCAB result in this area having the worst air pollution in the nation.

The climate in the SCAB is determined by its terrain and geographical location. The SCAB is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean is the southwestern border of the SCAB, and high mountains surround the rest of the SCAB. The SCAB is in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, and Santa Ana wind conditions do occur throughout the SCAB.

Although the SCAB has a semiarid climate, air near the land surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern in the SCAB is an onshore 8–12 miles per hour (mph) daytime breeze and an offshore 3–5 mph nighttime breeze. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly (Santa Ana) winds from the mountains and deserts northeast of the SCAB. Summer wind flow patterns represent worst-case conditions because this is the period of higher temperatures and more sunlight, which results in O<sub>3</sub> formation.

During spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. Air contaminants can be transported 60 miles (mi) or more from the SCAB by ocean air flow (on-shore) during the afternoons. From early fall to winter, the transport is less pronounced because of slower average wind speeds and the appearance of drainage winds earlier in the day. During stagnant wind conditions, offshore drainage winds may begin by late afternoon. Pollutants remaining in the SCAB are trapped and begin to accumulate during the night and the following morning. A low morning wind speed in pollutant source areas is an important indicator of air stagnation and the potential for buildup of primary air contaminants, affecting smog levels and concentrations that can affect human health.

Temperature normally decreases with altitude, and a reversal of this atmospheric state, where temperature increases with altitude, is called an inversion. The height from the earth to the inversion base is known as the mixing height. Persistent low inversions and cool coastal air tend to create morning fog and low stratus clouds in the SCAB. Cloudy days are less likely in the east parts of the SCAB and are about 25 percent more likely along the coast. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the earth's surface.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in the urbanized western part of the SCAB in Los Angeles and Orange Counties are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problem is the accumulation of CO and oxides of nitrogen (NO<sub>x</sub>) due to extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons (HC) and NO<sub>x</sub> to form photochemical smog.

### Air Pollution Constituents and Attainment Status in the SCAB

The California Air Resources Board (ARB) coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. The ARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by ARB and the United States Environmental Protection Agency (EPA) to classify air basins as attainment, nonattainment, nonattainment-transitional, or unclassified, based on air quality data for the most recent 3 calendar years compared with the AAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. Table 4.5.A lists the attainment status for the criteria pollutants in the Basin.

**Table 4.5.A: Attainment Status of Criteria Pollutants in the South Coast Air Basin**

Pollutant	State	Federal
O <sub>3</sub> : 1 hour	Nonattainment	N/A
O <sub>3</sub> : 8 hour	Nonattainment	Severe-17 Nonattainment
PM <sub>10</sub>	Nonattainment	Serious Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO <sub>2</sub>	Attainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board, 2010, <http://www.arb.ca.gov/desig/desig.htm>.

CO = carbon monoxide

N/A = not applicable

NO<sub>2</sub> = nitrogen dioxide

O<sub>3</sub> = ozone

PM<sub>10</sub> = particulate matter less than 10 microns in diameter

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in diameter

SO<sub>2</sub> = sulfur dioxide

The entire SCAB is designated as a nonattainment area for the State one-hour and 8-hour O<sub>3</sub> standards. The EPA has officially designated the status for the SCAB regarding the federal eight-hour O<sub>3</sub> AAQS as Severe-17, which means the SCAB has until 2021 to attain the federal eight-hour O<sub>3</sub> AAQS. The SCAQMD has requested that the Basin’s federal designation be changed from severe to extreme nonattainment. This change would extend the attainment deadline to 2023.

The entire SCAB has not exceeded the federal and State standards for NO<sub>2</sub> in the past five years with published monitoring data. The SCAB is designated a maintenance area under the federal AAQS and an attainment area under the State AAQS for NO<sub>2</sub>.

Most of the SCAB is designated nonattainment for the federal and State PM<sub>10</sub> and PM<sub>2.5</sub> AAQS. The entire SCAB is designated as attainment for State CO standards and designated as a “Severe Maintenance” area under the federal CO standards

The SCAB is in attainment with both federal and State SO<sub>2</sub>, and lead AAQS.

### **Local Air Quality**

The SCAQMD and the ARB maintain ambient air quality monitoring stations in the SCAB. The air quality monitoring station closest to the Harbor is the Mission Viejo Station. The air quality trends at that station are representative of the ambient air quality in the project area. The pollutants monitored at that station are CO, O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.<sup>1</sup> The closest air quality monitoring station to the project site which monitors NO<sub>2</sub> and SO<sub>2</sub> is the Costa Mesa Station. The air quality at that station is representative of the ambient air quality in the project area for those two pollutants.

The ambient air quality data in Table 4.5.B show that NO<sub>2</sub>, SO<sub>2</sub>, and CO levels are below the applicable State and federal AAQS at the relevant monitoring stations. The State one-hour O<sub>3</sub> AAQS was exceeded 5 to 9 times per year in the last three years. The federal eight-hour O<sub>3</sub> AAQS was exceeded 5 to 15 times per year in the last three years. The State 24-hour PM<sub>10</sub> AAQS was exceeded three times in 2007 but has not exceeded the federal 24-hour AAQS since 1999. The federal 24-hour PM<sub>2.5</sub> AAQS was exceeded twice in 2007 and once in 2009 in the last three years.

## **4.5.2 REGULATORY SETTING**

### **Federal Regulations and Standards**

Pursuant to the federal Clean Air Act (CAA) of 1970, the EPA established NAAQS for six major criteria pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations to protect public health. The NAAQS are listed in Table 4.5.B.

Data collected at permanent monitoring stations are used by the EPA to classify regions as attainment or nonattainment, depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The attainment/nonattainment status of the NAAQS for the criteria pollutants in the SCAB were shown earlier in Table 4.5.A.

The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the federal CAA for the SCAB.

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<sup>1</sup> Air quality data, 2004–2006; EPA and ARB Web sites.

**Table 4.5.B: Ambient Air Quality in the Project Vicinity**

Pollutant	Standard	2007	2008	2009
<b>Carbon Monoxide</b>				
Max 1-hr concentration (ppm)		2.9	1.5	ND
No. days exceeded: State	> 20 ppm/1-hr	0	0	ND
Federal	> 35 ppm/1-hr	0	0	ND
Max 8-hr concentration (ppm)		2.2	1.1	1.0
No. days exceeded: State	9.0 ppm/8-hr	0	0	0
Federal	9 ppm/8-hr	0	0	0
<b>Ozone</b>				
Max 1-hr concentration (ppm)		0.108	0.118	0.121
No. days exceeded: State	> 0.09 ppm/1-hr	5	9	7
Max 8-hr concentration (ppm)		0.090	0.104	0.095
No. days exceeded: State	> 0.07 ppm/8-hr	10	25	14
Federal	> 0.075 ppm/8-hr	5	15	10
<b>Particulates (PM<sub>10</sub>)</b>				
Max 24-hr concentration ( µg/m <sup>3</sup> )		74	42	41
No. days exceeded: State	> 50 µg/m <sup>3</sup> /24-hr	1	0	0
Federal	> 150 µg/m <sup>3</sup> /24-hr	0	0	0
Annual Arithmetic Average ( µg/m <sup>3</sup> )		23.0	22.6	ND
Exceeded: State	> 20 µg/m <sup>3</sup> ann. arth. avg.	Yes	Yes	ND
<b>Particulates (PM<sub>2.5</sub>)</b>				
Max 24-hr concentration ( µg/m <sup>3</sup> )		46.8	32.6	39.2
No. days exceeded: Federal	> 35 µg/m <sup>3</sup> /24-hr	2	0	1
Annual Arithmetic Average ( µg/m <sup>3</sup> )		11.1	8.3	ND
Exceeded: State	> 12 µg/m <sup>3</sup> ann. arth. avg.	No	No	ND
Federal	> 15 µg/m <sup>3</sup> ann. arth. avg.	No	No	ND
<b>Nitrogen Dioxide<sup>2</sup></b>				
Max 1-hr concentration (ppm)		0.074	0.081	0.065
No. days exceeded: State	> 0.25 ppm/1-hr	0	0	0
Annual arithmetic average concentration (ppm)		0.013	0.013	0.013
Exceeded: Federal	> 0.053 ppm ann. arth. avg.	No	No	No
<b>Sulfur Dioxide<sup>2</sup></b>				
Max 24-hr concentration (ppm)		0.004	0.003	0.004
No. days exceeded: State	> 0.04 ppm/24-hr	0	0	0
Federal	> 0.14 ppm/24-hr	0	0	0
Annual arithmetic average concentration (ppm)		0.000	0.001	0.001
Exceeded: Federal	> 0.030 ppm ann. arth. avg.	No	No	No

Sources: EPA and ARB (2010).

<sup>1</sup> ND: No Data. There was insufficient or no data available to determine the value.

<sup>2</sup> Monitored at the Costa Mesa-Mesa Verde Drive Air Monitoring Station.

arth: arithmetic

ppm = parts per million

µg/m<sup>3</sup> = micrograms of pollutant per cubic meter of air

The EPA established new NAAQS for ground-level O<sub>3</sub> and PM<sub>2.5</sub> in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for O<sub>3</sub> and particulate matter, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001, the United States Supreme Court upheld the way the government sets air quality standards under the CAA. The court unanimously rejected industry arguments that the EPA must consider financial cost as well as health benefits in writing standards. The justices also rejected arguments that the EPA took too much lawmaking power from Congress when it set tougher standards for O<sub>3</sub> and soot in 1997. Nevertheless, the court threw out the EPA's policy for implementing new O<sub>3</sub> rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the 8-hour ground-level O<sub>3</sub> standard. The EPA issued the proposed rule implementing the 8-hour O<sub>3</sub> standard in April 2003. The EPA completed final 8-hour nonattainment status on April 15, 2004. The EPA revoked the 1-hour O<sub>3</sub> standard on June 15, 2005.

The EPA issued the final PM<sub>2.5</sub> implementation rule in fall 2004 and made final designations on December 15, 2004. The EPA lowered the 24-hour PM<sub>2.5</sub> standard from 65 to 35 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and revoked the annual average PM<sub>10</sub> standard in December 2006.

### **State Regulations and Standards**

The State of California began to set California ambient air quality standards (CAAQS) in 1969 under the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

The California Clean Air Act (CCAA) of 1988 provided a time frame and a planning structure to promote the attainment of the CAAQS. The CCAA required nonattainment areas in the State to prepare attainment plans which are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented. The SCAB is currently classified as a nonattainment area for three criteria pollutants.

### **Regional and Local Air Quality Planning Framework**

The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout California. The federal CAA Amendments of 1977 required each State to adopt an implementation plan outlining pollution control measures to attain the NAAQS in nonattainment areas of the State.

The ARB coordinates and oversees the State and federal air pollution control programs in California. It oversees activities of local air quality management agencies and is responsible for incorporating air quality management plans (AQMPs) for all the air basins in the State into a State Implementation Plan (SIP) for the EPA approval. The ARB and local air districts maintain air quality monitoring stations throughout the State. Data collected at those stations are used by the ARB to classify air



basins as attainment or nonattainment with respect to each pollutant and to monitor progress in attaining the applicable AAQS.

The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the SCAB. Every three years, the SCAQMD prepares a new AQMP with a 20-year horizon, and which updates the previous plan. The SCAQMD adopted the *2007 AQMP* on June 1, 2007. The *2007 AQMP* is described as a regional and multiagency effort (i.e., the SCAQMD Governing Board, ARB, SCAG, and EPA). State and federal planning requirements will include developing control strategies, attainment demonstration, reasonable further progress, and maintenance plans. The *2007 AQMP* also incorporates significant new demographic projections and scientific data, primarily in the form of updated population projections, updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The ARB approved the *2007 AQMP* on September 27, 2007, and adopted it as part of the 2007 SIP. The SCAQMD forwarded the *2007 AQMP* to the EPA for its review and approval.

### 4.5.3 METHODOLOGY

The SCAQMD has guidelines and requirements for the conduct air quality analyses for projects in the SCAB. The current SCAQMD guidelines, the *CEQA Air Quality Handbook* (April 1993) were adhered to in the assessment of air quality impacts for the proposed Marina Improvement Project.

The air quality assessment included estimating emissions associated with short-term construction and long-term operation of the proposed Marina Improvement Project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site.

The net increase in pollutant emissions was used to assess the significance and impact on regional air quality as a result of the proposed project. This analysis also allows the local government to determine whether the proposed project will deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with the federal and State AAQS.

The SCAQMD has a localized significance threshold (LST) methodology that can be used to determine whether or not a project may result in significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State AAQS and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The current SCAQMD guidelines, *Final Localized Significance Threshold Methodology* (June 2003), were adhered to in the assessment of the air quality impacts of the proposed project.

The LST mass rate look-up tables were used to determine whether the daily emissions for the project-related construction and operations activities could result in significant adverse localized air quality impacts. The emissions of concern from construction activities are NO<sub>x</sub> and CO combustion emissions from construction equipment and fugitive PM<sub>10</sub> dust from site preparation activities. The primary emissions from operations activities include but are not limited to NO<sub>x</sub> and CO combustion emissions from stationary sources and/or on-site mobile equipment. Because the project does not increase capacity, off-site mobile vehicular emissions from the project are not included in the emissions compared to the LSTs.

#### 4.5.4 THRESHOLDS OF SIGNIFICANCE

The impact significance criteria used for this analysis are based primarily on Appendix G of the *State CEQA Guidelines* and the *County of Orange Local CEQA Procedures Manual* (2000). The Marina Improvement Project would be considered to result in a significant adverse air quality impact if it:

- Conflicts with or obstructs implementation of the applicable air quality plan
- Violates any AAQS or contributes substantially to an existing or projected air quality violation
- Results in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State AAQS (including releasing emissions, which exceed quantitative thresholds for O<sub>3</sub> precursors)
- Exposes sensitive receptors to substantial pollutant concentrations
- Creates objectionable odors affecting a substantial number of people

In addition to the federal and State AAQS, there are daily and quarterly emissions thresholds for construction and operation of a proposed project in the SCAB. Specifically, the thresholds described in the following sections, from the SCAQMD *CEQA Air Quality Handbook*, were used in this analysis. These emissions thresholds were established by the SCAQMD based on the attainment status of SCAB for individual criteria pollutants. Because the concentration standards were set at a level that protects public health with adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

##### Thresholds for Construction Emissions

The following CEQA significance thresholds for construction related air quality emissions have been established for the SCAB:

- 75 pounds per day (lbs/day) of ROC
- 100 lbs/day of NO<sub>x</sub>
- 550 lbs/day of CO
- 150 lbs/day of PM<sub>10</sub>
- 55 lbs/day of PM<sub>2.5</sub>
- 150 lbs/day of sulfur oxides (SO<sub>x</sub>)

Projects in the SCAB with construction related emissions that exceed any of these emission thresholds are considered to result in significant short-term adverse air quality impacts under the SCAQMD guidelines.

## Thresholds for Operational Emissions

The daily operational air quality emissions significance thresholds for the SCAB are described below.

**Emission Thresholds for Pollutants with Regional Effects.** Projects with operations related air quality emissions that exceed any of the emission thresholds listed below are considered to result in significant adverse regional air quality impacts under the SCAQMD guidelines:

- 55 lbs/day of ROC
- 55 lbs/day of NO<sub>x</sub>
- 550 lbs/day of CO
- 150 lbs/day of PM<sub>10</sub>
- 55 lbs/day of PM<sub>2.5</sub>
- 150 lbs/day of SO<sub>x</sub>

**Local Microscale Concentration Standards.** The significance of localized project impacts under CEQA depends on whether the ambient CO levels in the vicinity of the project site are above or below the State and federal CO AAQS. If ambient CO levels are below the CO AAQS, a project is considered to have a significant adverse localized air quality impact if project-related emissions result in an exceedance of one or more of these AAQS. If the ambient levels already exceed a State or federal AAQS, project-related air quality emissions are considered significant and adverse if they increase the one-hour CO concentrations by 1.0 part per million (ppm) or more or eight-hour CO concentrations by 0.45 ppm or more. The applicable local emission concentration standards for CO are:

- California State one-hour CO standard of 20.0 ppm
- California State eight-hour CO standard of 9.0 ppm

## Thresholds for Localized Significance

For the Marina Improvement Project, the appropriate SRA for LST is the Capistrano Valley area, according to the SRA/City Table on the SCAQMD LST Web site.<sup>1</sup> The total project site is larger than 5 acres (ac), however, it is expected that construction activities will not exceed 5 ac in any one day, so the 5 ac thresholds were used. The nearest sensitive receptor to the project construction areas is the Marina Inn which is approximately 150 feet north of the nearest area proposed for construction under the Marina Improvement Project. The following 5-ac thresholds were applied to the construction and operations phases of the project:

- 330 lbs/day of NO<sub>x</sub> at 50 m
- 2,102 lbs/day of CO at 50 m

<sup>1</sup> [www.aqmd.gov/ceqa/handbook/LST/LST.html](http://www.aqmd.gov/ceqa/handbook/LST/LST.html).

- 37 lbs/day of PM<sub>10</sub> at 50 m
- 11 lbs/day of PM<sub>2.5</sub> at 50 m

#### 4.5.5 OVERVIEW OF PROGRAM FEIR AIR QUALITY ANALYSIS

**Impacts.** The Program FEIR concluded that temporary construction-related dust and vehicle emissions will occur during site preparation and Revitalization Project construction. The Program FEIR concluded that despite implementation of mitigation measures and Project Design Features, such as limitations on construction hours and adherence to SCAQMD Rules 402 and 403 (which require watering of inactive and perimeter areas, track-out requirements, etc.), impacts, although minimized, will not be at less than significant levels. As illustrated within the Program FEIR analysis, mitigation measures will reduce PM<sub>10</sub> emissions, but NO<sub>x</sub> emissions will not be reduced to less than significant levels. Construction emissions were predicted to exceed SCAQMD thresholds for NO<sub>x</sub>, resulting in a significant and unavoidable impact.

The Program FEIR concluded that the Revitalization Project will be consistent with the AQMP. Operation of the Revitalization Project would add an overall increase in the local and regional pollutant load. However, the Program FEIR concluded that the increase in operational air emissions as a result of the Revitalization Project will not exceed SCAQMD thresholds. Although operational impacts are not anticipated to exceed SCAQMD thresholds, mitigation measures and Project Design Features are included in the Revitalization Project to support the reduction of any long-term operational impacts. Therefore, operational impacts were anticipated to be less than significant.

Cumulatively, the Revitalization Project along with other future development could increase air emissions within the surrounding areas, thereby decreasing ambient air quality. However, the Program FEIR analysis concluded that the Revitalization Project will contribute to less than 25 percent of the anticipated emissions from projects proposed within the area, and additional mitigation measures are not necessary.

Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs) identified in the Program FEIR and applicable to the Marina Improvement Project are listed below. During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

#### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

**PDF 4.6-3** Reduction of vehicle trips is achieved by implementing the Transportation Management Plan, including:

- Potential seasonal water taxi service;
- Visitor boat slips and dingy docks located near restaurants and retail areas; and
- Phased construction of the Revitalization Plan Improvements will minimize the size of areas subject to disruption from construction activities.

**MM 4.6-1** Prior to approval of project plans and specifications, the Director, OC DP, or his designee, in consultation with the Manager, OCPW/Environmental Planning, shall confirm that the plans and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures, as specified in the South Coast Air Quality Management District's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures will reduce short-term fugitive dust impacts on nearby sensitive receptors:

- On-site vehicles speed shall be limited to 15 miles per hour (mph);
- All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized;
- If dust is visibly generated that travels beyond the site boundaries, clearing, grading, earth moving, or excavation activities that are generating dust shall cease during periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 episodes; and
- All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

**MM 4.6-2** Prior to approval of the project plans and specifications, the Director, OC DPH, or his designee, in consultation with the Manager, OCPW/ Environmental Planning, shall confirm that the plans and specifications stipulate that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications using catalytic converters on gasoline-powered equipment and using reformulated low-emission diesel fuels. The County Inspector will be responsible for ensuring that contractors comply with this measure during construction.

**MM 4.6-6** In order to reduce operational energy usage and reduce energy production air emissions, Harbor projects are required at a minimum to comply with Title 24 of the California Code of Regulations established by the California Energy Commission regarding energy conservation. (LUP Policy 8.9.1-11)

**Level of Significance after Mitigation.** Despite implementation of PDFs and MMs, the Revitalization Project was found to result in significant and unavoidable impacts regarding construction emissions (NO<sub>x</sub> emissions).

## 4.5.6 IMPACTS AND MITIGATION

### Less Than Significant Impacts

**Fugitive Dust.** Fugitive dust emissions are generally associated with land clearing, exposure, and cut-and-fill operations. Because the majority of construction operations related to the Marina

Improvement Project will be conducted on or underwater, little fugitive dust is expected to be generated by these operations. However, small amounts of fugitive dust could be generated as construction equipment or trucks travel into, out of, and on the Harbor property, or from the excavation and pile installation for the ADA gangways foundations. As shown in Table 4.5.C, the amount of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) generated during construction will be relatively small and will not exceed the SCAQMD thresholds of significance for particulate matter. Therefore, construction of the project will result in less than significant adverse impacts related to PM<sub>10</sub> and PM<sub>2.5</sub>.

**Table 4.5.C: Peak Day Construction Emissions by Sub-Phase<sup>1</sup>**

Sub-Phase	CO (lbs/day)	ROC (lbs/day)	NO <sub>x</sub> (lbs/day)	SO <sub>x</sub> (lbs/day)	PM <sub>10</sub> (lbs/day)	PM <sub>2.5</sub> (lbs/day)	CO <sub>2</sub> (lbs/day)
Removal of Existing Slips and Piles	441.8	<b>179.9</b>	<b>121.4</b>	0.5	7.7	6.7	10,733.6
Installation of New Piles	319.2	<b>135.3</b>	31.9	0.3	2.6	2.2	2,901.6
Installation of New Slips	340.3	<b>140.5</b>	70.9	0.4	4.6	4.0	6,343.5
SCAQMD Emissions Thresholds	550	75	100	150	150	55	n/a
Exceed Significance Threshold?	No	<b>Yes</b>	<b>Yes</b>	No	No	No	n/a

Source: LSA Associates, Inc. (May 2008).

<sup>1</sup> It is assumed that there is no overlap of these construction phases within each phase.

**Odors.** The heavy-duty construction equipment used in the project area during construction would potentially emit odors, primarily from diesel engine sources and pile driving. However, the odors would cease to occur after construction is completed. In addition, on-shore wind conditions at the Harbor are fairly consistent and will function to quickly disperse and dilute any odorous emissions. No other sources of objectionable odors during the construction and/or operation of the project have been identified. Therefore, the construction and operation of the project would result in less than significant adverse impacts related to odors.

**Stationary and Mobile Sources.** Long-term air emission impacts are associated with changes in the permanent use of a project site where those changes would substantially increase emissions from on-site stationary and/or off-site mobile emissions sources. Stationary source emissions include emissions associated with electricity consumption and natural gas usage. Mobile source emissions would result from vehicle trips associated with a proposed project. The proposed Marina Improvement Project would not result in any substantive changes in long-term on-site stationary sources as described in Section 3.0, Project Description because there are no substantial structures proposed or new uses proposed in the project. The project would also not result in changes to off-site vehicle trips as discussed in Section 4.4, Transportation and Circulation. Therefore, no long-term mobile or stationary emissions were calculated for the proposed project and the operation of the proposed project would result in a less than significant impact related to stationary and mobile source emissions.

**CO Hotspots Analysis.** The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time caused by traffic conditions. CO transport is extremely limited because CO it disperses rapidly with distance from the emissions source (such as a motor vehicle) under

normal meteorological conditions. Under certain extreme meteorological conditions, CO concentrations near a congested road or intersection may reach unhealthy levels affecting local sensitive receptors such as residents, schoolchildren, the elderly, hospital patients, etc. Typically, high CO concentrations are associated with roads or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient CO concentrations, modeling of CO concentrations is recommended in determining a project's effect on local CO levels. Because the proposed Marina Improvement Project does not increase or expand capacity, it would likely result in either no change or only a minor insignificant change in off-site vehicle trips, no substantial increase in CO contributions would occur in the project vicinity as a result of the proposed project. Therefore, no CO hot spots are expected as a result of the project and modeling of CO emissions associated with the proposed project is not necessary. The proposed Marina Improvement Project would result in less than significant localized impacts related to CO.

**Localized Significance of Construction Emissions.** The following analysis was performed consistent with the SCAQMD *Final Localized Significance Threshold Methodology*. The Marina Inn, the closest sensitive receptor, is approximately 50 m north of the nearest part of the project construction area. The LST values for 50 m were used. Table 4.5.D shows the construction-related emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> compared to the LSTs for the Capistrano Valley Area. As shown, the calculated emissions rates for the project construction activities will be below the LSTs for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> at 50 m from sensitive receptors. Therefore, the construction activities for the Marina Improvement Project would result in less than significant short-term, localized, air quality impacts.

**Table 4.5.D: Summary of Construction Emissions Localized Significance**

Construction Phase	Emission Rates (lbs/day)			
	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Removal of Existing Slips and Piles	441.8	121.4	7.7	6.7
Installation of New Piles	319.2	31.9	2.6	2.2
Installation of New Slips	340.3	70.9	4.6	4.0
<b>Localized Significance Threshold (at 50 m)</b>	<b>2,102</b>	<b>330</b>	<b>37</b>	<b>11</b>
<b>Exceed Significance?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: LSA Associates, Inc. (May 2008).

**Consistency with the AQMP.** An AQMP describes air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area for specific pollutants. The main purpose of an AQMP is to bring an area into compliance with the applicable federal and State AAQS. CEQA requires that certain proposed projects be analyzed for consistency with the AQMP. For a project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily thresholds or cause a significant adverse impact on air quality, or the project must already have been included in the AQMP projections. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may otherwise be deemed consistent with the AQMP. The AQMP uses the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Because the AQMP is based on local General Plans, projects that are deemed

consistent with the General Plan are found to be consistent with the AQMP. As described in Section 3.0, Project Description, the proposed Marina Improvement Project would not result in any population, jobs, or housing growth or any substantive land use changes and, therefore, would be consistent with the City of Dana Point General Plan. In addition, the proposed project is not expected to result in any increase in long-term regional air quality emissions. Therefore, the Marina Improvement Project will not conflict with the AQMP, and the project will result in no significant adverse impact related to implementation of the AQMP.

### **Potentially Significant Impacts**

**Equipment Exhaust and Related Construction Activities.** Construction of the Marina Improvement Project is planned to occur in multiple phases over approximately eight years. Each of these phases would occur in multiple sub-phases, such as the removal of the existing piles and slips, the installation of new piles, and the installation of new slips. The maximum exhaust emissions generated within each of the construction sub-phases are summarized in Table 4.5.D. The *Air Quality Analysis* provides detailed listings of the project emissions during the project phases. Table 4.5.D indicates that construction equipment/vehicle emissions during slip and pile removal and installation periods for the construction of the proposed project would result in NO<sub>x</sub> and ROC emissions that would exceed the SCAQMD-established daily emissions threshold for those pollutants. While adherence to SCAQMD rules and regulations would reduce this impact, it would remain significant and adverse because the SCAQMD daily threshold would be exceeded. No feasible mitigation measure beyond compliance with SCAQMD rules and regulations are available to offset this significant impact. Therefore, construction of the Marina Improvement Project would result in significant adverse impacts related to emissions of NO<sub>x</sub> and ROC during construction.

### **Standard Conditions (SC)**

**SC-1** The construction of the Marina Improvement Project must comply with SCAQMD rules to reduce short-term air pollutant emissions generated during construction. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off a project site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques would reduce the fugitive dust generation and the PM<sub>10</sub> and PM<sub>2.5</sub> components of fugitive dust. Compliance with these rules would reduce the short-term project air quality impacts on sensitive receptors. Rule 403 measures applicable to the construction of the Marina Improvement Project are:

- Water active landside construction areas at least twice daily. Locations where equipment operations are to occur will be thoroughly watered prior to use.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered, or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).



- Use low-sulfur fuel for stationary construction equipment
- SC-2** The following dust suppression measures in the SCAQMD *CEQA Air Quality Handbook* would further reduce the likelihood of short-term air quality impacts:
- Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
  - Pave, water, or chemically stabilize all on-site roads as soon as feasible.
  - Minimize at all times the area disturbed by earthmoving or excavation operations.
- SC-3** The construction contractor will select the construction equipment used on site based on low-emission factors and high energy efficiency. The construction contractor will ensure that the construction plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.
- SC-4** The construction contractor will time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson will be retained to maintain safety adjacent to existing roads.
- SC-5** The construction contractor will support and encourage ridesharing and transit incentives for the construction crew.

#### **4.5.7 CUMULATIVE IMPACTS**

Construction of the project would contribute cumulatively to the local and regional air pollutants, together with other projects under construction. As detailed previously, the project would result in significant construction-related air quality impacts pertaining to NO<sub>x</sub> and ROC [precursors to O<sub>3</sub>] emissions. Thus, it is anticipated that these additional NO<sub>x</sub> and ROC emissions would result in significant cumulative air quality impacts.

The proposed project would also contribute to adverse cumulative air quality impacts because construction activity would result in additional emissions of pollutants, which may exacerbate ambient levels currently in excess of applicable NAAQS or CAAQS for PM<sub>10</sub> and O<sub>3</sub> (because NO<sub>x</sub> and ROC are precursors to O<sub>3</sub>). The proposed project, in conjunction with other planned projects, would contribute to the existing nonattainment status. Therefore, the project-level and cumulative short-term construction impacts of the proposed project would remain significant and unavoidable.

#### **4.5.8 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

The proposed Marina Improvement Project would result in significant unavoidable construction-related adverse air quality impacts of ROC and NO<sub>x</sub> [precursors to O<sub>3</sub>] emissions, even after the implementation of feasible standard conditions. While the adherence to SCAQMD rules and regulations would reduce this impact, it would remain significant and adverse because the SCAQMD daily threshold would be exceeded. No feasible mitigation measures beyond compliance with SCAQMD rules and regulations are available to offset this significant impact.

Construction activities for the Marina Improvement Project would also contribute to construction-related adverse cumulative air quality impacts because the Basin is presently in nonattainment for O<sub>3</sub>, and the project, in conjunction with other planned projects, would contribute to the existing nonattainment status for O<sub>3</sub>. Therefore, the cumulative construction impacts of the proposed project would remain significant.

## 4.6 NOISE

### 4.6.1 INTRODUCTION

This section evaluates the potential for short- and long-term noise impacts and mitigation measures for the Marina Improvement Project. The Dana Point Harbor facilities are owned by the County of Orange (County) and operated by OC Dana Point Harbor, a County agency. This analysis is intended to satisfy the County's requirements for a project-specific noise impact analysis by examining the impacts of the proposed project on noise-sensitive uses in the project area. The potential noise impacts of the proposed project are discussed in detail in the Noise Impact Analysis (LSA Associates, Inc., May 2008) provided in Appendix E and are summarized in this section.

### 4.6.2 EXISTING ENVIRONMENTAL SETTING

#### Fundamentals of Noise

**Noise Definition.** Noise impacts can be described in three categories. The first is audible impact, which refers to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 decibels (dB) or greater, because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise levels of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant and adverse impacts of proposed projects.

**Characteristics of Sound.** Sound is increasing in the environment and can affect quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep. To the human ear, sound has two specific characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound and describes a noisy or quiet environment; it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves, combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent noise-sensitive land uses.

**Measurement of Sound.** Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies.

Unlike linear units, such as inches or pounds, decibels are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 dB are 10 times more intense than 1 dB, 20 dB are 100 times more intense, and 30 dB are 1,000 times more intense. In other words, 30 dB represents 1,000 times as much acoustic energy as 1 dB. For reference, a sound as soft as human breathing is approximately 10 times greater than zero decibels. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. For example, a 10 dB increase in sound level is perceived by the human ear as a doubling of the loudness of the sound. Ambient sounds generally range from 30 A-weighted decibels (dBA) (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single-point source, sound levels decrease approximately 6 decibels for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases 4.5 dB for each doubling of distance from the noise source.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level ( $L_{eq}$ ) is the total sound energy of time-varying noise over a sample period. The predominant rating scales for human communities in California are the  $L_{eq}$  and community noise equivalent level (CNEL) or the day-night average level ( $L_{dn}$ ) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly  $L_{eq}$  for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours).  $L_{dn}$  is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and  $L_{dn}$  are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours. The City and County use the CNEL noise scale for long-term noise impact assessments.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level ( $L_{max}$ ), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by  $L_{max}$  for short-term noise impacts.  $L_{max}$  reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Another noise scale often used together with the  $L_{max}$  in noise ordinances for enforcement purposes is in terms of percentile noise levels. For example, the  $L_{10}$  noise level represents the noise level exceeded 10 percent of the time during a stated period. The  $L_{50}$  noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The  $L_{90}$  noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the  $L_{eq}$  and  $L_{50}$  are approximately the same.

**Psychological and Physiological Effects of Noise.** Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions and thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in less-developed areas. The Noise Impact Analysis (Table B, Common Sound Levels and their Noise Sources) provides a more detailed description of noise levels and their effects on humans.

**Vibration.** Vibration energy propagates from a source through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as motion of building surfaces, rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise. The rumble noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (rms) velocity or peak particle velocity (PPV). The rms is best for characterizing human response to building vibration and PPV is used to characterize potential for damage to structures. Ground vibrations from construction activities, including those within water bodies such as pile driving for pile installation, do not often reach the levels that can damage structures, but they can achieve the audible and feelable ranges in buildings very close to the site. Ground-borne vibration from construction sources, such as the pile installation in the Marina, is usually localized to areas within approximately 100 feet (ft) from the vibration source.

**Effects of Noise on Marine Mammals.** The National Marine Fisheries Service (NMFS) is in the process of developing guidelines for determining sound pressure level (SPL) thresholds for acoustic harassment to marine wildlife based on the best available science. In the interim, NMFS generally considers 180 and 190 dB root mean square (rms) as the level at which cetaceans and pinnipeds, respectively, could be subjected to Level A (injurious) harassment. Level B (behavioral) harassment has the potential to occur if marine mammals are exposed to pulsed sounds (e.g., impact pile driving) at or above 160 dB rms, but below injurious thresholds. These thresholds are considered conservative. Piling and construction activities that cause noise and vibration in the marine environment generally result in marine mammals leaving the area of disturbance. Most sound energy as a result of concrete and steel impact hammer pile driving is concentrated in the low sensitivity range of hearing frequencies for most marine mammal species, with most energy concentrated below 1 kilohertz (kHz) (JASCO 2006). See Section 4.7, Biological Resources, for further discussion of noise on marine mammals.

### **Sensitive Land Uses in the Project Vicinity**

Certain land uses are considered more sensitive to noise than others. Examples of these include residential uses, educational facilities, hospitals, childcare facilities, and senior housing. Residential, commercial, recreational, and hotel uses currently surround the project site. The residential uses adjacent to the project site, residents living on boats within the Marina and the Dana Point Marina Inn (approximately 200 ft from the closest pile-driving activities) are the closest noise-sensitive receptors in the vicinity of the project site that would potentially be adversely affected by noise from the project. As mentioned, the Marina allows people to live on boats docked within the Marina, although it is not a designated residential area. The existing boat residents are scattered throughout the Marina.

### **Overview of the Existing Noise Environment**

The primary existing sources of noise in the project area are vehicle activities in the Marina parking lots, boat noises, and vehicular traffic.

## **4.6.3 METHODOLOGY**

Evaluation of noise impacts associated with a proposed project typically includes the following:

- Determining the noise impacts associated with short-term construction of the proposed project on adjacent uses
- Determining the long-term noise impacts on off-site noise sensitive uses
- Determining the required Mitigation Measures to reduce short- and long-term noise impacts

## **4.6.4 THRESHOLDS OF SIGNIFICANCE**

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the following thresholds were used to assess the significance of potential noise impacts associated with the construction and operation of the proposed project. The project may be considered to have significant effects related to noise if implementation would result in one of more of the following:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

This noise impact analysis considered both the County and the City's noise standards, including their General Plan Noise Elements and Zoning Code standards, as thresholds against which potential project noise impacts were evaluated. As described in Section 4.6.5, the County and City have the

same noise standards for sensitive land uses and the same regulations regarding noise generated from construction activities.

## 4.6.5 REGULATORY SETTING

### County of Orange Noise Standards

**Noise Element of the General Plan and Municipal Code.** The Noise Element of the County of Orange General Plan and the Codified Ordinances of the County of Orange establish noise criteria to ensure that high noise levels do not adversely affect the quality of life of County residents. The noise criteria are based on land use compatibility. Table 4.6.A provides the County’s exterior and interior noise standards for sensitive land use areas. However, Section 4-6-7 of the County’s Noise Ordinance provides exemptions to the County’s noise standards for specific activities, such as construction. The Ordinance states that noise sources associated with construction, repair, remodeling, or grading of any real property are exempt from the noise standards if construction occurs between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays, but not during any time on Sundays or federal holidays.

**Table 4.6.A: County of Orange Noise Standards for Residential Land Uses**

Maximum Noise Level	Time Period
Exterior noise standards, L <sub>50</sub>	
50 dBA	10:00 p.m.–7:00 a.m.
55 dBA	7:00 a.m.–10:00 p.m.
Interior noise standards, L <sub>8</sub>	
45 dBA	10:00 p.m.–7:00 a.m.
55 dBA	7:00 a.m.–10:00 p.m.

Source: Codified Ordinances of the County of Orange, Sections 4-6-5 and 4-6-6.

dBA = a-weighted decibel

L<sub>8</sub> = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 8 percent of a stated time period.

L<sub>50</sub> = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 50 percent of a stated time period.

### City of Dana Point Noise Standards

**Noise Element of the General Plan and Municipal Code.** The Noise Element of the General Plan (July 1991) contains noise standards. The City specifies outdoor and indoor noise limits for residential uses, hotels/motels, commercial, and other land uses. The noise standard for exterior living areas is 65 dBA CNEL. The indoor noise standard is 45 dBA CNEL, which is consistent with the standard in the California Noise Insulation Standard.

In addition, the City has adopted a quantitative Noise Control Ordinance (Municipal Code, Chapter 11.10). The Ordinance establishes maximum permissible hourly noise levels ( $L_{50}$ ) for sensitive land uses in the City. Tables 4.6.B and 4.6.C list exterior and interior noise limits for residential uses.

**Table 4.6.B: Exterior Noise Limits for Residential Land Uses,  $L_n$  (dBA)**

Time Period	$L_{50}$	$L_{25}$	$L_8$	$L_2$	$L_{max}$
Night: 10:00 p.m.–7:00 a.m.	50	55	60	65	70
Day: 7:00 a.m.–10:00 p.m.	55	60	65	70	75

Source: City of Dana Point Municipal Code.

dBA = A-weighted decibel

$L_2$  = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 2 percent of a stated time period.

$L_8$  = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 8 percent of a stated time period.

$L_{25}$  = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 25 percent of a stated time period.

$L_{50}$  = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 50 percent of a stated time period.

$L_{max}$  = Maximum A-weighted noise levels that are measured during a designated time interval, using fast time averaging.

$L_n$  = percentile noise exceedance level

**Table 4.6.C: Maximum Interior Sound Levels for Residential Land Uses,  $L_n$  (dBA)**

Time Interval	$L_8$	$L_2$	$L_{max}$
Night: 10:00 p.m.–7:00 a.m.	45	50	55
Day: 7:00 a.m.–10:00 p.m.	55	60	65

Source: City of Dana Point Municipal Code.

dBA = A-weighted decibel

$L_2$  = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 2 percent of a stated time period.

$L_8$  = A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 8 percent of a stated time period.

$L_{max}$  = Maximum A-weighted noise levels that are measured during a designated time interval, using fast time averaging.

$L_n$  = percentile noise exceedance level

The City’s Noise Control Ordinance also governs the time of day that construction work can be conducted. Noise sources associated with construction, repair, remodeling, or grading of any real property are exempt from the noise standards listed in Tables 4.6.B and 4.6.C, provided the construction occurs between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays, but not during any time on Sundays or federal holidays.



#### 4.6.6 OVERVIEW OF PROGRAM FEIR NOISE ANALYSIS

**Impacts.** The Program FEIR concluded that grading and construction within the Revitalization Project area would result in temporary noise and/or vibration impacts on nearby noise-sensitive receptors. The Program FEIR concluded that although construction noise and vibration impacts would comply with Standard Conditions of Approval (SCA) and Mitigation Measures (MMs), impacts would be significant and unavoidable due to the duration of construction activities.

Operation of the Revitalization Project would increase vehicular activity along roadways within the Revitalization Project vicinity. The Program FEIR concluded that long-term mobile noise impacts would be less than significant for roadway segments under build-out traffic scenarios. The Program FEIR further concluded that operation of the Revitalization Project would generate on-site noise associated with commercial activities, which include loading and unloading activities, mechanical equipment operation, and activity in parking lots. The Program FEIR concluded that stationary source impacts would be reduced to less than significant levels with adherence to the County Zoning Code requirements relating to noise level standards.

Cumulatively, the Revitalization Project, along with other future development, could increase the ambient noise levels in the site vicinity. The Program FEIR concluded that these noise impacts would be significant and unavoidable.

PDFs, SCAs, and MMs identified in the Program FEIR and applicable to the Marina Improvement Project are listed below. During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

#### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

**SCA 4.9-1** Prior to approval of the project plans and specifications by the Director, OC Dana Point Harbor, or his designee, shall confirm that the plans and specifications stipulate that construction activities shall be limited to 7:00 a.m. to 8:00 p.m. on weekdays, including Saturdays, and no construction on Sundays and holidays. The County inspector will be responsible for ensuring that contractors comply with this measure during construction.

- SCA 4.9-2** Prior to the issuance of any Grading or Building Permits, OC Dana Point Harbor shall prepare or obtain an acoustical analysis report and appropriate plans which demonstrate that the noise levels generated by Harbor land uses during their operation shall be controlled in compliance with the Orange County Codified Ordinances, Division 6 (Noise Control). The report shall be prepared under the supervision of a County-certified acoustical consultant and shall describe the noise generation potential of the project during its operation and the noise Mitigation Measures, if needed, which shall be included in the plans and specifications for the project to assure compliance with Orange County Codified Ordinances, Division 6 (Noise Control). (LUP Policy 8.1.1-24)
- SCA 4.9-3** Prior to approval of project plans and specifications, the Director, OC Dana Point Harbor, shall confirm that the plans and specifications stipulate that stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors during construction activities. (LUP Policy 8.1.1-25)
- SCA 4.9-4** OC Dana Point Harbor shall confirm that grading and drainage plans are reviewed with a geotechnical report and that the plans include the following notes:
- a. All construction vehicles and equipment, fixed or mobile operated within 1,000 ft of a dwelling, shall be equipped with properly operating and maintained mufflers;
  - b. All operations shall comply with the County's Noise Ordinance; and
  - c. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings. (LUP Policy 8.1.1-32)
- MM 4.9-2** For projects within 1,000 ft of sensitive receptors, impact equipment (e.g., jack hammers, pile drivers, and rock drills) used for construction shall be hydraulically or electrical powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used.
- MM 4.9-3** For projects within 1,000 ft sensitive receptors, if feasible, sonic or vibratory pile drivers shall be used instead of impact pile drivers (sonic pile drivers are only effective in some soils) whenever possible. If sonic or vibratory pile drivers are not feasible, acoustical enclosures shall be provided as necessary to ensure that pile-driving noise does not exceed speech interference criterion at the closest sensitive receptor. Engine and pneumatic exhaust controls on pile drivers shall be required as necessary to ensure that exhaust noise from pile driver engines is minimized to the extent feasible. Where feasible, pile holes shall be pre-drilled to reduce potential noise and vibration impacts.

**Level of Significance after Mitigation.** Despite compliance with SCA and MMs, the Program EIR determined that the proposed project would result in significant and unavoidable impacts regarding exposure to construction noise and cumulative noise.

#### 4.6.7 IMPACTS AND MITIGATION MEASURES

##### Less Than Significant Impacts

**Long-Term Noise Impacts.** The proposed project includes replacement and improvements to existing Marina facilities. The project may result in a reduction in the total number of boat slips in the Marina; hence, the project is not expected to increase the number of vehicle trips on local roads or increase the number of boats using the Marina. The mix of sailboats and motor boats and the sizes and types of engines or motors utilizing the Marina facilities is determined by boating trends, not by OC DPH or the Marina operators. Projecting these boat characteristics to determine possible noise impacts is speculative and, as a result, they are not analyzed herein, in accordance with CEQA Guidelines Section 15145. The Program FEIR determined that noise impacts associated with boat slips are not anticipated to be significant. Therefore, the operation of the proposed project would not result in any long-term adverse noise impacts.

##### Potentially Significant Impacts

**Short-Term Construction-Related Noise Impacts.** Two types of short-term noise impacts would occur during project construction. The first is the increase in traffic volumes on local streets, associated with the transport of workers, equipment, and materials to and from the project site. The heavy equipment to be used during construction of the project will be moved to the site and will remain on site for the duration of each construction phase. The increase in traffic volumes on the surrounding roads due to construction traffic is expected to be small. However, there will be short-term intermittent high noise levels associated with construction-related trucks traveling to and from the project site.

The second type of short-term noise impact is related to the noise generated by heavy equipment operating in the project area. Construction of the proposed project will occur in multiple phases. Each phase of construction will consist of multiple tasks. The primary tasks will be: slip demolition and pile removal, pile installation, and slip installation. The construction equipment for the project will include backhoes, loaders, bobcats, tugboats, heavy-duty trucks, gas skiffs, cranes, generators, air compressors, drill rigs, barges, jackhammers, and pile drivers.

Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 4.6.D lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor.

**Table 4.6.D: Typical Construction Equipment Noise Levels**

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile drivers, 12,000 to 18,000 ft-lb/blow	81-96	93
Rock drills	83-99	96
Jackhammers	75-85	82
Pneumatic tools	78-88	85
Pumps	74-84	80
Scrapers	83-91	87
Haul trucks	83-94	88
Cranes	79-86	82
Portable generators	71-87	80
Rollers	75-82	80
Dozers	77-90	85
Tractors	77-82	80
Front-end loaders	77-90	86
Hydraulic backhoe	81-90	86
Hydraulic excavators	81-90	86
Graders	79-89	86
Air compressors	76-89	86
Trucks	81-87	86

Source: *Noise Impact Analysis* (LSA Associates, Inc., May 2008).

Pile driving will be the noisiest activity on site, generating up to 93 dBA  $L_{max}$  at a distance of 50 ft. Other construction equipment used on site, such as loaders and backhoes, would generate up to 86 dBA  $L_{max}$  at a distance of 50 ft.

The nearest sensitive receptors are the Dana Point Marina Inn, located approximately 200 ft from the project construction area, and the live-aboards who are in various locations throughout the Marinas. These sensitive receptors would be subjected to short-term noise reaching 87 dBA  $L_{max}$  generated by project construction activities. Construction-related noise impacts from the proposed project would be potentially adverse. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area but would no longer occur when project construction is complete. Implementation of Mitigation Measure 4.6.1 would reduce the volume of construction activity to sensitive receptors and would regulate the times that construction activity would occur. In addition, implementation of Mitigation Measure 4.6-2 would relocate the live-aboards to be moved as far as feasible from the construction activities to minimize construction-related nuisance impacts. Although adhering to local restrictions related to hours of construction would normally reduce construction-related noise impacts to a less than significant level, the length of construction for the proposed project is anticipated to be up to eight years; therefore, construction-related noise impacts are deemed to be significant and unavoidable due to the duration of construction activities. Implementation of Mitigation Measures 4.6.1 and 4.6.2, requiring that construction equipment and staging areas be moved as far away from sensitive receptors as feasible, would reduce, but not entirely mitigate, the construction-related noise impacts.

Piling and construction activities that cause noise and vibration in the marine environment generally result in marine mammals leaving the area of disturbance. Most sound energy as a result of concrete and steel impact hammer pile driving is concentrated in the low sensitivity range of hearing frequencies for most marine mammal species, with most energy concentrated below 1 kHz (JASCO 2006). Further, sound propagation of even very intense sounds is generally restricted to short distances in shallow bays and estuaries, such as Dana Point Harbor. This is due to sound scattering associated with environmental features present in bays such as shallow water, high turbidity, and soft substrate. Therefore, sounds from impact hammer pile driving in the Harbor waters are likely to attenuate to background noise levels at short distances from the construction activities.

Noise levels are expected to be below those identified as harassment during construction, and therefore an application to the NMFS for an Incidental Harassment Authorization under Section 101 of the Marine Mammal Protection Act will not be necessary. The sound intensity produced, and the potential level of impact on marine mammals for the Dana Point Harbor project, are considered less than significant, as further discussed in Section 4.7, Biological Resources. Further, to ensure that pile-driving activities remain less than significant, Mitigation Measure 4.7-6 (see SEIR Section 4.7), requiring slowly ramping up pile-driving activities (referred to as a “soft start”), has been proposed. Implementation of Mitigation Measure 4.7-6 will ensure that any potential pile-driving noise impacts on marine mammals will remain at a less than significant level.

**Short-Term Construction-Related Vibration Impacts.** The proposed pile driving for pile installation in the Marinas would generate the primary source of vibration during construction. The closest pile-driving activities to a sensitive receptor would be approximately 200 ft from the Dana Point Marina Inn, which is the closest land-based sensitive receptor. In addition, the existing live-aboard residents are located throughout the Marina.

Using Equation 9 and Table 17 from the Caltrans Transportation and Construction-Induced Vibration Guidance Manual (Jones & Stokes, June 2004) it was estimated that the vibration level at the Dana Point Marina Inn would be 0.08 inches per second (in/sec). Although perceptible, this level would not exceed the 0.1 in/sec threshold, below which there is virtually no risk of architectural damage to normal buildings. Therefore, the proposed project would not result in any significant vibration impacts to the Dana Point Marina Inn.

The live-aboards are also in proximity to the proposed construction activities; however, the boats would not be subject to ground-borne vibrations. In addition, implementation of Mitigation Measure 4.6-2 would relocate the live-aboards to be moved as far as feasible from the construction activities to minimize construction-related nuisance impacts. Therefore, with implementation of Mitigation Measure 4.6-2, the proposed project would not result in any significant adverse vibration impacts.

## Mitigation Measures

Implementation of the following mitigation measures would reduce the potential adverse project construction noise impacts to less than significant levels.

- 4.6-1** To reduce project construction noise impacts, OC Dana Point Harbor shall verify that construction hour limitations are noted on building and/or grading plans prior to issuance

of any construction or building permits. Construction shall be limited to the hours of 7:00 a.m. to 8:00 p.m., Monday through Saturday. In accordance with the County of Orange and City of Dana Point Noise Ordinances, no construction activities shall be conducted outside of these hours or on Sundays and federal holidays.

The following measures shall also be noted on building and/or grading plans and implemented to reduce potential construction noise impacts on nearby sensitive receptors:

1. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from the sensitive receptors nearest the construction areas.
2. The construction contractor shall locate equipment staging in areas farthest from noise-sensitive receptors nearest the project site during all project construction (refer to FEIR No. 591, Standard Conditions of Approval [SCA] 4.9-1 and 4.9-3).

**4.6-2** To reduce construction noise impacts throughout the phased construction activities of the proposed project, OC Dana Point Harbor shall coordinate with those residents living on boats within the Marina to relocate them to be moved as far as feasible from the construction activities to minimize construction-related noise nuisance impacts. In addition, OC Dana Point Harbor staff shall provide Marina boat residents with information regarding the availability of other nearby Marina facilities. Information regarding the timing and location of the construction activities shall also be made available on the Harbor website, by postings throughout the Marina, and other means as appropriate.

#### **4.6.8 CUMULATIVE IMPACTS**

Noise from construction of the proposed project and other nearby projects would be localized. Therefore, the cumulative study area for construction noise is the area immediately surrounding or between each particular project site. The only project in close proximity to the Marina Improvement Project that could potentially have cumulative noise impacts is the Dana Point Harbor Revitalization Commercial Core Project.

The Commercial Core Project associated with the Dana Point Harbor Revitalization Project could potentially be under construction at the same time as the Marina Improvement Project. That project has the potential to generate construction-related noise in the immediate area, which was considered cumulatively significant in the Program FEIR. Because construction noise for the Marina Improvement Project is also considered a significant adverse impact, the cumulative construction noise impacts for the proposed project, in conjunction with the Commercial Core Project, are considered cumulatively adverse and significant.

Ground-borne vibration impacts from equipment that would be used during Project construction are localized. The proposed project would not result in any significant vibration impacts; however, the Program FEIR concluded that vibration impacts on nearby noise-sensitive receptors would be significant and unavoidable due to the duration of construction activities. Therefore, if construction of the proposed project were to occur at the same time as construction of the Commercial Core Project, ground-borne vibration impacts would be cumulatively adverse and significant.

Long-term noise generated by on-site operations for the Marina Improvement Project would not change after implementation of the proposed project; the proposed project would not contribute to off-site cumulative noise impacts from other planned and future projects. Therefore, impacts related to operational noise would be less than cumulatively significant.

#### **4.6.9 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

Although implementation of Mitigation Measures 4.6-1 and 4.6-2 would help reduce project-related construction noise impacts, the length of construction for the proposed project is anticipated to be up to eight years; therefore, construction-related noise impacts are deemed to be significant, unavoidable, and adverse due to the duration of construction activities. In addition, if the Commercial Core Project is under construction at the same time as the Marina Improvement Project, cumulative construction-related noise and vibration impacts would be considered significant and adverse. All other potential project impacts related to long-term operational noise are considered less than significant.

## 4.7 BIOLOGICAL RESOURCES

This section provides a discussion of the existing marine biological resources in the Harbor and an analysis of potential impacts from implementation of the proposed project. This section also addresses the proposed impacts to marine biological resources with consideration of local, State, and federal regulations and policies; provides recommended mitigation measures pursuant to CEQA; and discusses resource agency permits and anticipated mitigation ratios/strategies required by the resource agencies.

The marine biological resources analysis in this section is based on the following project-specific technical reports, which have been included in Appendix F to this Subsequent Environmental Impact Report (SEIR):

- Dana Point Harbor Bird Survey, Keane Consulting, April 2007
- Marine Biological Resources Technical Appendix for the Dana Point Harbor Waterside Improvement SEIR, Coastal Resources Management, Inc., January 2008 (updated June 2010)
- Marine Biological Field Survey Results, February–March and October–November 2007 Surveys, Updated February–June 2010 Surveys, Dana Point Harbor Marina Improvement Project, Draft Subsequent Environmental Impact Report, Coastal Resources Management, Inc., June 2010
- Focused Survey Report for Eelgrass (*Zostera Marina*) and Invasive Algae (*Caulerpa Toxifolia* and *Undaria Pinnatifida*), February–March 2007 Surveys, Dana Point Harbor Marina Improvement Project, Coastal Resources Management, Inc., July 2007

In addition to the project-specific reports listed above, the analysis in this section incorporates findings from the following reports:

- Dana Point Harbor Revitalization Project, Final Program Environmental Impact Report No. 591, RBF Consulting, January 31, 2006
- Biological Resource Reconnaissance Survey Report, The Chambers Group, Inc., January 2004 (updated September 2005)
- Marine Oceanographic and Biological Assessment, MBC Applied Environmental Sciences, March 2003 (updated September 2005)



## 4.7.1 EXISTING SETTING

The Harbor, constructed between 1966 and 1970, is located on the lee (protected) side of Dana Point Headlands within Capistrano Bay. The Harbor is entirely manmade and is protected by a 1.7-mile (mi) long and 14–18 foot (ft) high federal breakwater.

The Harbor depths vary between approximately 21 ft Mean Lower Low Water<sup>1</sup> (MLLW) in the Entrance Channel and Main Channel to intertidal depths in the Turning Basin, where Baby Beach provides sandy intertidal habitat. Depths within the Marina Basins are generally between -8 and -12 ft MLLW.

### Physical Environment

**Unconsolidated Sediments.** Surficial sediments within the East and West Basins ranged between fine sands to extremely fine silts, although underlying sediments tend to be sandier. Sediments were coarsest in the West Basin near the OC Sailing and Events Center and on the south side of the bait barge along the base of the East Breakwater (the breakwater generally next to Doheny Beach and near the proposed temporary dock area). In each of these areas, sediment size decreased with depth.

**Hard Substrate.** Intertidal and subtidal rock quarry stone and smaller riprap is present in many areas of the Harbor and serves as protection for bulkheads and shorelines. The breakwaters and the south side of the East and West Island Marinas consist of larger quarry stone, whereas the riprap that protects the bulkheads of the Marinas in the vicinity of the OC Sailing and Events Center and the sport fishing dock consists of small-to moderate-sized riprap. Sloped cement quay walls occur around the perimeter of the Marinas and at the bridge abutments. These cement slopes were covered by a light to moderate layer of fine sediments.

Pilings and docks are attachment surfaces for plants and invertebrates. This community of organisms is commonly referred to as the “biofouling community.” These hard surfaces extend between the highest high tide line and the Harbor bottom depths, supporting intertidal and subtidal organisms. This habitat type is common throughout the Harbor.

Exposed natural reef is present within many areas of the Harbor, a remnant of the extensive reef habitat that was present prior to construction of the Harbor. Isolated rock habitat noted in the West Marina Basin included three single rock outcrops in the Island West Basin and one moderate relief rock outcrop in Cove West Basin. These outcrops were at depths between -8 and -10 ft MLLW. Other outcrops are likely present but not observed during the surveys. Outside of the Marina Basins, scattered low to medium relief reef outcrops and isolated boulders were located in the Turning Basin west of the OC Sailing and Events Center docks at depths between -3 and -8 ft MLLW; in the Main Channel and East Channel Area (Planning Area 11) at depths between -8 and -20 ft MLLW; in the East Channel seaward of the sport fishing docks; and in the area at the north end of the proposed temporary dock (north of the existing bait barge) at depths of -12 ft MLLW.

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<sup>1</sup> The United States National Oceanic and Atmospheric Administration uses mean lower low water (MLLW), which is the average of the lowest tide recorded at a tide station each day during the recording period. MLLW is generally located above the Lowest Astronomical Tide (LAT); therefore, some tidal states may have negative heights.

## Biological Environment

The Harbor intertidal habitats extend from the extreme low to extreme high water mark (-1.2 to +7.0 ft MLLW). The types of habitats in this zone include sandy intertidal, quarry stone (riprap), dock piles, and sloping cement bulkheads. Portions of or all of these shoreline types are exposed to both air and water during the tidal cycle. Habitats below the extreme low tide zone are “subtidal” and are never exposed. Project area subtidal habitats include unconsolidated, soft-bottom (sands and muds) habitats, which make up the majority of the Harbor’s benthic (bottom) environment, portions of docks, pilings, bulkheads, isolated reef outcrops, and the water column. These habitats support marine plants, invertebrates, fishes, and birds.

**Intertidal Sandy Beach.** Sand beach habitat is found in the West Turning Basin at Baby Beach. This sand beach is a low-energy environment that is affected primarily by wind waves and tidal action within the Harbor. The sediments consist of a combination of fine-grain sediments mixed with coarse-grained sand, imported to form and sustain the beach. The high intertidal portion of the County-maintained public beach supports few if any marine organisms because of infrequent tidal exposure and periodic cleaning and grooming. This higher elevation, however, provides resting habitat for seabirds (gulls and pelicans). The middle and low intertidal zones provide consistent tidal inundation and therefore support burrowing species of invertebrates (primarily clams, crustaceans, and polychaete worms). These organisms attract shorebirds to the beach that utilize the invertebrates as their food source. Core samples analyzed by Applied Ecological Research in 2000 included polychaete worms and snails; the algae *Enteromorpha* was found below the tide line along the beach.

**Subtidal Environments.** The benthic invertebrate community in the Harbor is made up of a complex of species that live on the sediment surface (epibenthic organisms) or in the soft-bottom sediments (infauna). Bottom-dwelling fish that either live in burrows (i.e., gobies), as well as species that are dependent on the bottom sediments for foraging (i.e., stingrays, sand bass, and halibut) are important members of the bottom community within bays and Harbors.

**Subtidal Soft-bottom Habitat.** Benthic surveys in the Harbor indicate that the infaunal community is dominated by small polychaete annelid and arthropod species, with fewer numbers of clams and nemerteans. These studies also suggest that the infaunal community makeup and composition is similar to Newport Harbor, Alamitos Bay, and Marina del Rey Harbor.

During benthic surveys conducted in 1994 and 1998, infaunal species composition and dominance was dominated by a similar group of species that included amphipods (*Grandidierella japonica* and *Corophium* sp.) and annelid worms (*Pseudopolydora paucibranchiata* and *Euchone limnicola*). High abundances at some stations of species tolerant of variable salinities, such as *P. paucibranchiata* and *G. japonica*, suggest that freshwater input from urban runoff may be considerable in some areas of the Harbor. Density of infaunal organisms in the Harbor in 1994 ranged from approximately 3,000 organisms per square meter (sq m) in sediments from the south side of the Harbor to almost 20,000 organisms per sq m near the storm drain at Baby Beach. During Southern California Bight-Wide regional benthic surveys conducted in 1998, infaunal density in the Harbor ranged from approximately 1,250 to nearly 7,000 organisms per sq m, with

the highest densities found in the Baby Beach area. As is typical in Southern California Harbors, species found during infauna sampling include both native and well-established introduced species.

A total of 87 taxa of marine plants, invertebrates, and fishes were observed during the rocky intertidal and subtidal field surveys. Marine plants contributed the highest number of taxa (33.3 percent of the total). Mollusks (octopus, snails, and clams) contributed the second highest number (20 percent of the total), followed by fish (11.5 percent), annelid worms (8.0 percent) and arthropods (5.7 percent).

**Soft-Bottom Epi-Benthos.** The soft-bottom epibenthic community in the Harbor during field surveys was species-poor. Eleven soft-bottom benthic algae and macro-invertebrate taxa were observed in the Marina Basins and other soft-bottom habitats in the Harbor. Sediments within the East and West Basins as well as other areas within and outside the Marina Basins were lightly coated with a layer of diatoms, and secondarily, spotty cover of the algae *Chaetomorpha aerea* and *Ulva intestinalis*. This was typical in areas of lower tidal current flows. Small beds and patches of eelgrass (*Zostera marina*) were observed in the shallow subtidal habitat offshore of Baby Beach encompassing 457 square feet of bottom habitat. No invasive algae (*Caulerpa taxifolia* or *Undaria pinnatifolia*) was present.

The most common occurring macro-invertebrate on soft sediments was the predatory snail *Navanax inermis*, which was ubiquitous throughout the Harbor soft-bottom habitats. The burrowing anemone *Pachycerianthus fimbriatus* was common within the West Marina; it was also found in many areas of both Marina Basins and in the Main Channel. The tube-building polychaete *Diopatra ornata* and the bubble snail *Haminoea vesicula* were observed where sediments were sandier in the East Channel near the southern section of the proposed East Breakwater temporary dock area. Notably, no marine invertebrates or algae were observed on the soft substrates within the Embarcadero docks or the Marine Services Basins.

**Rocky Intertidal and Subtidal Habitat (Pier Pilings, Rock Riprap, Cement Bulkheads, and Natural Reefs).** Artificial substrates (bulkheads, seawalls, docks, pilings, breakwaters and natural reef outcrops) in the Harbor provide surface area for sessile marine animals and plants and mobile macro invertebrates. The hardscape of these structures support mussels, barnacles, sponges, and other types of invertebrates and plants that constitute the “biofouling community,” many of which are invasive species. The undersides of boat floats and docks are commonly colonized by green algae, barnacles, mussels, limpets, polychaete worms, moss animals (ectoprocts), and sea squirts (tunicates). Bay fishes are attracted to the biofouling habitat because it a constant source of food.

Most plants and invertebrates during the survey were associated with Harbor artificial hardscape and natural reef (81 of 88 taxa). Of the various hard-bottom habitat types, 59 were associated with East and West Marina hard substrate, and 68 were present on hard substrate in the West Channel area (Planning Area 8) and East Channel on larger quarry stone and natural reefs. The most productive areas were reefs and quarry stone at the hardscape of the OC Sailing and Events Center reefs (40 taxa), Marina pilings (36 taxa), the hardscape of the East Breakwater quarry

stone and isolated reefs near the East Breakwater temporary dock (25 taxa), and the hardscape of the sport fishing dock bulkhead and riprap (25 taxa).

**Marina Basin Pilings.** A total of 36 taxa were observed on 14 piles scattered throughout the East Marina. While the cumulative number of taxa observed on pilings was 36 for all piles, the number of taxa on a single pile varied between 5 and 11. Species richness decreased with depth. The dominant organisms on the upper 3 ft of the pilings included a complex of green algae (*Ulva intestinalis*), a turf and filamentous red algae complex, brown algae (*Colpomenia perigrina*, *Dictyota flabellata*, and *Sargassum muticum*), hydroids (*Aglaophenia* sp.), serpulid polychaete worms, barnacles (*Balanus amphitrite* and *B. glandula*), and mussels (*Mytilus galloprovincialis*). The mid-depth piling community (-3 to -7 ft) was dominated by polychaete worms (serpulids and the calcareous tube-building *Dodecaceria fewksii*), mussels, solitary tunicates (*Styela plicata*), and ectoprocts (*Bugula neritina* and unid. encrusting ectoprocts). The bottom depth piling community (-7 to -10 ft MLLW) was dominated by tunicates, ectoprocts, and hydroids.

**Basin Quay Walls.** The sloping cement bulkhead around the perimeter of Cove East and West and Island East and West Basins (including the Harbor Patrol Basin) supported 18 species of algae and invertebrates. However, this habitat exhibited an extremely low percentage cover of sessile organisms and low abundances of mobile macro invertebrates. The most conspicuous species was the calcareous tube-building polychaete *Dodecaceria fewksii* that formed patchy, small colonies on the quay walls. Other common species included lined-shore crabs (*Pachygrapsus crassipes*), solitary ascidians, and scattered, juvenile mussels. A fine silt layer, approximately 1–2 centimeters (cm) deep, covered the substrate. Other than *Dodecaceria*, most of the flora and fauna were found in the depressions formed by the meeting of adjoining cement sections of quay wall.

**Bridge Abutments, Island Way.** Twelve taxa were represented on the north bridge abutment at depths between +3 to -10 ft MLLW. This site consisted of a species-poor assemblage of macrophytes and invertebrates due to a lack of sunlight and a coating of sediment over the concrete slope. Four macrophytes were observed: *Corallina pinnatifolia*, *Dictyota binghamiae*, *Dictyopteris undulata*, and *Colpomenia sinuosa*. The dominant invertebrates included acorn barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), bay mussels (*Mytilus edulis*), tunicates (*Styela plicata*), sponges (*Leucosolenia* sp.), and hydroids (*Aglaophenia* sp.); hydroids exhibited the highest cover.

**East Breakwater Quarry Stone and Isolated Reefs (East Basin Temporary Dock).** Hardscape areas (the breakwater and isolated reefs) in the area near the East Breakwater supported many plants and invertebrates in response to adequate tidal exchange and tidal currents, as well as suitable substrate. The East Breakwater provided the most extensive hard-bottom habitat. Common red macrophytes present in the low intertidal and shallow subtidal zone included articulated corallines (*Corallina chilensis*, *C. pinnatifolia*, *Amphiroa zonata*), and crustose algae (*Lithothamnion* spp., *Peyssonneliaceae/Hildenbrandiaceae*) and secondarily, *Ceramium/Polysiphonia* spp. and *Laurencia pacifica*. Several species of brown macrophytes were also

present: *Dictyota binghamiae*, *Dictyopteris undulata*, *Zonaria farlowii*, *Taonnia lennebackerae*, *Sargassum muticum*, *Halidryis dioica*, *Eisenia arborea*, and *Colpomenia sinuosa*.

The fauna included limpets (*Lottia limatula*, *L. scabra*, *Crepidula onyx*), barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), and trochiid snails (*Tegula eiseni*). The snails *Pteropurpura festiva* and *Acanthina spirata* were also present, but were not as common.

North of the bait barge, a few moderate relief (1.5–2 meters [m] high) rocky reefs were located. These reefs supported fewer macrophytes and macro-invertebrates than the subtidal fauna on the East Breakwater. Species that were observed included the red algae complex *Ceramium/Polysiphonia* spp. and *Rhodomenia californica*; brown macrophytes (*Sargassum muticum*, *Dictyopteris undulata*); slipper limpets (*Crepidula onyx*); and gorgonians (*Muricea fruticosa*).

A significant amount of trash was observed while surveying the East Breakwater biological communities. This debris was concentrated at the base of the breakwater lodged in the rocks as well as on the sediments at the base of the breakwater rocks.

**OC Sailing and Events Center Reefs and Riprap.** Riprap behind the docks and low relief natural reef in the Turning Basin in front of the OC Sailing and Events Center docks supported a large number of species: 40 taxa of plants and invertebrates similar in nature to those occurring in the Marina piling community and the quarry stone/natural reef habitats in the West Channel and Main Channel. Dominants included the southern sea palm algae (*Eisenia arborea*), the brown seaweed *Sargassum muticum*, coralline turf algae, and invertebrates such as sponges, colonial polychaete worms, lobsters (*Panilurus interruptus*), snails (*Kelletia kelletii*), limpets (*Lottia digitalis*), slipper limpets (*Crepidula onyx*), and mussels (*Mytilus galloprovincialis*).

On the south side of the OC Sailing and Events Center, riprap lined the cement bulkhead. The most commonly found red algal forms included articulated corallines (*Corallina pinnatifolia*, *Amphiroa zonata*), coarsely branched red algae (*Gelidium purpurascens*), and crustose corallines (*Lithothamnion* spp.); small, red turf algae (*Ceramium* and *Polysiphonia* spp.) was less common but present. The dominant brown macrophytes were *Dictyota binghamiae*, *Dictyopteris undulata*, and *Sargassum muticum*. Barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), lobster (*Panilurus interruptus*), slipper limpets (*Crepidula onyx*), and tunicates (*Styela plicata*) were the most common-occurring invertebrates.

**Sport Fishing Dock Riprap.** The variable-sized riprap in front of the sport fishing docks supported a moderately diverse community of intertidal and subtidal plants and invertebrates typical of both the inner Marina and the outer channels of the Harbor. The most common types of plants were filamentous red algal taxa, coralline turf algae, and macrophytes, particularly *Sargassum muticum* and *Dictyota flabellata*. The most conspicuous macro-invertebrates were limpets (*Collisella* and *Lottia* spp.), mussels (*Mytilus galloprovincialis*), sea fans (*Muricea californiensis* and *M. fruticosa*), lobsters (*Panilurus interruptus*), and colonies of the cup coral *Astrangia lajollensis*.

## Biological Species

**Plankton.** Plankton consists of algae (phytoplankton) and animals (zooplankton) small enough to be suspended in the water column and drift through tidal and oceanic currents. The phytoplankton community off the California coast primarily consists of diatoms, dinoflagellates, silicoflagellates, and coccolithophores, while the zooplankton are those animals that spend part (meroplankton) or all (holoplankton) of their life cycle as plankton. Fish eggs and larvae (ichthyoplankton) are an important component of the zooplankton community. With the exception of a few fish species (e.g., the embiotocidae or surfperches that bear live young), most fish that occur in Southern California are present as larvae or eggs in the plankton community. Plankton abundances and distributions are directly tied to water temperature, nutrients, upwelling, and current movements, and for zooplankton, the amount of phytoplankton food resources. The planktonic community in the Harbor is expected to be composed of the same types of organisms common to the nearshore coastal environment offshore of Dana Point since the plankton are drawn into the Harbor through tidal and wind-driven processes and there is not a significant estuarine influence in the Harbor.

**Fishes.** The types of fishes that commonly occur in protected Marinas and Harbors of Southern California are a combination of species that are associated with both soft-bottom habitat and hardscape of pilings, docks, cement bulkheads, and breakwaters.

**Soft-Bottom.** Few fishes were observed on or above the soft-bottom habitat during the dive and remote video surveys. Of the two species observed, only the round sting ray (*Urolophus halleri*) was common. Other unidentified flat fish were seen, but could not be identified. However, there are several other species of fish that occur in other bays and Harbors in Southern California that are likely to be present in the Harbor. These include gobies (*Clevelandia ios*) and flatfish (California halibut, *Paralichthys californicus*; diamond turbot, *Hypsopsetta guttulata*).

**Hard-Bottom.** Nine species of fish and one unidentified juvenile were observed in the vicinity of hard-bottom habitat during the dive and remote video surveys. The most common fishes observed included garibaldi (*Hypsypops rubicundus*), kelp bass (*Paralabrax clathratus*), opaleye (*Girella nigricans*), pile surfperch (*Damalichthys vacca*), blacksmith (*Chromis punctipinnus*), señorita (*Oxyjulis californica*), and kelpfish (*Heterostichus rostratus*). Most fish were seen in the vicinity of the OC Sailing and Events Center docks, the sport fishing docks, the West Channel, and East Breakwater proposed temporary dock area.

**Water-Column.** Water-column species such as topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), black surfperch (*Embiotoca jacksoni*), shiner surfperch (*Cymatogaster aggregata*), walleye surfperch (*Hyperprosopon argenteum*), white croaker (*Genyonemus lineatus*), queenfish (*Seriphus politus*) and white surfperch (*Phanerodon furcatus*) are also common within southern California marinas and may be expected to be present in Dana Point Harbor.

**Marine Mammals.** One of the most important areas of high concentrations of marine mammals in Southern California is the waters within a 10 mi radius between San Clemente and Dana Point. These

waters are known for high seasonal concentrations of common dolphin (*Delphinus delphis*) and the nearshore migratory pathway of California gray whales (*Eschrichtius robustus*), which was delisted as an endangered species in June 1994.

Several species of marine mammals inhabit the local waters. These include two pinnipeds (California sea lions [*Zalophus californicus*] and Harbor seals [*Phoca vitulina*]) and 12 species of cetaceans (whales). Four of the whales are baleen (filter-feeding) whales, and eight species are odontocetes (toothed whales). The California gray whale, bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), and Pacific white-sided dolphin (*Lagenorhynchus obliquidens*) are the most commonly occurring species in the waters offshore of the Harbor.

Whales and dolphins are uncommon visitors to Dana Point Harbor. Recently however, a young, emaciated, gray whale entangled in fishing gear swam into Dana Point Harbor and remained for a few days in mid-May 2010. The net was removed by a team of biologists, and the whale swam out of the harbor. It died offshore of Doheny Beach a few days later. California sea lions and Harbor seals are more frequently observed within the Harbor waters, with sea lions also hauling out on the breakwater. The Harbor is not considered a breeding habitat for pinnipeds but it is a secondary foraging area.

**Water-Associated Birds.** Shorebirds, waterfowl, and seabirds occur along the shoreline throughout the year, but concentrations are usually highest during the fall to spring period when seasonal migrants winter over along the Southern California shoreline. Common shorebirds include willet (*Catoptrophorus semipalmatus*), whimbrel (*Numenius phaeopus*), marbled godwit (*Limosa fedoa*), and sanderling (*Calidris alba*). The western grebe (*Aechmophorus occidentalis*), various species of cormorants (*Phalacrocorax* spp.) and surf scoter (*Melanitta perspicillata*) are among the water fowl that occupy the nearshore waters of the Harbor. Sea birds and larger marsh birds such as California brown pelican (*Pelecanus occidentalis*), terns (*Sterna* spp.), western and ring-billed gulls (*Larus occidentalis* and *L. delawarensis* *Larus* spp.), great blue herons (*Ardea herodias*), black-crowned night herons (*Nycticorax nycticorax*), and snowy egrets (*Egretta thula*) are expected to either occur in the waters and on the shoreline in the immediate area of Dana Point, or potentially within the Harbor as foraging and/or resting habitat.

Bird surveys conducted in March 2007 (Keane Biological Consulting, 2007) and March 2003 (MBC Applied Environmental Sciences in: RBF and MBC Applied Environmental Sciences, 2003) indicated that approximately one-half of the species observed were marine water-associated birds. Herons, egrets, and gulls, and pelicans were the most common species observed during both surveys. Other common water-associated bird species present included surf scoter (*Melanitta perspicillata*) and cormorants (*Phalacrocorax* spp). Although not observed, dabbling and wading ducks can also be found in the Harbor. During spring and summer, California least terns (*Sterna antillarum browni*), Forster's terns (*Sterna forsteri*), elegant terns (*Sterna elegans*), Caspian terns (*Sterna caspia*) and black skimmer (*Rynchops niger*) may be seen in local waters, including the Harbor.

**Breeding and Nesting Species of Water Birds in the Harbor.** Four bird species were identified as confirmed breeders in the Harbor area during the March 2007 bird survey (black-crowned night-heron, American crow, house finch, and house sparrow), with an additional 10 species considered likely to breed in the Harbor area (snowy egret, Anna's hummingbird, Allen's hummingbird, black

phoebe, barn swallow, bushtit, European starling, common yellowthroat, hooded oriole, and lesser goldfinch) An additional 10 species (great blue heron, rock pigeon, Nuttall's woodpecker, Cassin's kingbird, western scrub-jay, northern mockingbird, California towhee, common raven, orange-crowned warbler, Brewer's blackbird) could potentially nest in the harbor study area because this area lies within their ranges and potentially suitable nesting habitat exists there; however, the likelihood of nesting is considered to be less than 50 percent (Keane Biological Consulting 2007). Of all of these species, one water bird (black-crowned night heron) was observed nesting. Both snowy egrets and great blue herons were determined to be likely nesters near the Harbor.

### Sensitive Species

**Eelgrass (*Zostera Marina*).** Eelgrass is a marine-flowering plant that grows in soft sediments in coastal bays and estuaries and occasionally offshore to depths of 50 ft. Eelgrass canopy (consisting of shoots and leaves) enhances the abundance and the diversity of otherwise barren sediments. Many species of invertebrates (i.e., clams, crabs, and worms) live either on eelgrass or within the soft sediments that cover the root and rhizome mass system. Eelgrass is a nursery habitat for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass). They are also foraging centers for seabirds such as the endangered California least tern that seek out juvenile topsmelt that are attracted to the eelgrass cover. Lastly, eelgrass is an important contributor to the detrital (decaying organic) food web of bays as the decaying plant material is consumed by many benthic invertebrates (such as polychaete worms) and reduced to primary nutrients by bacteria.

Studies conducted between 2005 and 2010 have documented the expansion of an eelgrass bed seaward of Baby Beach in the western section of Dana Point Harbor. Most recently, small-to-large patches of eelgrass were located 160 to 412 feet west of the existing bulkhead at the OC Sailing and Event Center during surveys conducted by MBC Applied Environmental Sciences (2008 and 2009) and CRM (Coastal Resources Management, Inc. 2010) (Figure 4.7-1 Eelgrass Locations – OC Sailing and Event Center Docks).

Chambers Group, Inc. located a single, three-turion plant at the eastern end of Baby Beach in 2005 during surveys for the Dana Point Harbor Maintenance Dredging Project. MBC Applied Environmental Sciences conducted eelgrass and invasive algae surveys for the Dana Point Harbor Maintenance Dredging and Pipeline Corridor Project in August 2008. A total of 14.5 sq m of eelgrass was located seaward of Baby Beach in 2008, and 70 sq m of eelgrass were located seaward of Baby Beach in 2009. Eelgrass turion density ranged between approximately 48 to 56 turions per square meter during the February 2009 survey. None of the eelgrass was impacted by the County dredging project.

Coastal Resources Management, Inc. (2010) did not locate eelgrass within Dana Point Harbor during the February/March 2007 or the October/November 2007 reconnaissance surveys of Baby Beach. On June 8th, 2010, CRM updated the earlier Dana Point Harbor marine biological surveys in the vicinity of Baby Beach and the Sailing Center Docks along the eastern one-third of Baby Beach at depths between -3 and -12 ft MLLW. CRM reported the presence of 457.3 square feet (42.5 sq m) of eelgrass within the survey area at depths between -2.5 and -4.5 ft MLLW in a mixture of silt and scattered boulders. None of this eelgrass was reported by MBC during the 2008 and 2009 surveys. Eelgrass density was extremely low, ranging between 4 and 10 turions per square meter. In addition,



turion density was extremely low. These observations suggest that eelgrass recently expanded during the 2009–2010 growing season and will likely continue to increase in cover, and increase in density.

CRM could not relocate the eelgrass patch that MBC located in the Dry Boat Storage area docks during the 2010 survey. This location appeared to be located underneath jet ski platforms at the time of the survey.

**Surfgrass (*Phyllospadix* spp.).** Surfgrass is a sensitive marine resource that occurs in rocky shoreline and rocky subtidal habitats at depths to approximately 20 ft. Its sensitivity is related to its use by invertebrates and fishes as nursery habitat and its susceptibility to long-term damage because it is a very slow-growing species. Revegetation occurs very slowly through initial seeding and eventually through the spreading of roots and rhizomes over surfaces of rocks. Surfgrass is considered to be Essential Fish Habitat by the National Marine Fisheries Service (NMFS). Juvenile olive rockfish (*Sebastes serranoides*), which is a Fisheries Management Plan Groundfish species, utilizes surfgrass beds as nursery habitat. Surfgrass is also an extremely important nursery habitat for juvenile lobsters. Surfgrass is a dominant feature of the Dana Point Marine Life Refuge and Niguel State Marine Park intertidal and subtidal habitat. Its presence on the inside of the Harbor's breakwater or within the Marina is likely limited because of the lack of wave action and other related requirements. No surfgrass was observed within the Harbor project area during the 2007 field surveys.

### **Abalone.**

**Abalone (*Haliotis sorenseni*).** The white abalone is one of eight species of abalone that is known from California. Its listing as a federally endangered species in May 2001 is the result of a population reduction related to overfishing. White abalone is reported to be most abundant between 25–30 m (80–100 ft) depths, making it the deepest-occurring abalone species in California. The white abalone depth range is generally believed to be between 60–200 ft deep (18–60 m), with most occurring at depths greater than 75 ft on reef in exposed areas. However, white abalones have been verified at depths as shallow as 28 ft (8.5 m).<sup>1</sup> It is unlikely to occur anywhere in the Harbor because of a lack of suitable rocky habitat and depth.

**Black Abalone (*Haliotis cracherodii*).** In 1998, the NMFS added black abalone to the candidate species list for possible listing under the federal Endangered Species Act (ESA). Black abalones usually inhabit surf-battered rocks and crevices from the intertidal zone to shallow subtidal zone down to 20 ft (6 m). It is a long-lived species, attaining an age of 25 years or more. Now a rare species, the black abalone was abundant in California until the mid-1980s. This species is potentially present within the Dana Point Marine Life Refuge and on the outer side of the Harbor breakwater, but in highly reduced numbers. It does not occur within the Harbor.

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<sup>1</sup> Based on surveys conducted by Coastal Resources Management, Inc. in April and March 2002 in the vicinity of El Capitan State Beach, California

**Red Abalone (*Haliotis rufescens*).** Red abalone is listed as a species of special concern by the NMFS. In Southern California, it is exclusively subtidal, restricted to areas of upwelling along the mainland and the northwestern Channel Islands. It does not occur within the Harbor area.

**Green Abalone (*Haliotis fulgens*).** Green abalone is listed as a species of special concern by the NMFS. It prefers shallow water from the low tide zone down to 25 ft (8 m). Now rare, the green abalone was once a common species in Southern California. It does not occur within the Harbor area.

**Pink Abalone (*Haliotis corrugata*).** This NMFS species of special concern occurs at a depth range from the lower intertidal zone to almost 200 ft (60 m), but most are found from 20 to 80 ft (6 to 24 m). It has the broadest distribution of the Southern California abalones. In the early 1950s, pink abalone comprised the largest segment of the abalone fishery, approximately 75 percent. By the early 1980s, the commercial pink abalone fishery had expanded throughout its range, and the landings dwindled to virtually nothing. Surveys at San Clemente, Santa Catalina, and Santa Barbara Islands in 1996 and 1997 indicated that there were few abalone remaining. It does not occur within the Harbor area.

## **Fishes.**

**California Grunion (*Leuresthes tenuis*).** This fish species is not a formally listed species, but is considered sensitive because of its beach-spawning activity and potential impacts from beach disturbances such as beach cleaning and beach nourishment. It uses the high intertidal sandy beach habitat of many Southern California beaches as spawning habitat. Grunion lay their eggs in the wet beach sands during the highest spring tides between late February or early March to as late as early September. Dana Strands beach is a grunion-spawning habitat that has been used by grunion on a regular basis. Doheny (Capistrano Beach) is also a historical spawning ground for this particular species. It does not occur within the Harbor area.

**Steelhead Trout (*Onchorynchus mykiss*).** Steelhead trout are a federally endangered and State species of special concern. The steelhead trout is an anadromous sea-going rainbow trout that lives approximately 2–4 years of its life (but this period varies greatly) in the open ocean prior to returning to the stream where it was spawned. It is dependent on small, clear-flowing (but not rapid) streams with gravel beds to complete its spawning cycle. The area must also have protective cover and an adequate food source. Steelhead populations are declining because of impacts on habitat such as dams, turbidity, and other habitat incursions. A steelhead trout was caught in the Harbor as recently as December 30, 2002. However, it is unlikely that this species would naturally occur in the Harbor.

**Tidewater Goby (*Eucyclogobius newberryi*).** The tidewater goby is a federally listed endangered species that has been expatriated from many Southern California creek mouths. It is currently found in shallow marine areas and lower reaches of streams between San Diego northward to

Humboldt County waters, where salinity is less than 10 parts per thousand (ppt). Habitat conducive to tidewater gobies is absent from the Harbor.

**California Halibut (*Paralichthys californicus*).** Although it does not have a formal special status, the California halibut is considered a sensitive species by resource agencies because of its commercial value and a continued regionwide reduction of its nursery habitat in bays and wetlands. California halibut spawn at sea, and its larval stages are planktonic. After several months, larval fish settle to the bottom and migrate into shallow coastal waters. Young-of-the-Year fish (YOTY) prefer shallow waters between approximately -1.5 ft and -3.5 ft MLLW, whereas juveniles prefer deeper channel bottoms to a maximum depth of approximately -15 ft MLLW. After spending nearly nine months in coastal embayments, juveniles move out into the open coastal environment. The species uses inshore waters of bays, Harbors, and estuaries as a nursery habitat. Halibut may occasionally be found particularly in the outer channels of the Harbor, but are much more common in the open coastal environment. Their occurrence within the Harbor is rare.

## Reptiles.

**Sea Turtles.** Several species of federally listed threatened and endangered sea turtles could potentially occur in the nearshore open water habitats surrounding the Harbor. There are no known nesting beaches for these species in the United States, but they have been observed off the coast of Southern California (California State Lands Commission 1998). These include the endangered leatherback sea turtle (*Dermochelys coriacea*), the threatened green sea turtle (*Chelonia mydas*), loggerhead sea turtle (*Caretta caretta*), and olive ridley sea turtle (*Lepidochelys olivacea*). Sightings are extremely rare, and it is unlikely that they would be affected by project activities. The green sea turtle, federally listed as endangered, has been sighted offshore of the Harbor; however, the nearest place they are frequently seen is in and near the mouth of the San Gabriel River and Alamitos Bay. The presence of this species in the Harbor would be considered uncommon to rare, as it is more common in tropical and subtropical waters.

## Marine Mammals.

**California Gray Whale (*Eschrichtius robustus*).** Two distinct populations of gray whales occur in the North Pacific Ocean, a western stock and an eastern stock. The eastern stock occurs along the eastern Pacific coastline and is known as the California gray whale. In June 1994, the eastern Pacific population was removed from the Federal Endangered Species List, due to recovery of population numbers to near the estimated sustainable population size.

The California gray whale migrates through the Southern California Bight (SCB) twice each year, traveling between its feeding grounds in Alaska and its breeding grounds in Baja California. The southern migration through the SCB occurs from December through February, with pregnant females moving through the area first. The northward migration begins in February and lasts through May, peaking in March. Solitary animals generally lead the northbound migration with cow-calf pairs following 1 to 2 months later. Gray whales migrate within 125 mi (200 kilometers [km]) of the shoreline and many are sighted within 9 mi (15 km) of shore. On the northbound

migration, cow-calf pairs are believed to more closely follow the shoreline rather than the offshore route. Gray whales are observed commonly in the nearshore waters of the project area, but rarely do individual whales enter the Harbor. As stated above, an ailing gray whale entered the Harbor in May 2010; the whale eventually left the Harbor but died onshore at Doheny State Beach a few days later.

**Water-Associated Bird Species.** A bird survey focusing on nesting species was conducted by Keane Biological Consulting (2007). This section focuses on marine-associated sensitive species of birds, including observations from that survey, and a 2003 survey conducted by MBC Applied Environmental Sciences.

**California Gull (*Larus californicus*).** The California gull is a Species of Special Concern. It nests in alkali and freshwater lacustrine habitats east of the Sierra Nevada, and not locally. It is abundant in the project area during its nonbreeding season (August–March). This species would roost on the breakwater and docks of the Harbor during the nonbreeding season.

**Double-Crested Cormorant (*Phalacrocorax auritus*).** A Species of Special Concern, this species is vulnerable to reduced nesting success from persistent pesticides in the water. This species is the most widespread of all cormorants in North America, but in California, it is the least abundant of the various species of cormorants and uncommon in Southern California. In California, it nests offshore on rocks, islands, abandoned wharves, and power poles, and most of the breeding colony sites are in central to northern California. They can be found in nearshore waters and roost on the breakwater and docks of the Harbor. Cormorants are diving birds that catch and eat fish.

**California brown pelican (*Pelicanus occidentalis californicus*).** The California brown pelican is federally and State-listed as an endangered species. It is observed primarily in the open ocean and beaches but is also common in estuaries, tidal rivers, rocky coasts, breakwaters, and islands. Breeding locations along the west coast of California are limited to the Channel Islands. During the late 1960s and early 1970s, the brown pelican population suffered a widespread and dramatic decline linked to eggshell thinning due to dichloro-diphenyl-trichloroethane (DDT), first noted in 1962, which resulted in listing the subspecies as endangered. The population is now recovering well. Brown pelicans do not breed on the mainland but are frequent inhabitants of Southern California estuaries and Harbors. The Harbor breakwater provides roosting habitat for pelicans, and the Dana Wharf region and bait barge attract large numbers of pelicans. However, no nesting habitat for pelicans is present on the California mainland or in the Harbor.

**California least tern (*Sterna antillarum browni*).** The California least tern is federally and State-listed as endangered. A migratory species, it nests from April through August along the coast of California from San Francisco south to Baja California. It presumably winters in Central America or northern South America, although the specific location of its wintering range is unknown. In 2006, the California least tern breeding population was estimated at over 7,000 pairs, more than a tenfold increase from estimated numbers when it was listed in the early 1970s. Least terns breed on sparsely

vegetated sandy beaches, salt flats, and dredge spoil in colonies of a few to several hundred nesting pairs. This species relies on sight for foraging and usually requires relatively clear water to locate its preferred baitfish food sources, northern anchovy (*Engraulis mordax*), topsmelt (*Atherinops affinis*), and jacksmelt (*Atherinopsis californicus*). There is some field evidence to suggest that least terns would forage in turbid waters to which fish are attracted. The majority of foraging occurs in open ocean. California least terns are expected to forage occasionally among the docks of the project site, particularly during years when offshore prey (small baitfish) is limited in availability.

There are no nesting sites in the Harbor or the immediate vicinity of the Harbor. The nearest nesting site is located approximately 20 mi south of the Harbor at Red Beach on Camp Pendleton Marine Corps Base. In 2006, there were 27 least tern nests with 16 fledglings. The nearest breeding site to the northwest of Dana Point is in Upper Newport Bay. In 2006, only 18 of 61 eggs (36 nests) hatched, and only 2 of those chicks survived to fledging. In 2007 to date, there have been 35 nests built, but hatching success appears to be much higher than in 2006, with a minimum of approximately 20 fledglings. Other nesting sites for this species are located at the Santa Ana River mouth, Bolsa Chica, and in the Port of Los Angeles.

**Western Snowy Plover (*Charadrius alexandrinus nivosus*).** The western snowy plover is a federally and State-listed threatened shorebird that nests on sand spits, dune-backed beaches, river/creek mouth beaches, and on salt pans in lagoons and estuaries. Its current breeding range extends between southern Washington to Baja California. Breeding occurs from early March to late September. Individuals of the wintering population can be expected to be present along south Orange County beaches and forage along the shoreline between November and February.

Small numbers of migrant or wintering snowy plovers are occasionally reported from the nearby San Mateo Creek area, but no nesting has been documented at the Harbor. Their occurrence in the Harbor is limited by the small amount of available sandy beach and mudflat. Snowy plovers prefer the same type of nesting habitat as least terns, so little potential exists for them to nest at the beaches of the Harbor.

**Great Blue Heron.** The great blue heron has no listing status, and although it is a common wading bird in Southern California estuaries, its nesting sites in California are uncommon. It is one of the most widespread and adaptable wading birds in North America. The range of the great blue heron extends from Southeast Alaska and north British Columbia to south Quebec and south to Florida, Texas, Baja California, and Central America, at least to Belize and Guatemala. Along the Pacific coast, its range extends from southeast Alaska to Mexico, and they are known to be common in coastal California. They can be found in shallow estuary systems and fresh and saline emergent wetlands all year throughout most of the State. Great blue herons usually arrive on breeding grounds by early February. Courtship and nest-building begin shortly thereafter, and eggs are laid in late February or March. They usually nest in colonies, sometimes with five or more pairs, but often with fewer. This species is sensitive to human disturbances and probably to pesticides and herbicides in nesting and foraging areas. Great blue herons have been observed to nest in and near the Harbor area.

## Sensitive Habitats

**Reef Habitat.** Subtidal reefs are considered Essential Fish Habitat for groundfish species. Kelp forests associated with reefs provide protection and cover for many marine invertebrates and fishes. Kelp (*Macrocystis pyrifera*) grows on rock and cobble habitat offshore of the Harbor (outside of the project area) northwest through Corona del Mar at depths between 20 and 45 ft. California Department of Fish and Game (CDFG) Kelp Bed No. 9 extends between Emerald Bay and the Harbor. Kelp canopy has historically persisted in two regions of Orange County; between Heisler Park and Cactus Point in Laguna Beach and between Mussel Cove (South Laguna) and Dana Point, including the waters offshore of Dana Strand and the Dana Headlands. Kelp beds located between the Harbor breakwater and San Mateo Creek are located at distances between approximately 1,600 and 5,000 ft from shore and are identified as CDFG Kelp Bed No. 8.

**Giant Kelp.** Kelp grows on the western breakwater of the Harbor, the hard substrate of the South East Regional Reclamation Authority (SERRA) outfall downcoast of the Harbor at depths less than 40 ft, intermittently for approximately 1 mi south of the outfall on low relief cobble and boulder, and immediately downcoast of Capistrano Beach County Park at distances between 600 and 1,500 ft offshore. Inshore kelp beds are patchy and not always present due to their shallow nature and greater susceptibility to damage from storms. Hard-bottom features and kelp beds are more common farther offshore at depths between 40 and 55 ft between Doheny Beach Marine Life Refuge and San Mateo Point. Inside the Harbor, giant kelp is very sparse.

## Protected Marine Areas

The 1999 Marine Life Protection Act (MLPA) mandated that the State of California design and manage an improved network of marine protected areas (MPAs) to protect marine life and habitats, marine ecosystems, and marine natural heritage. Marine protected areas include marine reserves, marine parks and marine conservation areas. Upcoast and outside of the Harbor, intertidal and subtidal habitats currently receive local and State environmental protection status as part of *Niguel State Marine Conservation Area* and the *Dana Point State Marine Conservation Area* located at the base of the Headlands.<sup>1</sup> The Niguel State Marine Park boundaries extend 1,200 ft offshore and 2.1 mi along the shoreline. It encompasses an area of 315.2 acres (ac). Dana Strands Beach and the waters offshore of the beach are located within the boundaries of this State Marine Conservation Area. The Dana Point State Marine Conservation Area boundaries extend 0.7 mi offshore and 1,200 ft of shoreline between the headlands and the Harbor. This covers an area of 124.8 ac.

Downcoast of the Harbor, Doheny Beach State Marine Conservation Area is also an underwater park. This area overlaps with the Doheny Beach State Marine Park. The Marine Park extends 600 ft offshore, whereas the State Marine Conservation Area extends 1,500 ft offshore. Most of the shoreline is sandy habitat, although there is some rocky intertidal habitat at the northern edge of the Marine Park. Offshore, the seafloor is a mixture of both sand bottom and low-to-high relief reef. Lagoon wetland habitat is located at the mouth of San Juan Creek. The County of Orange-maintained Capistrano Beach County Park is located at the southern end of Doheny Beach State Marine Park.

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<sup>1</sup> A map indicating the location of these protected marine areas is included in Appendix F to this SEIR.

## Proposed Protected Marine Areas

Intertidal and subtidal habitats that were previously listed as State of California Marine Ecological Reserves and Marine Life Refuge have been reclassified. This re-classification was the result of a state-wide simplification of existing state-protected areas into six classifications, and replaced 18 classifications that were previously used to categorize state Marine Managed Areas (MMAs). Marine Protected Areas (MPAs) are a subset of MMAs and include conservation areas, marine reserves, state marine parks, and state marine conservation areas. The MLPA requires that the Department of Fish and Game (Department) prepare and present to the Fish and Game Commission (Commission) a master plan that will guide the adoption and implementation of a Marine Life Protection Program, which includes a statewide network of MPAs.

On April 13, 2007, the California Fish and Game Commission (CFGC) adopted regulations to create a new suite of MPAs designed for the Central Coast of California, the first region considered for the State. This move effectively launched the state's Marine Life Protection Act (MLPA) Program. Southern California MPAs (Point Conception to the Mexican Border) and Northern California MPAs are currently undergoing reviews.

For Southern California, a MPA proposal was unanimously adopted on November 10, 2009 by the MLPA Blue Ribbon Task Force (BRTF) as the MLPA South Coast Integrated Preferred Alternative (IPA) MPA Proposal to be recommended to the CFGC. The IPA recommends 50 MPAs in state waters in the MLPA South Coast Study Region, which extends from Point Conception in Santa Barbara County to the California/Mexico border in San Diego County.

The proposed MPAs in the vicinity of Dana Point Harbor include the Crystal Cove State Marine Conservation Area, the Laguna Marine Life Reserve, and the Dana Point State Marine Conservation Area.

## Fishery Management Plan Species

The proposed project area is located in an area designated as Essential Fish Habitat (ESH) in the Coastal Pelagics Fishery Management Plan (FMP) and the Pacific Groundfish FMP. The Coastal Pelagics FMP includes four finfish (Pacific sardine, chub mackerel, northern anchovy, and jack mackerel) as well as market squid. The Pacific Groundfish FMP includes 83 species, many of which are rockfish.

**Coastal Pelagic FMP.** Coastal Pelagic FMP species that are likely to be present within and outside of the Harbor include northern anchovy (*Engraulis mordax*) and Pacific sardine. Outside the Harbor, jack mackerel and chub mackerel are known to occur; these, however, would only be present within the Harbor on rare occasions. Of these species, the northern anchovy is the most likely species to be within the Harbor area.

The northern anchovy central subpopulation ranges from approximately San Francisco, California, to Punta Baja, Baja California. The bulk of the central subpopulation is located in the SCB, a 20,000

square-nautical-mile area bounded by Point Conception in the north and Point Descanso, Mexico (approximately 40 mi south of the United States-Mexico border) in the south. Northern anchovy in the central subpopulation are typically found in waters that range from 12° Centigrade (°C) [56.3° Fahrenheit (°F)] to 21.5°C (70.7°F). All life stages are found in the surface waters of the Exclusive Economic Zones<sup>1</sup> (EEZ). Eggs and larvae are found near the surface, generally at depths of less than 50 m and in the same areas as spawning adults. Anchovy eggs are most abundant at approximately 14°C (57.2°F).

Northern anchovy comprise a significant portion of nearshore otter trawl catches, contribute moderately to the nearshore fish biomass of the nearshore area of San Pedro Bay, and account for approximately 80 percent of all fish caught within 3 km of the coast in the SCB. Along the coast of northern Orange County and Long Beach to Los Angeles Harbors, this species ranked highest in abundance during 6 of the 11 monitoring surveys between 1972 and 1997 offshore of the San Gabriel River and was never ranked lower than the 5th most abundant species. The northern anchovy is also the most abundant species in Los Angeles Harbor, representing over 80 percent of the fish caught, and larvae of the species are also a common component of the ichthyoplankton. In Los Angeles Harbor, northern anchovy appear to prefer deeper waters of the Harbor. There is a commercial bait fishery for northern anchovy offshore of the Harbor, and a commercial bait barge is located within the Harbor. Larvae of northern anchovy are also part of the Dana Point ichthyofauna and ichthyoplankton community.

**Pacific Groundfish FMP.** The Pacific Groundfish FMP species that are likely present within the Harbor or immediately outside the Harbor rocky habitats include the California scorpion fish (*Scorpaena guttata*) that is associated with rocky habitats on the breakwaters, and potentially, juvenile olive rockfish (*Sebastes serranoides*). While both may be associated with rocky habitats along the breakwaters and to a lesser extent the quarry stone lining the Island Marina shoreline in the outer Main Channel of the Harbor, populations of these species are expected to be low.

California scorpion fish are benthic and found intertidally as deep as 183 m (600 ft). They are commonly found in both sandy and rocky areas in association with rocky reefs, often lodged in crevices. Although it is commonly a solitary species, it aggregates near prominent features and can be associated with anthropogenic features, including pipes and wrecks. Juveniles settle on the rocky bottom. Very young scorpion fish live in shallow water hidden away in habitats with dense algae and bottom-encrusting organisms. The Dana Point breakwaters and the quarry stone protecting the Marinas are likely habitat for this species.

Olive rockfish occurs from surface/intertidal waters to 174 m (571 ft) deep, but most commonly it occurs in waters less than 30 m (98 ft). Adult olive rockfish are a midwater fish, almost always lining over hard, high relief (such as reefs, wrecks, oil platforms or pipes). The YOTY and adults are primarily found hovering off the bottom. Sometimes olive rockfish are observed well off the bottom, in or near kelp or over rocky reefs. Olive rockfish prefer clear-water areas of dense kelp and are rarely caught or seen over sandy substrate. Olive rockfish distribution is fairly even over all rocky substrata, although significant selection is exhibited toward low rock substratum. The larval stage of olive

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<sup>1</sup> Seazone over which a state has special rights over the exploration and use of marine resources. It stretches from the seaward edge of the state's territorial sea out to 200 nautical miles from its coast.



rockfish is planktonic. When YOTY olive rockfish settle out of the plankton, they are most commonly found in and around kelp beds, oil platforms, surfgrass, and other structures at depths as shallow as 3 m (9.8 ft). Young olive rockfish also are found under drifting kelp mats. In Los Angeles Harbor, olive rockfish have been found largely as juveniles associated with the kelp growing along the inner edge of the federal breakwater. The inside and edges of the Dana Point Harbor breakwaters are likely habitat for this species.

### **Habitats of Particular Concern**

Eelgrass (*Zostera marina*) is identified as a Habitat Area of Particular Concern (HAPC) for ESH groundfish species. Eelgrass meadows form a basis of primary production that supports ecologically and economically important species. Eelgrass is an important habitat for invertebrates which use eelgrass beds as a source of food and attachment. Marine fishes seek the shelter of the beds for protection, and forage on invertebrates that colonize the eelgrass blades and sediments in and around eelgrass vegetation. The vegetation also serves a nursery function for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass) and federal FMP groundfish species (i.e., lingcod (*Ophiodon elongatus*), and Bocaccio rockfish (*Sebastes paucispinis*)).

As discussed above, eelgrass is found in Dana Point Harbor, although it is not abundant and its density is low. Its distribution is primarily limited to the region near Baby Beach. A single patch was also located in the boat basin north of the launch ramp in 2009 (MBC Applied) but it was not relocated during CRM project surveys conducted in 2010.

***Zostera japonica.*** *Zostera japonica* is a dwarf eelgrass native to Asia and threatens to upset the natural balance of California's wetlands. It has been found in Humboldt Bay but has not been found in Dana Point Harbor. This species of eelgrass does not grow in Dana Point Harbor and will not be impacted during construction or operational activities associated with the proposed project.

### **Invasive Algae**

***Caulerpa Taxifolia.*** *Caulerpa* has a potential to cause ecosystem-level impacts on California's bays and nearshore systems due to its extreme ability to outcompete other algae and seagrasses. *Caulerpa taxifolia* grows as a dense smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a nonnative marine habitat. Fish, invertebrates, marine mammals, and sea birds that are dependent on native marine vegetation are displaced or die off from the areas where they once thrived. It is a tropical-subtropical species that is used in aquariums and was introduced into Southern California in 2000 (Agua Hedionda Lagoon and Huntington Harbour) by way of individuals likely dumping their aquaria waters into storm drains or directly into the lagoons. While outbreaks have been contained, the State Water Resources Control Board (SWRCB), through the NMFS and the CDFG, requires that projects that have the potential to spread this species through dredging, and bottom-disturbing activities conduct preconstruction surveys to determine whether this species is present using standard agency-approved protocols and by NMFS/CDFG Certified Field Surveyors.

*Caulerpa* was not observed during focused surveys conducted within the regions proposed for waterside improvements. CRM surveyed 6.88 ac of a potential 29 ac of bottom habitat and inspected dock piles and floats. The amount of habitat covered during the survey averaged 23.4 percent, ranging from 13.9 percent in the East and West Marina Basins to over 100 percent coverage at the OC Sailing and Events Center and the Harbor Patrol Basin. Diver-specific surveys in the vicinity of Baby Beach covered between 58 and 65 percent of the total bottom habitat; this effort reflected a concentrated survey effort in a region where there was a greater probability of locating either eelgrass or *Caulerpa*, since a few patches of eelgrass were located there in April 2005 and February 2009. However, *Caulerpa* was not present in the Harbor during previous surveys (Chambers Group, Inc., 2005, 2006 and MBC Applied Environmental Sciences, 2009).

***Undaria Pinnatifida.*** *Undaria pinnatifida* is a golden brown kelp native to the Japan Sea. It has been introduced in Australia, New Zealand, and Europe and has now spread to the California coastline. It has been found in Santa Barbara Harbor, Long Beach Harbor, Anaheim Bay, San Diego Bay, and offshore of Catalina Island. In Japan it is known as wakame and is extensively cultivated as a fresh and dried food plant. However, it has the potential to become a major pest in our coastal waters. *Undaria* grows to between 3–7 ft (1–2 m) tall and is found in sheltered Harbor waters on rocks, breakwaters, and marine debris from the low-tide mark to 50 ft (15 m). A mature plant has a distinctive, spiraled (frilly), spore-producing structure at its base. It also has an obvious central stem to 4 inches (in) (10 cm) wide that extends for the length of the plant. The blade may be up to 3.1 ft (1 m) wide and extends from the tip of the plant for half the length of the plant.

*Undaria* was not observed during dive surveys or remote video surveys in the Harbor between February 2007 and June 2010.

## 4.7.2 REGULATORY SETTING

### United States Army Corps of Engineers

**Section 404 of the Clean Water Act.** Pursuant to Section 404 of the Clean Water Act (CWA), the United States Army Corps of Engineers (Corps) regulates the discharge of dredged and/or fill material into waters of the United States (U.S.). The term “waters of the U.S.” is defined at 33 CFR Part 328 and includes (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above. Wetlands are defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.”

**Section 10 of the Rivers and Harbors Act.** Section 10 of the Rivers and Harbors Act requires authorization from the Corps for the creation of any obstruction to the navigable capacity of any of the waters of the United States. Corps approval is necessary to build or commence the building of any

wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, Harbor, canal, navigable river, or other water of the U.S. In addition, Corps approval is necessary to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of any port, roadstead, haven, Harbor, canal, lake, Harbor of refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the U.S.

### **United States Fish and Wildlife Service (USFWS)**

Pursuant to Section 7 of the ESA, any federal agency undertaking a federal action (including issuance of permits) that may affect a species listed as threatened or endangered under the ESA must consult with USFWS. Pursuant to Section 9 of the ESA, the “take” of a species listed as threatened or endangered is prohibited.

### **National Marine Fisheries Service**

The National Oceanic and Atmospheric Administration Marine Fisheries Services (NOAA Fisheries) receives its ocean stewardship responsibilities under many federal laws, including the Magnuson Stevens Fishery Conservation and Management Act. Most important are the ESA, which protects species determined to be threatened or endangered; the Marine Mammal Protection Act (MMPA), which regulates interactions with marine mammals; the Lacey Act, which prohibits fish or wildlife transactions and activities that violate State, federal, Native American tribal, or foreign laws; the Fish and Wildlife Coordination Act, which authorizes NOAA Fisheries to collect fisheries data on environmental decisions that affect living marine resources; and the federal Power Act, which allows NOAA Fisheries to minimize effects of dam operations on anadromous fish, such as prescribing fish passageways that bypass dams. Many other statutes, international conventions, and treaties also guide NOAA Fisheries activities.

### **California Department of Fish and Game**

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFG defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Thus, CDFG jurisdictional limits closely mirror those of the Corps. Exceptions are CDFG’s exclusion of wetlands that are not associated with a river, stream, or lake; addition of artificial stock ponds and irrigation ditches constructed on uplands; and addition of riparian habitat supported by a river, stream, or lake, regardless of the riparian area’s federal wetland status.

### **California Coastal Commission (CCC)**

The California Coastal Act (Coastal Act) (California Public Resources Code Division 20, Section 30240) restricts land uses within or adjacent to environmentally sensitive habitat areas (ESHAs). The Coastal Act Section 30107.5 defines an ESHA as:

*... any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Included within this definition are wetlands, estuaries, streams, riparian habitats, lakes, and portions of open coastal waters that meet the rare or valuable habitat criteria. The CCC regulates the diking, filling, and dredging of wetlands within the Coastal Zone. The Coastal Act Section 30121 defines "wetlands" as land "*which may be covered periodically or permanently with shallow water.*" The Harbor and any proposed changes to the waterside facilities are regulated and reviewed by the CCC.

### **Regional Water Quality Control Board (RWQCB)**

Waters subject to the provisions of Section 404 of the CWA also require Water Quality Certification from the RWQCB pursuant to Section 401 of the CWA. Waters that do not fall under the jurisdiction of the RWQCB pursuant to Section 401 of the CWA may require authorization through application for waste discharge requirements (WDRs) or through waiver of WDRs, pursuant to the Porter-Cologne Water Quality Control Act (California Water Code, Division 7).

### **4.7.3 METHODOLOGY**

The potential impacts listed below were analyzed using results from project-specific marine biological assessments, field surveys, and previous biological assessments prepared for the Harbor Program EIR, as described above.

### **4.7.4 THRESHOLDS OF SIGNIFICANCE**

The impact significance criteria used for this analysis are based primarily on Appendix G of the State CEQA Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The project may be considered to have a significant effect related to biological resources if implementation would result in one or more of the following;

- Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.
- Substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan.

#### **4.7.5 OVERVIEW OF PROGRAM FEIR BIOLOGICAL RESOURCES ANALYSIS**

**Impacts.** The Program FEIR concluded that the Revitalization Project would impact species identified as special-status and marine biological resources. Program FEIR analysis concluded that these impacts would be less than significant with implementation of Project Design Features (PDF), Standard Conditions of Approval (SCA), and Mitigation Measures (MM). The Program FEIR further concluded that no riparian or wetland habitat exists within the Harbor or off-site areas, and therefore, the Revitalization Project would not result in impacts to riparian or wetland habitat. Cumulatively, the Revitalization Project along with other future development would not result in significant cumulative biological impacts. PDFs, SCA, and MM identified in the Program FEIR and applicable to the Marina Improvement Project are listed below. It should be noted that the conditions of MM 4.7-5, as included below, have been satisfied with the marine biological surveys conducted for the Marina Improvement Project.

During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

#### **Project Design Features (PDF), Standard Conditions (SCA), and Mitigation Measures (MM)**

**MM 4.7-2** If an active nest of any bird species listed pursuant to the federal or California Endangered Species Act, California bird species of special concern or a wading bird (heron or egrets) as well as owls or raptors is found, construction activities within 300 feet (500 feet from any identified raptor nest) shall not exceed noise levels of 65 dB peak until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Surveys for the above bird species during their breeding season shall be conducted by a qualified biologist prior to commencement of construction. (LUP Policy 7.1.2-4)

**MM 4.7-3** The following measures shall be utilized to protect nesting habitat of the raptors (red tailed hawk, Cooper's hawk, osprey, etc):

- If work is scheduled to be performed during the breeding season of any raptor (February 1 through August 15), a preconstruction survey within 500 ft of the site for raptor nests shall be performed by a qualified biologist to document the presence/absence of all nesting raptors; and

- If active raptor nests are found, a buffer of 500 ft in diameter should be established around the nest and no construction activity shall occur within that buffer until the young have fledged.

**MM 4.7-4** In order to minimize indirect impacts on biological resources that may be related to noise and construction activity, the OC Dana Point Harbor shall implement the following Best Management Practices (BMPs) prior to or during construction activities.

- Limit construction and all project activities to a well-defined area; and
- Construction limits shall be fenced or flagged adjacent to preserved trees and/or sensitive habitats to avoid direct impacts.

**MM 4.7-5** Future waterside improvements to the east and west of the breakwaters (Planning Areas 8, 11 & 12) shall be reconstructed within the seaward footprint of the existing structures except as necessary to provide for public safety or public access. Construction activities taking place below the mean higher high water (MHHW) mark shall prepare a focused marine biological survey to determine if sensitive species are present. (LUP Policy 7.2.1-15)

**MM 4.7-6** OC Dana Point Harbor shall require that standard BMPs be utilized in order to ensure impacts to water quality or the marine environment are minimized and include:

- Erosion to be controlled by landscaping (leave existing vegetation in place where possible), paving and drainage structures;
- Perimeter barriers, such as berms or sand bags around all construction sites to catch run-off;
- Tracking controls, such as rumble strips and gravel strips will be used to minimize dirt being tracked into and out of the project site;
- Harbor basin inlets shall be protected by placing sediment barriers, such as wire mesh and gravel filter to intercept debris and soil runoff; and
- Appropriate housekeeping activities to minimize the potential for pollutants from material storage or construction activities. (LUP Policy 7.2.1-16)

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Biological Resources were identified in the Program FEIR.

#### **4.7.6 IMPACTS AND MITIGATION**

The following analysis is based on the Marine Biological Surveys conducted by CRM for the proposed project. These technical reports, included as in Appendix F, assumed a loss of 116 slips for the Marina Improvement Project. The calculated amounts of square foot coverage associated with the

docks and piles are therefore based on a slip loss of 116. However, as described throughout this SEIR, changes to the Harbor LUP certified by the CCC resulted in several changes to the plan as proposed, including a policy for a “no net loss” or maximum of 155 slip-loss policy for boat slips. Because the loss of 116 slips is within the range of slip loss as approved by the CCC, the following analysis remains valid.

## LESS THAN SIGNIFICANT CONSTRUCTION IMPACTS

**Soft- and Hard-Bottom Associated Benthic Communities.** The removal of 1,306 piles and subsequent placement with approximately 969 support piles for the new dock systems in the Harbor will result in minor disturbances to soft-bottom benthic invertebrates within a zone of disturbance around the piles to be removed related to sediment resuspension and sediment disturbances from machinery. This impact will be a less than significant impact on soft-bottom infauna. Once disturbances cease, larvae will settle on the sediments and begin the process of recolonization.

The removal of docks and dock pilings within the Marina Basins, the OC Sailing and Events Center, the sport fishing dock, Embarcadero/Dry Boat Storage Staging dock, and the Marine Services dock will result in an initial loss of biofouling (pile-dwelling) associated flora and fauna on each of the 1,306 piles. Because the Marina Improvement Project will occur over several phases over an approximately 8 year period, losses will be site-specific and will not occur throughout the Harbor at the same time. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut 2–3 ft below the mudline. The old piles will be lifted from the water using a crane and then trucked off site. The last phase would be placement of the piles. The preferred method of pile installation is to predrill boreholes to facilitate pile driving. Prestressed concrete piles will then be driven into these holes and grouted with cement or sand. Some of the biofouling cover will be dislodged during the pile removal process, creating a zone of organic debris on the Harbor bottom in the immediate vicinity of the docks. Most of the biofouling organisms would be removed and transported off site to a proper disposal area, eliminating a significant localized impact related to an accumulation of decaying organic material on the Harbor seafloor. The removal of the pilings is unlikely to result in the release of a significant amount of contaminants; most contaminants present on the pilings would be bound up within the tissues of the organisms being removed. None of the species that would be removed are considered sensitive or unique.

Construction of piling and dock systems for the OC Sailing and Events Center and the sport fishing dock would potentially impact hard-bottom macroflora and fauna living on or among the subtidal hardscape within these areas. Losses would be associated with the direct effects of pile driving and secondary turbidity plumes. Mortality of individual plants and invertebrates might occur. These initial losses would be offset since additional pile substrata and surface area would be added. Plants and invertebrates would begin to colonize the new hard substrate upon completion of construction. Mobile *macroinvertebrates* (i.e., octopus and lobsters) would likely move out of the impact zone. The losses of plants and invertebrates from pile driving would not result in any population level impacts to *macrobiota* within the surrounding region. Therefore, construction of the docks and the addition of the piles is considered to have a short-term less than significant impact on hard bottom-associated plants and invertebrates within these areas of the Harbor.

The majority of habitat potentially affected by the construction of the proposed temporary docks/yacht broker docks near the eastern breakwater is sand to silty bottom in the lee of the East Breakwater. Remnants of low-reef outcrops may be present but these are mostly buried and exhibit low biological productivity. The loss of biomass would be offset by the addition of piles that would function as additional hard bottom habitat for invertebrates and algae. Therefore, construction of the docks and the addition of the piles is considered to have a short-term less than significant impact on associated plants and invertebrates in this area of the Harbor.

**Water Column Biota – Plankton and Fishes.** The project area water column habitat supports plankton and fish community members that are common to the bays and Harbors of Southern California. Living in bays and Harbors with constant sources of turbidity from runoff and other sources have acclimated these species to some degree with the turbid conditions that might arise from pile removal and replacement. In addition, fishes have the ability to swim away from disturbances such as noise, vibrations, and excess turbidity, while plankton move with the current and do not remain in one location for an extended period of time. These behavioral mechanisms help preclude construction impacts from occurring on water column organisms.

Construction activities would cause a temporary reduction in submarine light levels and a very localized, short-term reduction of plankton productivity due to increased turbidity. Because plankton drift with the current and turbidity is expected to be localized, there would be only short-term, less than significant construction impacts to the plankton community.

There would be no direct loss of open water (schooling) fishes from pile removal and replacement. Water column fishes would avoid the immediate work area due to either increased turbidity or a potential increase in underwater pressure and noise levels from work equipment. However, the removal of pilings may also attract some fish to biofouling debris that is removed from piles that settles on the Harbor floor. No mortality of bottom-dwelling species such as gobies is anticipated due to the mobile nature of fishes.

Secondary impacts of increased water turbidity on fishes would be a short-term, less than significant construction impact. Greater than ambient suspended sediment load related to higher turbidity may temporarily reduce the ability of both visual foraging fishes to feed (i.e., surfperch and halibut) and planktivores (i.e., topsmelt, anchovy, juvenile surfperch, and juvenile sciaenids). Because the proposed project would proceed incrementally over months-to-years, fish living within the Marina Basins would be able to move to nearby areas without any negative impacts to their habitat or food sources. The Marina Improvement Project would result in less square foot coverage of water surfaces than under existing conditions, and therefore, no secondary impacts associated with building materials or surface water coverage is expected.

Water column dissolved oxygen concentrations would potentially decrease due to the resuspension of organically enriched sediments. Additionally, the resuspension of potentially toxic levels of copper and DDT could potentially increase, particularly in areas near storm drains. These impacts would physiologically stress the fish in the area and result in their movement out of the local area. Because fish would likely move away from the immediate zone of turbidity, their exposure to elevated levels of contaminants is expected to be minimal. Turbidity would return to ambient levels upon cessation of pile removal and replacement through tidal flushing and circulation, and fish populations would



return to the area. Based on the reasons discussed above, potential impacts arising from pile and dock removal and construction activity in the Harbor would result in less than significant, localized, temporary impacts to the plankton and fish.

### **Sensitive Species.**

**Surfgrass.** Surfgrass does not occur within the confines of the Harbor; thus, it would not be impacted by construction activities.

**Abalone.** White, red, green, and black abalones have an extremely low to zero potential to be present within any of the Marina Improvement Project construction zones. Their distribution is limited to areas outside of the Harbor on the seaward side of the Marina breakwaters and in offshore rocky habitats. Consequently, Harbor Marina construction activities are not expected to impact these sensitive species.

**Tidewater Goby.** Tidewater gobies are not known to occur within the Harbor; therefore, no construction-related impacts would occur to this species or its habitat.

**Steelhead Trout.** Although there are rare occasions when individual steelhead trout may be present, there are no known populations of this species in the Harbor. Therefore, construction-related impacts on steelhead trout are not expected to occur.

**California Halibut.** Juvenile halibut likely occur within some areas of the Harbor. During pile installation, any juveniles in the immediate area of construction would swim away from the immediate impacted zone. No mortality or short-term stresses on this species are anticipated as a result of construction activities.

**Water-Associated Bird Species.** The special-status marine birds most likely to occur in the vicinity of the project area include brown pelican, double-crested cormorant, western snowy plover, California gull, elegant tern, and occasionally, California least tern and common loon. All of these species feed on fish and may, on occasion, forage in Dana Point Harbor. No breeding colonies for any of the sensitive species of seabirds exist in the project area.

Pile-driving activities could potentially result in impacts to sensitive bird species related to an increase in localized turbidity plumes and a reduction in foraging habitat. These species rely on sight foraging behavior to catch their prey. In addition, their fish and invertebrate prey base may move out of the turbidity plumes caused by construction activities. However, because pile-driving activities are within localized areas, other areas of the Harbor would be available as foraging habitat for these species. Therefore, potential impacts related to pile-driving activities on sensitive bird species are considered less than significant.

Seabirds roosting on docks and jetty areas near the bait barge in the vicinity of the proposed Yacht Broker/Temporary Dock could be impacted by construction activities. However, seabirds would respond by moving to other nearby roosting habitat, which is available throughout the harbor. This modification of seabird behavior would not have any population level impacts on seabirds. Therefore, the construction impacts are considered to be less than significant.

**Marine Mammals.** All marine mammals are protected by the Federal Marine Mammal Protection Act of 1972 (MMPA). The MMPA prohibits the intentional taking, import, or export of marine mammals without a permit. Several of the species that occur within the SCB are also protected under the Federal Endangered Species Act of 1973 (ESA). A species that is listed as threatened or endangered under the ESA is categorized as depleted under the MMPA. Unintentional take of a depleted species is allowed by permit only if the activity is determined to have a negligible impact. Intentional take of a depleted species is only allowed under a scientific research permit.

Marine mammals are not anticipated to be in the immediate areas where pile removal and replacement would occur in the Harbor and would not suffer any direct mortality resulting from pile removal or pile replacement. Therefore, removal and replacement of docks and piles in the harbor is expected to have a less than significant impact on marine mammals.

### **Sensitive Habitat.**

**Reef Habitat.** Scattered low-to-moderate relief rocky reef habitat is still present within the confines of the protected Harbor. While biological diversity of these reefs is less compared to reefs outside the Harbor due to sedimentation, less wave exposure, and exposure to higher levels of contaminants, the limited amount of the Harbor reef habitat still supports many types of plants, invertebrates, and fishes. The scattered outcrops found in the East and West Marina basins, west of the Sailing Center, and in the East Channel in general proximity to the proposed Temporary Dock are characterized by low-diversity biological communities.

Pile driving has a potential to damage isolated reef outcrops and result in some short-term, localized disturbances. Because it is not known exactly where these reefs occur, sonar surveys would be necessary prior to construction of the temporary docks to pinpoint reef habitat and assess the amount and quality of reef habitat and associated biological resources. Most likely, pile driving and turbidity would result in the disturbances of a small percentage of exposed natural reef in these areas. Since there is an abundance of rocky habitat throughout the Harbor, it is anticipated that the impacts from the construction of the temporary docks would be less than significant on rocky subtidal habitat and biota.

**Giant Kelp.** Individual giant kelp (*Macrocystis pyrifera*) plants may be present on either remnant natural reefs or quarry stone protecting the Marinas, but are located outside of the proposed construction areas. Short-term turbidity increases from pile emplacement activities in the construction zone will not impact local giant kelp populations within the general Dana Point Harbor region. Consequently, the pile driving will have a not impact giant kelp populations.

**Marine Protected Areas.** No Marine Protected Areas occur in the Harbor; therefore, no short-term construction-related impacts to such areas would occur.

**Fishery Management Plan Species.** Project activities that could potentially affect identified Coastal Pelagic FMP species (northern anchovy) and Pacific Groundfish FMP species (scorpion fish and juvenile olive rockfish) include increased water turbidity caused by the demolition and replacement of docks and bulkheads, increased underwater pressure and noise due to pile driving and pile removal, and direct mortality from habitat destruction. These impacts could potentially result in (1) the movement of schooling anchovies away from the impact zones to more suitable offshore habitat, and (2) an increase in the suspended sediment load that could potentially introduce this species to harmful levels of contaminants and clog their gill apparatus, resulting in a reduced ability to breathe and/or feed. This is particularly true for northern anchovy, which is a filter feeder that uses the gills to filter plankton. Groundfish species are likely to be extremely rare in the project area. However, should they be present, the potential for direct mortality of juveniles or adults of these species is minimal. Any impacts resulting from project turbidity would cause these species to avoid construction zones, resulting in a less than significant impact.

Based on the life histories and distribution of these species, most of the populations would be distributed in offshore areas rather than the confines of the Harbor, and therefore the potential for short-term construction-related impacts to FMP species is expected to be less than significant.

### **Invasive Species.**

*Zostera japonica.* *Zostera japonica* does not grow in Dana Point Harbor and will not be impacted during construction or operational activities associated with the proposed project.

*Undaria pinnatifida.* *Undaria pinnatifida* is not currently growing within the Harbor and is therefore not anticipated to be impacted during construction or operational activities associated with the proposed project. It should be noted that at this time there are no defined eradication processes for this species by the NMFS or the CDFG.

## **LESS THAN SIGNIFICANT OPERATIONAL IMPACTS**

The net amount of dock surface areas and pile surface areas throughout the Harbor is expected to decrease by approximately 32,990 square feet (sf) due to reconfiguration of the dock systems and during the estimated eight years of construction. In the event that temporary docks were to remain as yacht broker docks, the amount of surface area decrease from existing conditions would be 15,248 sf. A decrease in dock surface area will result in a long-term, beneficial impact to open water habitat. This will increase waterbird (and endangered species) and seabird foraging habitat and reduce shading effects on harbor waters. In the long-term, there will be a net overall benefit to the marine ecosystem related to a decrease in dock surface area.

Dock renovations would result in beneficial impacts to water column and benthic soft-bottom habitats within the East and West Marina Basins (including the commercial fishing docks and the Harbor Patrol docks), where a net increase of 0.75 ac of unshaded, open water habitat would become available. These beneficial changes would be permanent during the life of the project.

No additional shading is anticipated for the Marine Services dock area, but there would be a slight beneficial increase in soft-bottom habitat due to pile removal. An increase in dock area at the Embarcadero/Dry Boat Storage Staging docks would decrease the amount of open water habitat. These changes would be permanent during the life of the project and are considered less than significant.

**Soft-Bottom Benthos.** Although the total number of piles will decrease, the reduction in surface area of the piles is only expected to decrease by approximately 1 sf. This will have neither adverse nor beneficial long-term effects on soft bottom-associated organisms.

### **Hard Substrate Pilings, Docks, and Riprap,**

**Docks and Pilings.** The proposed project will result in a net decrease of biofouling organisms because of a decrease in dock surface area (0.75 acres) and 1 sf of piling habitat. This will not result in a regional or local loss of any invertebrate or algae species. However, some areas of the Harbor would be affected more than others, with the highest reduction occurring within the Marina Basins. Localized reduction of biofouling biomass in the West and East Marinas would not result in a regional population-level decline of intertidal or subtidal hard substrate-associated algae or invertebrates. Once new piles are reinstalled in the Marinas, they will be recolonized by similar types of organisms that were initially removed. The process of recolonization would begin immediately upon the structures being placed in the water, but reestablishment of mature biofouling communities would take several years. Therefore, the reduction of piling habitat and dock habitat is considered a less than significant adverse impact to local biofouling species.

**Dock Surface Areas.** For the entire project, there would be a potential net shading decrease of marine habitat by approximately 32,990 sf. By region, the greatest decline in shading related to dock structures would occur in the East and West Marina Basins.

The Dry Boat Storage building was approved as part of the landside project and the certified Program FEIR. The structure will be supported on piles and will extend out over portions of the Embarcadero/Dry Boat Storage Staging docks. The portions of the structure extending over the water, the docking system, and the operations at the waterside boat staging area are discussed in this SEIR. Although the Dry Boat Storage building extends over the water and would have some potential shading impact, the building design includes a large door on the south end extending over the water, which will allow natural light into the overhang area when it is open. In addition, the siding on the lower portions of the wall that overhangs the water is proposed to be translucent panels in order to allow natural light into the same overhang area. For these reasons, the building would not significantly contribute to shading impacts in this area.

**Water Column Organisms.** Project improvements will have a long-term, beneficial effect on water column habitat and associated plankton and fish populations. An additional approximately 32,990 sf of open water habitat will experience direct sunlight as a consequent of the reconfiguration of the dock systems. This will occur incrementally following completion of the first phase of dock reconstruction and will continue through a period of several years. In the event that temporary docks were to remain as yacht broker docks, the amount of surface area decrease from existing conditions would be approximately 15,248 sf. Consequently, there will be a greater surface area of unshaded open water that will locally increase primary plankton production. Additionally, the increase in open water habitat will have a beneficial impact on fishes and foraging seabirds.

### **Sensitive Species.**

**Surfgrass.** No long-term impacts to surfgrass will occur as a result of the proposed project.

**Abalone.** No long-term impacts to abalone will occur as a result of the proposed project.

**Tidewater Goby.** No long-term impacts to the tidewater goby will occur as a result of the proposed project.

**Steelhead Trout.** No long-term adverse related impacts would occur on this species or its habitat as a result of the proposed project. However, assuming this species' inland critical aquatic habitat is restored in the future to levels that would enhance the population of local steelhead trout, better water quality within Dana Point Harbor could potentially create a condition that might allow greater numbers of steelhead trout to transit through the Harbor.

**California Halibut.** No long-term adverse related impacts would occur on this species or its habitat as a result of the proposed project.

**Green Sea Turtles.** No long-term impacts to green sea turtles will occur as a result of the proposed project. The proposed project components will have no effect on sea turtle abundance or distribution.

**Seabirds.** Seabirds would be beneficially impacted by the overall increase of open-water foraging habitat that would occur with project implementation within the Harbor. Additionally, there will be an increase of open water foraging habitat for the endangered least tern and the California brown pelican. The long-term improvements within the Harbor will not result in the mortality of any species of endangered or other sensitive species of seabirds.

A decrease in the amount of open-water habitat in the vicinity of the Yacht Broker/Temporary Dock in the East Channel would not affect the ability of seabirds to forage in the outer harbor channels. Schooling fishes (including baitfish used by seabirds) would likely aggregate in other areas of the channel.

Therefore, foraging terns, gulls, and pelicans would follow their food sources. This modification of foraging behaviors would not result in any significant, adverse impacts on seabirds.

**Marine Mammals.** No long-term impacts to marine mammals will occur as a result of the proposed project.

#### **Sensitive Habitats.**

**Kelp Beds.** No long-term impacts on kelp beds will occur as a result of the proposed project.

**Fishery Management Plan Species.** No long-term adverse impacts to either coastal pelagic or groundfish FMP species will occur as a result of the proposed project. Because there will be an increase in the amount of unobstructed open water habitat within the Harbor, this could potentially result in long-term beneficial effect on northern anchovy, which would have a greater amount of open water habitat within which to school.

**Invasive Species.** *Caulerpa* algae is not currently present in the Harbor; therefore, the potential for the spread of this species over the long-term operation of the project is not expected.

*Undaria pinnatifida* is not currently growing within the Harbor; therefore, potential impacts related to this species and long-term operation of the project are considered less than significant.

*Zostera japonica* does not occur within Dana Point Harbor and will not be impacted by the project.

**Temporary Dock Removal.** The proposed project plans call for a temporary dock system near the East Breakwater, with the possibility that this dock system would remain in place permanently as a yacht broker dock. In the event that the regulatory agencies do not approve the docks to be located permanently in this location, the temporary dock system would be removed. The impacts on marine resources due to the removal of these temporary docks would be similar in type and significance to construction-related impacts for the project construction phases related to work vessels. However, the impacts related to the temporary dock removal would be relatively small as compared to the overall project construction impacts. Following the removal of the temporary docks, open water and subtidal rock and sediment habitat would result in a return of unshaded marine habitat conditions in the area of the temporary docks next to the East Breakwater. The amount of habitat that would benefit from less shading would increase from approximately 3,262 sf (during project construction simultaneously with the operation of the temporary docks) to approximately 25,990 sf (0.6 ac) following removal of the temporary docks. In the event that temporary docks were retained as yacht broker docks, the amount of area benefiting from less shading would be approximately 15,248 sf. This action would also return important biological value to water column habitat for fish, foraging seabirds, and macro-algal communities associated with the hard-bottom habitat. Removal of the temporary docks, therefore, would result in a return to status quo biological values in the outer portions of the Harbor.

## POTENTIALLY SIGNIFICANT CONSTRUCTION IMPACTS

**Water Quality/Turbidity Impacts.** Pile replacement activities would also have a potential to release detectable levels of sediment-bound contaminants into the water column that would be redistributed through the tidally induced movement of the turbidity plume. Organically enriched sediments resuspended into the water column during pile replacement would also cause a slight decrease in dissolved oxygen levels. Tidal currents would slowly dissipate the oxygen-poor water mass and replenish ambient oxygen levels within one to several tidal exchanges. Potential water quality and turbidity impacts to specific areas of the project are discussed below.

### **Marina Basins, Embarcadero/Dry Boat Storage Staging Docks, and Marine Services Docks.**

Existing piles will be removed or cut off at the waterline, and new ones placed into predrilled holes in rock substrate. These activities could increase the levels of water turbidity as each phase of the project is being conducted. Higher turbidity is expected to be limited to the specific area of dock improvements, and the turbidity plume would dissipate as a function of tidal exchange within the Marinas. While the impact is expected to be short-term and have a less than significant impact on water quality within each specific phase, the project will be conducted over a period of several years. Turbidity levels for each specific phase may be above ambient conditions for an extended period. Therefore, Mitigation Measure 4.7-1, requiring best management practices (BMPs) and measures to limit the spread of the turbidity plume outside the work, is proposed.

Sediment testing for the Dana Point Harbor Dredge Material Evaluation (Kinnetic Laboratories and Moffatt & Nichol, 2007) indicated that fine sediments in one particular zone near the 60 in storm drain in the East Basin contain elevated levels of copper and total DDTs compared to other sites tested. Consequently, pile removal and replacement in the vicinity of this one zone may result in the resuspension of material that could degrade water quality. This has a potential to result in a potentially short-term adverse significant impact to water quality within the East Basin. Implementation of Mitigation Measure 4.7-1, requiring measures to minimize turbidity and disturbance of contaminants, would reduce the level of impact to less than significant levels.

Implementation of Mitigation Measure 4.7-1 would reduce water turbidity impacts in the Marina Basins, Embarcadero/Dry Boat Storage Staging dock, and Marine Services dock areas to a less than significant level.

**Yacht Broker/Temporary Docks and Sport Fishing Docks.** Turbidity associated with pile driving and/or boring activity in the vicinity of hard-bottom habitat and reefs (Yacht broker/Temporary dock area sport fishing docks) would result in a short-term reduction of light and an increase of suspended material in areas that are high in macrophyte productivity. Bottom sediments would also be disturbed during construction activities and could potentially impact marine resources. However, due to moderate tidal current activity and wind-wave exposure in these areas of the Harbor, any turbidity created by these activities should only remain for a short period of time and would be dispersed out of the Harbor over the course of daily tidal changes. Implementation of Mitigation Measure 4.7-1, as discussed above, would reduce water turbidity impacts in these areas of the Harbor to a less than significant level.

**OC Sailing and Events Center Docks.** Construction activities could increase turbidity in the vicinity of the OC Sailing and event Center docks. As stated above, bottom sediments could be disturbed during construction activities and could potentially impact marine resources. However, due to moderate tidal current activity and wind-wave exposure in these areas of the Harbor, any turbidity created by these activities should only remain for a short period of time and would be dispersed out of the Harbor over the course of daily tidal changes. Implementation of Mitigation Measure 4.7-1, as discussed above, would reduce water turbidity impacts in these areas of the Harbor to a less than significant level.

Eelgrass surveys conducted in the vicinity of the proposed dock improvements (Coastal Resources Management, Inc. 2010) indicate that as of June 2010, one or two small patches of low-density eelgrass (approximately 3 sq m) may be affected by turbidity generated from pile-driving activity near the proposed OC Sailing and Event Center docks. The locations of these eelgrass patches are illustrated in Figure 4.7-1. Pile driving will not result in the direct loss of eelgrass based upon the results of 2009 and 2010 field surveys, and potential impacts at present are related to secondary turbidity effects.

Although turbidity plumes would dissipate and disperse out of the area over the course of daily tidal changes, some suspended sediment may settle on eelgrass blades. The loss or reduction of eelgrass cover and density as a result of increased turbidity would be a local but significant impact to the existing eelgrass bed in the vicinity of Baby Beach. In addition, there is a potential for more eelgrass expanding into the proposed dock footprint into areas where pile driving will occur in the next several years. Therefore, Mitigation Measure 4.7-2, requiring pre- and post-construction surveys in accordance with the provisions of the Southern California Eelgrass Mitigation Policy (SCEMP, NFMS, 1991 as amended), is proposed. Based upon these surveys, a determination will be made if impacts to eelgrass are anticipated; a mitigation plan to offset such eelgrass habitat losses will be developed if surveys determine that eelgrass losses would occur.<sup>1</sup>

**Oil and Fuel Discharges–Harborwide.** Accidental oil or fuel spills that could potentially occur during project construction activities could result in significant effects on water quality, and depending on the severity of the spill, affect the fish and wildlife of the Harbor. Such events are likely to be localized spills of lighter, refined diesel fuels, gasoline, and lubricating oils that are highly toxic to marine life. The potential for the occurrence of petroleum product leaks or spills would be low, but the potential for significant, long-term effects on marine resources would be moderate to high. Mitigation Measure 4.7-1, requiring BMPs and measures to control water quality impacts, is intended to avoid water quality degradation and reduce the potential for adverse impacts on water quality and marine resources to a less than significant level.

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<sup>1</sup> The total area of potential impact to eelgrass appears to be well under 10 m<sup>2</sup> which is the criteria in the SCEMP to allow an exemption to be requested by the project applicant, provided suitable out-of-kind mitigation is proposed.



## Sensitive Habitats.

**Reef Habitat.** Reefs in the West Channel are outside the footprint of the proposed OC Sailing and Events Center docks. However, there are scattered reef outcrops in the East Channel in the vicinity of the proposed Temporary Dock. These scattered reefs are characterized by low-diversity biological communities and are highly impacted, very low relief, and covered in silt.

If reef habitat is present, pile installation has a potential to damage isolated reef outcrops and associated macro-invertebrates and macro algae (i.e., gorgonians, snails, and urchins, and kelp). Because it is not generally known exactly where these reefs are with respect to pile locations, sidescan sonar surveys will be necessary prior to the construction of the temporary docks to pinpoint reef habitat and assess the amount and quality of reef habitat and associated biological resources. Due to the low diversity biological community associated with these already impacted reefs in the East Channel, it is anticipated that the impacts from the construction of the temporary dock will result in less than significant impacts on rocky subtidal habitat and biota. However, Mitigation Measure 4.7-4, requiring pre-construction biological surveys and preparation of a Marine Biological Impact Reduction Plan (MBIRP), will ensure that construction impacts to sensitive resources are reduced to a less than significant level.

## Sensitive Species.

**Eelgrass.** Eelgrass surveys conducted in the vicinity of the proposed OC Sailing and Event Center docks (Coastal Resources Management, Inc. 2010) indicate that as of June 2010, one or two small patches of low-density eelgrass may be affected by turbidity generated from pile-driving activity. However, there is a potential for more eelgrass expanding into the proposed dock footprint where pile driving would occur in the next several years. As discussed above, Mitigation Measure 4.7-2, requiring pre- and post-construction surveys in accordance with the provisions of the SCEMP (NFMS, 1991 as amended) is proposed. Based upon these surveys, a determination will be made if impacts to eelgrass are anticipated; a mitigation plan to offset such eelgrass habitat losses will be developed if surveys determine that eelgrass losses would occur<sup>1</sup>. In addition, Mitigation Measure 4.7-3, which requires a qualified marine biologist to mark the positions of eelgrass beds prior to the initiation of any construction and to assist the construction crew in avoiding unnecessary damage to eelgrass, is proposed. Implementation of these measures will ensure that potential construction impacts to eelgrass are reduced to a less than significant level.

**Sea Turtles.** The green sea turtle, federally listed as endangered, has been sighted offshore of the Harbor, but it's occurrence would be considered rare. There are no warm water discharges that might attract them to the Harbor, nor is there available seagrass habitat for foraging. Although an occasional green sea turtle may enter the Harbor at the time of Marina improvements, the potential for adverse impacts to an individual is low. Marina reconstruction, the construction and (possible) removal of the temporary dock systems, and vessel movements within the Harbor

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<sup>1</sup> The total area of potential impact to eelgrass appears to be well under 10 m<sup>2</sup> which is the criteria in the SCEMP to allow an exemption to be requested by the project applicant, provided suitable out-of-kind mitigation is proposed.

could induce behavioral modification to this species that would result in a change in swimming behavior to avoid excessive noise, turbidity, or the vessel movements. No green sea turtle mortality would be expected to occur as a result of the waterside construction activities, nor would the project cause any decline in green sea turtle populations. However, if a sea turtle is present in the Marina Improvement Project area during construction activities, Mitigation Measure 4.7-4, outlining measures to be taken by construction crews, would reduce these potential construction impacts to a less than significant level.

**Listed or Otherwise Sensitive Bird Species.** The special-status marine birds most likely to occur in the vicinity of the project area include brown pelican, double-crested cormorant, western snowy plover, California gull, elegant tern, and occasionally, California least tern and common loon. All of these species feed on fish and may, on occasion, forage in the Harbor. No breeding colonies for any of the sensitive species of seabirds exist in the project area.

Pile-driving activity could potentially result in less than significant impacts to sensitive bird species related to an increase in localized turbidity plumes and a reduction in foraging habitat. These species rely on sight foraging behavior to catch their prey. In addition, their fish and invertebrate prey base may move out of the turbidity plumes caused by construction activities. Because pile-driving activities are within localized areas, other areas of the Harbor would be available as foraging habitat for these species.

Seabird roosting habitat on docks and near the bait barge would be temporarily affected, and individual birds that congregate near the bait barge would move to surrounding habitat. These impacts are considered to be less than significant. Seabird roosting habitat on the breakwaters would not be affected by the Marina Improvement Project.

A decrease in the amount of open water habitat in the vicinity of the yacht broker/temporary docks would have a less than significant impact on the ability of seabirds to forage in the outer Harbor channel. The docks are located near to the shoreline over primarily rocky shoreline and rocky to sandy bottom habitat. Schooling fishes, including baitfish used by seabirds, would likely concentrate nearer to the center of the channels over deeper water habitat. Therefore, species such as terns, gulls, and pelicans would likely avoid the docks during foraging activity; however, gulls, pelicans, and (potentially) cormorants would use the temporary docks as roosting sites.

Construction activities may disturb marine birds, especially nesting birds, if present during such activities. However, construction will extend over eight years and will disturb small areas of the Harbor at any one time, leaving available other open water areas for this species. Therefore, due to the phased construction plans and the ability for the marine birds to use other nearby Harbor areas, potential impacts to nonnesting marine birds are considered less than significant.

Construction activities associated with the proposed project may result in some temporary disruptions to the roosting activities of great blue herons in the project vicinity. The great blue herons present in the project area are currently coexisting with Marina users and are accustomed to human intrusion and noise. In addition, there are many trees within the vicinity that could provide alternative nesting and roosting habitat. In addition, the proposed Marina Improvement Project does not include the removal of any landside trees or vegetation. However, the Program

FEIR included MM 4.7-2, referred to above, which was intended to protect the nesting habitat of the black-crowned night herons and snowy egrets and is applicable to the Marina Improvement Project. Implementation of Program FEIR MM 4.7-2, restated as Mitigation Measure 4.7-5 below, will ensure that potential impacts to the nesting habitat of these species are reduced to a less than significant level.

**Marine Mammals.** Vessel traffic coming in and going out of Dana Point Harbor (barges, tugs, work vessels) would be transiting to and from offshore waters where California sea lion, Pacific harbor seal, California gray whale, bottlenose dolphin, and other marine mammals are found. Transiting vessels have a low potential to collide with marine mammals, expose these resource groups to contaminants, or interfere with foraging activity. Marine mammals are generally capable of avoiding boat traffic, especially at the speeds the vessels will likely be transiting at. Marine mammals in the local waters have also likely habituated to vessel traffic since large fishing vessels, excursion vessels, and work vessels commonly transit in-and-out of Dana Point Harbor. Vessel operators are also trained to recognize the presence of marine mammals which reduces the potential for adverse impacts. In the event a pinniped or cetacean is injured or killed as consequence of a collision, the impact would be a locally significant impact, but it would not result in a population-level impact. Therefore, the potential for collision impacts to marine mammals is considered unlikely and less than significant. However, to ensure that impacts related to collisions with marine mammals remain less than significant, and that any potential vessel collision is properly reported, Mitigation Measure 4.7-4 requires the vessel operator and OC DPH to immediately notify the NFMS (Southwest Division) and to submit a written, follow up report within 24 hours of the incident.

Marine mammals are capable of hearing over long distances, and even though they may not be in immediate vicinity, there is a low potential for marine mammals to be affected by pile-driving activity. The duration of such noise would be intermittent and the work at each site would be in different locations and at different times.

The project includes the removal of 1,306 14-inch diameter pilings to be replaced by approximately 969 concrete piles. The use of concrete piles is an environmentally superior method- acoustically speaking- to the use of steel piles since because it produces less noise from individual pile strikes. However, pile extraction and pile driving will still result in the production of some underwater noise and vibrations within Dana Point Harbor that marine mammals may be capable of sensing. Overall however, the Biological Assessment concluded that moving sound sources from vessels and aircraft seem to be more disturbing than stationary sources such as drilling rigs and drill ships. The initiation of these pile driving could potentially result in a minor startle response from nearby marine mammals and they would be expected to either move away from, or avoid the immediate vicinity. A minor startled response by a marine mammal (most likely a sea lion) would include swimming away from the source of the noise, from either the physical presence of the piling equipment or the sound/vibration detected by the animal that was produced from such activities.

No deleterious impacts would result from a minor startled response. Over time, marine mammals would acclimate to the noise. Most pile driving would occur within the East and West Marina Basins, where marine mammals are least likely to be present. Although marine mammals would likely be able to “sense” pile-driving noise, the magnitude and intensity of the source sounds are unlikely to result in

any significant changes in behavior. Such types of sounds and their intensity levels are common throughout the range in which these marine mammals live.

Pile driving in the air and water could cause seal lions to temporarily move farther away from these activities, although the sea lions are anticipated to adapt to noise. Breeding would not be affected because sea lions do not breed in Dana Point Harbor. The Biological Assessment prepared for this project (Appendix F) contains further references related to the effects of noise on marine mammals relative to pile driving.

Few, if any, individual sea lions or marine mammals would be expected to be present within the Dana Point Harbor during pile extraction or pile-driving activities. Any sea lions or other marine mammals present would not be harmed, because they would likely either move out of range of sound produced by pile driving, or they would adapt to expected sound intensities. The effect would be of short duration for each pile. Noise levels are expected to be below that identified as harassment during construction, and therefore an application to the NMFS for an Incidental Harassment Authorization, under Section 101 of the Marine Mammal Protection Act will not be necessary. The sound intensity produced, and the potential level of impact on marine mammals for the Dana Point Harbor project is considered less than significant. However, to ensure that pile-driving activities remain less than significant, Mitigation Measure 4.7-6, requiring slowly ramping up pile-driving activities (referred to as a “soft start”) has been proposed. Implementation of Mitigation Measure 4.7-6 will ensure that any potential pile-driving noise impacts on marine mammals will remain at a less than significant level.

### **Invasive Species.**

*Caulerpa taxifolia*. Because *Caulerpa* is not present within the Harbor, the potential spread of this species during project construction activities is not expected. However, as outlined in Mitigation Measure 4.7-2, a *Caulerpa* algae survey will be conducted according to the NMFS Control Protocol prior to construction. If this species is found, OC Dana Point Harbor, NMFS, and CDFG will be notified within 24 hours of completion of the survey. In the event that *Caulerpa* is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed disturbing activity is eliminated in accordance with the NMFS *Caulerpa* Control Protocol (Version 3, adopted March 12, 2007 [NMFS 2007]).

## **POTENTIALLY SIGNIFICANT OPERATIONAL IMPACTS**

### **Water Turbidity Impacts.**

**Marina Operations.** Water quality within the Harbor will be coordinated by OC DPH to ensure compliance with ordinances, laws, and guidelines related to discharges, vessel maintenance, and Marina maintenance. Periodic and/or uncontrolled discharges of various pollutants, oils, greases, and wastes would potentially create significant long-term adverse effects on water quality with subsequent adverse impacts on local marine life.

The two Marinas in Dana Point Harbor are certified as Clean Marinas, as defined and administered by the Clean Marinas Program. The purpose of the program is to use BMPs in order to prevent or reduce pollution in the coastal waters. The program requires Certified Marinas to follow guidelines for Marina activities, including but not limited to emergencies, topside boat

maintenance and cleaning, and underwater boat hull cleaning. The Dana Point Harbor Marinas rules and policies prohibit certain activities that could contribute to poor water quality. This includes prohibiting rebuilding, hull painting, and other major repairs, as well as restrictions for sanding, painting, and the use of chemicals on a boat while the boat is berthed at the Marina. Owners and contractors are required to follow policies that specify proper methods of in-water boat maintenance and require contractors to be registered and carry identification for any in-water services or maintenance services. These methods, required in order to retain the Clean Marina Certification, ensure that Dana Point's coastal waters can maintain optimum populations of marine organisms and protect human health.

To prevent long-term impacts on local water quality and marine life, adherence to the policies and procedures required for Clean Marina Certification should be continued. This program provides tenants and boaters with reasonable BMPs, safety guidelines, information on pump-out facility use, regulations, education, and steps to take in response to trash and debris disposal, accidental spills, leakages, and fires to reduce the potential for water quality degradation. Continued compliance with the Clean Marinas Program, as required in Mitigation Measure 4.7-7, will assist in reducing potential long-term water quality-related impacts to marine life to a less than significant level.

#### **Dock Renovation, Dry Boat Storage Staging, and Other Operational Changes.**

Operationally, renovated and/or replaced Marina Service docks and related dock infrastructure are proposed to better serve visitors, boaters, and existing Harbor uses.

The overall increase in linear dock space in the Marine Services and Embarcadero/Dry Boat Storage Staging dock areas has the potential to intensify the use of these areas. Increased use in these areas has the potential to adversely affect water quality and impact marine biological resources. However, the planned uses will not significantly change from the existing and ongoing public access, marine repair, and Embarcadero dock uses. Adherence to the policies and procedures required for Clean Marina Certification, as required in Mitigation Measure 4.7-7, would reduce any impacts to marine biological resources to a less than significant level.

**Temporary Dock Operations.** Although the temporary docks will be in place for displaced boats only during the project construction phases, the length of project implementation over eight years could result in impacts to marine life related to water quality. In addition, if the temporary docks were to remain in place as yacht broker docks, the impacts associated with these docks would be permanent. Accidental dumping of trash, debris, hazardous materials, and organic wastes from vessels or from visitors to the temporary dock areas could degrade water quality, habitat values, and marine life in a region of the Harbor that supports many types of marine life. This would result in a significant, localized impact on the quality of the bottom habitats. Implementation of Mitigation Measure 4.7-7, requiring compliance with rules and regulations contained in the Clean Marinas Program, would reduce this water quality impact to a less than significant level.

**Dock and Pile Surface Area Changes.** Permanent dock installation at the OC Sailing and Events Center would create additional shading over approximately 5,796 sf of open water habitat and some

soft-bottom and natural reef areas. This would result in a long-term, adverse decrease in the amount of unobstructed habitat in this area of the Harbor and immediately inside the West Basin. These changes would be permanent during the life of the Marina Improvement Project. The proposed configuration of the new headwalk at the sport fishing docks creates an additional dock surface area that would shade an additional approximately 2,699 sf of riprap habitat, resulting in a long-term adverse shading impact.

Because the shading impacts in the OC Sailing and Events Center and sport fishing docks areas would be permanent during the life of the project, and because there is no feasible mitigation to reduce shading impacts with the current project design, shading impacts at the OC Sailing and Events Center and sport fishing dock are considered significant and adverse.

### **Sensitive Species.**

**Eelgrass.** The proposed project has a potential to impact eelgrass in the vicinity of the proposed OC Sailing and Events Center Docks as a result of shading from either dock structures or small boats tied up to the dock. The level of impact and the mitigation required for any disturbance to eelgrass will be determined during pre- and-post construction surveys for the project, as required in Mitigation Measures 4.7-2 and 4.7-3. Should it be determined that a loss of eelgrass has occurred, appropriate measures in accordance with the SCEMP (NMFS 1991, as amended) will be required to offset any observed eelgrass losses.

### **Sensitive Habitats.**

**Reefs and Kelp Beds.** The installation of the temporary docks adjacent to the East Breakwater would create a long-term adverse shading effect on water column habitat and a combination of hard-bottom quarry stone/natural reef habitat and soft-bottom habitat. Approximately 69 sf of seafloor habitat (a combination of rock and sand) will be drilled to place piles.

The length of time that habitats and organisms would be affected by shading is potentially up to eight years. During this time, there will be temporary losses of habitat value and function and direct adverse impacts on plants and animals associated with the water column and substrate and soft-bottom habitats. Although the operation of these docks is considered “temporary,” up to eight years of dock shadow effect shade may reduce the value of these habitats for marine life.

Shading effects and subsequent decreased light penetration could potentially create a reduction (to an unknown degree) during construction in the productivity, diversity, and composition of macro-algae (understory kelp, red and brown turf algae) on the natural reef outcrops that might be underneath the boat docks. Expected habitat changes would include an increase of coralline and encrusting red/brown algae; encrusting and upright ectoprocts, sponges, and tunicates that would replace the macro-algae; and a potential reduction and/or change in the numbers and types of fishes associated with macro-algal canopy. These changes would result in a significant, temporary impact on marine resources that could last for up to 8 years, or the duration of construction activities. Because the temporary docks will be present for up to 8 years during construction, and because there is no feasible mitigation to reduce shading impacts with the current project design,

shading impacts in the temporary dock area are considered a significant and unavoidable adverse construction-related impact.

Following completion of the project and removal of the temporary dock system, rocky intertidal and subtidal quarry stone and natural reef habitat will be exposed to preproject unshaded light conditions that will lead to a reestablishment of macrophytes, understory species of algae, and macrofauna typical of rocky habitats. The process of recolonization will take several years, having to respond to long-term temporal reductions in light levels. The return to pre-project biological conditions is not a beneficial impact; it is a return to status quo conditions.

Due to the length of time that these habitats will have been subjected to reduction in light conditions, and because the recolonization of the rocky intertidal and subtidal habitats cannot be guaranteed, impacts to these habitats are considered a significant and unavoidable adverse impact, similar to the construction impacts to these resources. Further, should the temporary docks remain in place as permanent yacht broker docks, these impacts would be permanent and would be considered a significant and unavoidable adverse operational impact.

## Mitigation Measures

The following measure would reduce impacts to marine resources resulting from turbidity and accidental spills during construction activities to a less than significant level.

- 4.7-1** Prior to issuance of any construction permits, the Director, OC Dana Point Harbor, shall review and approve a Marina Construction Management Plan and confirm that the following construction best management practices (BMPs) are included to minimize turbidity plumes and possible contaminants released into the water column during construction activity:
- No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to tidal erosion and dispersion. Construction materials shall not be stored in contact with the soil.
  - Hazardous waste and oil spill contingency plans and spill response equipment shall be kept on site or near the Harbor during Marina construction. The Construction Contractor shall have adequate equipment available to contain such spills immediately.
  - Any construction debris shall be removed from the site. All trash shall be disposed of in the proper trash receptacles at the end of each construction day.
  - Floating booms shall be used to contain debris discharged, and any debris discharged, including construction debris from the sea floor, shall be removed no later than the end of each day. A postconstruction bottom survey shall be conducted to ensure that all material has been successfully removed from construction areas.
  - Where feasible, silt curtains shall be deployed around work barges and the pile removal and placement operations in order to minimize the spread of turbid waters outside the project area.
  - Barges and work vessels shall be operated in a manner to ensure that sensitive resources within the Harbor are not impacted through grounding, propeller damage, or other

activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.

The following measures would reduce potential impacts related to the presence of eelgrass or *Caulerpa* to a less than significant level.

- 4.7-2** To reduce impacts related to potential disturbance to the shallow water marine substrate, OC Dana Point Harbor shall confirm that preconstruction and postconstruction eelgrass and *Caulerpa* monitoring surveys are conducted in accordance with the most currently approved National Marine Fisheries Service (NMFS) Control Protocol and the Southern California Eelgrass Mitigation Policy (SCEMP) as adopted by the NMFS, in consultation with the California Department of Fish and Game. The survey shall be conducted during the active growth period (typically March through October) when possible. The preconstruction survey reports shall be completed within 30 days prior to construction activities, and the postconstruction survey reports shall be completed within 30 days of completion of each phase of the project and shall be submitted to the California Coastal Commission and the United States Army Corps of Engineers. The survey shall provide recommendations to avoid areas of eelgrass if determined to be present and/or provide recommendations for appropriate mitigation.

In the event that *Caulerpa* is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed disturbing activity is eliminated in accordance with the NMFS *Caulerpa* Control Protocol (NMFS 2007).

An eelgrass mitigation plan shall be developed based upon the results of preconstruction and postconstruction surveys. The plan shall require that direct losses, if any, to eelgrass vegetation shall be mitigated at a ratio of 1.2:1 (mitigation to impact), and potential eelgrass habitat shall be mitigated at a ratio of 1:1 according to requirements of the SCEMP. As detailed in the SCEMP, the actual amount of eelgrass to be mitigated shall depend on preconstruction and postconstruction surveys (refer to IP II-3 SP24).

- 4.7-3** To reduce potential impacts related to the presence of eelgrass, OC Dana Point Harbor shall hire a qualified marine biologist who shall implement the following measures during construction activities near Baby Beach and the OC Sailing and Events Center:
- A qualified marine biologist shall mark the positions of eelgrass beds with buoys prior to the initiation of any construction to minimize damage to eelgrass beds outside the construction zone. Impacts to eelgrass beds shall be avoided where practical and feasible. To assist the construction crew in avoiding unnecessary damage to eelgrass, the project marine biologist shall meet with construction crews prior to construction to review areas of eelgrass to avoid and to review proper construction techniques.
  - Barges and work vessels shall be operated in a manner to ensure that eelgrass beds are not impacted through grounding, propeller damage, or other activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels



The following measure would reduce potential construction impacts to sensitive habitats and endangered species to a less than significant level.

- 4.7-4** To reduce potential construction impacts to sensitive habitats and endangered species, OC Dana Point Harbor shall hire a qualified marine biologist who shall conduct a pre-construction marine biological survey to identify sensitive marine biological resources (i.e., eelgrass, reefs and kelp beds, and seabirds). This survey shall be used to prepare a Marine Biological Impact Reduction Plan (MBIRP) to map sensitive biological resources and minimize construction impacts to marine resources. The marine biologist shall also meet with the construction crews prior to the issuance of any construction permits or any construction activities to review sensitive areas to avoid and to review proper construction techniques. The Marine Biologist shall:
- Brief construction and work vessel crews on the potential for sea turtles to be present and provide crews with the identification characteristics of sea turtles since they may occasionally be mistaken for seals or sea lions.
  - Prepare an incident report of any green sea turtle activity in the project area and inform the construction manager to have the crew aware of the potential for additional sightings. The report shall be provided within 24 hours to the California Department of Fish and Game and the National Marine Fisheries Service.
  - A biological monitor shall be present on site during the start-up of each construction phase and periodically throughout construction activities to monitor the presence of endangered species (seabirds, marine mammals, and sea turtles). In the event that an endangered species is sighted within 100 meters (m) of the construction zone, all construction activity shall be temporarily stopped until the animal is safely outside the outer perimeter of construction. The on-site biological monitor shall have the authority to halt construction operation and shall determine when construction operations can proceed.
  - In the event a marine mammal is injured or killed as a consequence of a vessel collision, the vessel operator and OC Dana Point Harbor shall immediately notify the National Marine Fisheries Service (Southwest Division) and shall submit a written follow-up report within 24 hours of the incident.
  - Monitor the construction process on a regular basis to ensure that all water quality Best Management Practices (BMPs) are implemented and to assist the project engineer in avoiding and minimizing environmental effects to Harbor marine biological resources.

The following measure would reduce impacts to sensitive or protected birds to a less than significant level.

- 4.7-5** Prior to issuance of any demolition or construction permits, OC Dana Point Harbor shall ensure that the following provisions are incorporated into the final project plans for the purpose of protecting migratory and sensitive nesting birds (blue herons, snowy egrets, the black crowned night heron, owls and raptors) within the study area during construction:

- If construction activities are performed during the breeding and nesting season (January through September), a preconstruction survey within 500 feet (ft) of the site for nests shall be performed by a qualified biologist at least 15 days prior to construction to document the presence/absence of all these species;
- If an active nest of any bird species listed pursuant to the federal or California Endangered Species Act, California bird species of special concern or a wading bird (herons or egrets), as well as owls or raptors, is found, construction activities within 300 ft (500 ft from any identified raptor nest) shall not exceed noise levels of 65-decibel (dB) peak until the nest is vacated and juveniles have fledged and there is no longer evidence of a second attempt at nesting.
- The qualified biologist shall monitor active nest sites on a weekly basis. If the biologist notes that all young have fledged from the nest, then the noise restriction near the nest is no longer required.

The following measure would reduce potential pile-driving noise impacts to marine mammals to a less than significant impact.

**4.7-6** To ensure that potential pile-driving noise impacts to marine mammals remain less than significant, OC Dana Point Harbor shall ensure that the following provisions are incorporated into the final project plans for the proposed project:

- The contractor shall use sound abatement techniques to reduce noise and vibrations from pile-driving activities. Recommended sound abatement techniques shall include, but are not limited to, vibration or hydraulic insertion techniques, drilled or augured holes for cast-in-place piles, bubble curtain technology, and sound aprons if feasible for the project.
- At the initiation of each pile-driving event and after breaks of more than 15 minutes, the pile driving shall employ a “soft-start” in which the hammer is operated at less than full capacity (i.e., approximately 40–60 percent energy levels) with no less than a 1-minute interval between each strike for a 5-minute period. The operation of the hammer at 40–60 percent energy level during the soft start of pile driving is expected to result in similar levels of noise reduction (40–60 percent) underwater.

The following measure would reduce potential long-term water quality-related impacts to marine life to a less than significant level.

**4.7-7** To reduce potential long-term water quality-related impacts to marine life, OC Dana Point Harbor shall, prior to occupancy of any new dock or slip facilities, provide boater education material to tenants as part of lease materials, and to reduce the potential for water quality and degradation of Dana Point Harbor marine resources by boaters. In addition, OC Dana Point Harbor shall provide the following to boaters:

- A copy of all applicable regulations regarding vessel discharges of wastes, antifouling paint use, and refuse management (including handling of hazardous wastes);

- Information regarding procedures for notifying appropriate authorities regarding spills of hazardous materials, containment measures, and applicable penalties for violations;
- A regular cleaning schedule of the Marina dock facilities and vacuum sweeping of the parking lots;
- Adequate signage to identify the location off pump-out stations and hours of operation;
- A regular inspection and maintenance schedule for the pump-out facility;
- Educational information about the pump out station to tenant boaters;
- A list of existing local, State, and federal regulations that will be enforced pertaining to marine sanitation devices and the illegal discharge of boat sewage; and;
- A list of other local pump-out locations shall be made available to boaters.

#### **4.7.7 CUMULATIVE IMPACTS**

The study area for cumulative impacts to biological resources is the areas that could be affected by the proposed project and the areas affected by other projects whose activities could directly or indirectly affect the marine environment in the Harbor. As discussed above, impacts related to biological resources are confined to the marine resources within the Harbor. The projects included in the cumulative list are projects are primarily inland developments that would not impact the aquatic biological resources in the Harbor. Because impacts to the Harbor's biological resources would be negligible as a result of these projects, potential impacts will not contribute to potential cumulative impacts on marine resources.

Shading impacts to marine biological resources due to new and additional dock coverage of water surfaces are considered significant and adverse for the temporary docks along the Eastern breakwater. Because the temporary docks will be present for up to eight years, or the duration of construction activities, and because there is no feasible mitigation to reduce shading impacts with the current project design, shading impacts in the temporary dock area are considered a significant and unavoidable adverse construction-related impact, but not a permanent impact of the project once the docks are removed. However, if the temporary dock were to remain in place as a yacht broker dock, the shading impacts associated with this dock would be permanent and would be considered a significant and unavoidable adverse impact.

The proposed project does not increase the overall operational square footage of dock space, and therefore, the project's cumulative contribution to marine shading impacts is not considered cumulatively significant.

All other biological impacts would be reduced to less than significant levels with implementation of the proposed mitigation and adherence to the Mitigation Measures contained in the Program EIR and incorporated into the Marina Improvement Project.

#### **4.7.8 SIGNIFICANT UNAVOIDABLE IMPACTS**

Shading impacts in the temporary dock area are considered a significant and unavoidable adverse construction-related impact, but not a permanent impact of the project. Once construction has been completed and the temporary docks have been removed, shading impacts will no longer occur. However, if the temporary docks were to remain in place as yacht broker docks, and because there is no feasible mitigation to reduce such impacts, the shading impacts associated with these docks would be considered a permanent significant and unavoidable adverse impact.

With implementation of the stated Mitigation Measures, all of the other potentially adverse significant impacts to Biological Resources are reduced to less than significant levels.

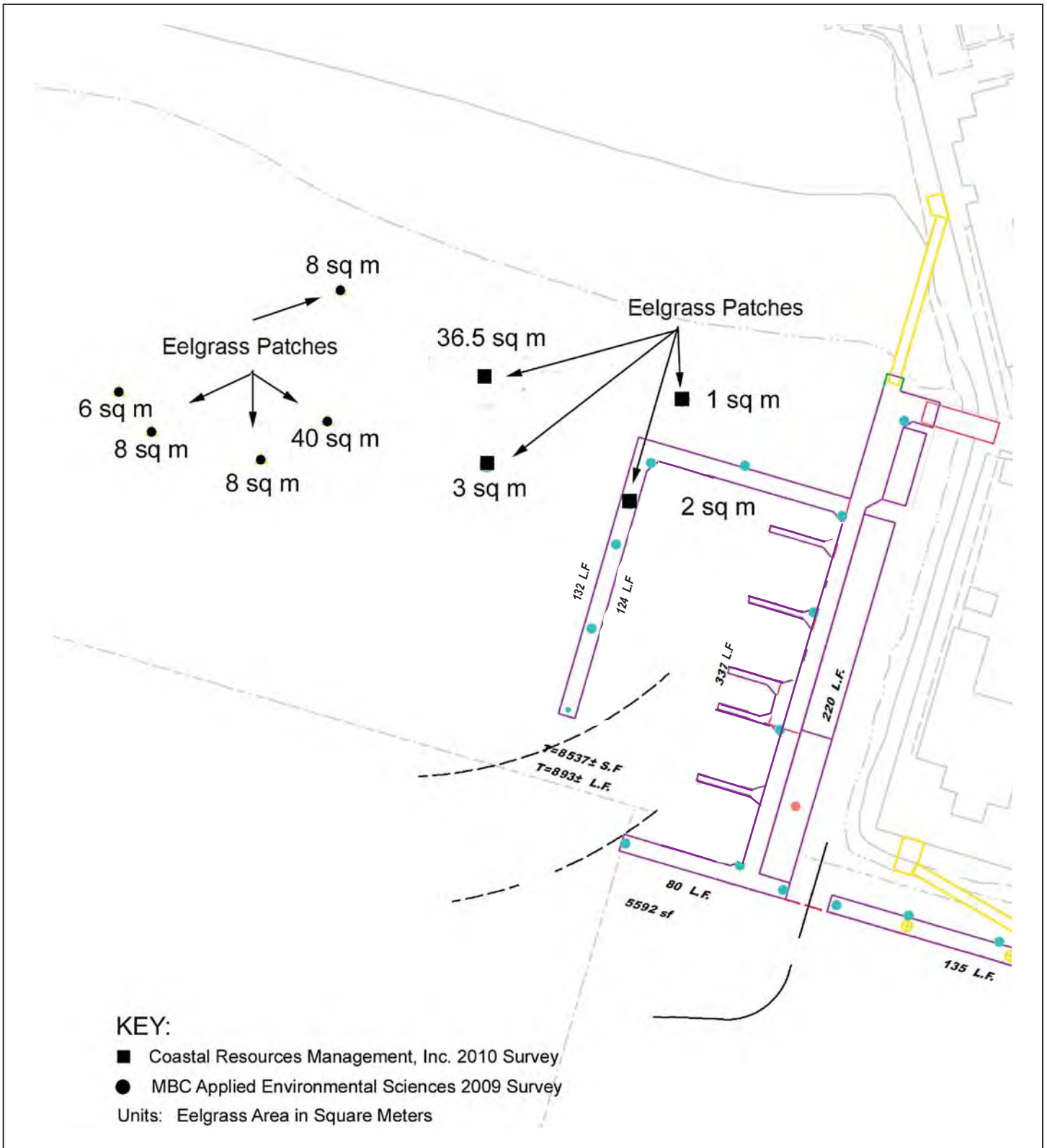
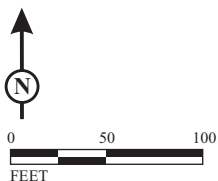


FIGURE 4.7-1

LSA



Dana Point Harbor Marina Improvement Project  
Eelgrass Locations - OC Sailing and Event Center Docks

## 4.8 AESTHETICS

This section provides a discussion of the aesthetic resources within the Dana Point Harbor Marina Improvement Project area, and the project's effects on these resources and views. This section describes the existing landform and aesthetic character of the project area and describes views of the project site from the surrounding area and on-site vantage points. The potential visual changes resulting from implementation of the proposed project are addressed with consideration of local, State, and federal regulations and policies. This section also provides recommended mitigation measures pursuant to the California Environmental Quality Act (CEQA).

### 4.8.1 EXISTING SETTING

#### **Project Location**

The Harbor is bordered by the Pacific Ocean to the south; Dana Headlands and Old Cove Marine Preserve to the west; Doheny State Beach to the east; and a variety of commercial, residential, and recreational land uses on the north.

The Harbor consists of the East and West Marinas, and includes County-operated park, picnic and beach areas adjacent to the waterside areas of the Marina. The Harbor is located in the vicinity of regionally recognized natural features and/or recreation areas, as described below.

#### **Surrounding Area Visual Character and Views of the Project Area**

**North.** The majority of the area north of the Harbor consists of coastal bluffs. A small center containing retail and restaurant uses is located at the northwest corner of the Dana Point Harbor Drive/Street of the Golden Lantern intersection. Lantern Bay Park, which is located north of the Harbor, consists of a large grassy open space area available for active and passive recreational uses. Heritage Park is located west of the shopping center and includes a terraced lawn providing picnicking and additional passive recreational opportunities. The existing Harbor facilities are visible from the coastal bluffs above; however, mature trees partially obstruct views of the Harbor area. The Pacific Ocean, located beyond the Harbor, is visible from the coastal bluffs. Views southward from the Street of the Golden Lantern are of mature landscaping to the east and west, partially obstructing the Harbor facilities and commercial buildings located within the Commercial Day Use area. Farther west, views of the marine services area and the associated Harbor facilities are visible from Pacific Coast Highway (PCH).

**East.** Doheny State Beach is a wide sandy public beach, extending eastward from the Harbor's eastern jetty. Views of the project area from Doheny State Beach include the eastern jetty and a portion of the southern jetty, the shipyard, surface boat storage, and surface auto parking areas. The County operates a beach park with metered parking between the State Park and the jetty. Views into the Harbor from Doheny Beach are limited due to intervening vegetation, the jetty and structures.

**South.** The Pacific Ocean is located south of the project area. Views of the project area from boats traveling on the Pacific Ocean include the eastern jetty and southern jetty. Portions of the rooftops of the two-story structures located within East and West Island are also visible from the ocean.

**West.** Restaurants, multifamily and single-family residences, and hotels are located to the northwest and north of the site, on the top of the bluffs overlooking the Harbor area. While existing Harbor facilities are visible from these coastal bluffs, mature trees partially obstruct views of the Harbor. Further west on a coastal bluff is the Dana Point Headlands, a 121 ac property currently under construction and proposed for mixed-use development. The Pacific Ocean and the distant horizon, located beyond the Harbor, are visible from the coastal bluffs.

### **Harborwide Visual Character**

The Harbor Marinas are characterized by open and expansive views of the horizon, bluffs, jetty, the island bridge within the Marina, the sky, and dense urban development in the surrounding area. The Harbor may be visually divided into landside and waterside attributes of the East and West Marinas. The existing Harbor area is fully developed, being comprised of buildings of varying height, surface parking areas, meandering walkways, large open space grass areas with picnicking facilities, native and nonnative vegetation, rock and concrete jetties, seawalls and breakwaters, and boat slips and docks.

### **Project Site Visual Character**

The project site is an existing fully developed Marina; surrounding areas are completely built out and are characterized by recreational and marine commercial land use types. The Marina is configured into four quadrants, as delineated by landside (typically referred to as the cove side) facilities on the north and an artificially created island to the south, both of which are bisected by an access bridge. A rock breakwater to the south provides wave protection from the Pacific Ocean. In both the West and East Marinas, the primary natural feature is water. This artificially calm water zone exemplifies nature transformed by human activity and is the area's most important visual feature. Other elements that contribute to the visual setting include the boats, sailboat masts, piers, docks, boat slips, gates, seawalls, access roads, surface parking lots, sidewalks, grassy and planted areas, and additional buildings outside the project area in the landside commercial areas including restroom facilities, a hotel, retail shops, boat dealers, offices, and restaurants.

The project site is characterized by boats berthed in the Marinas and gangways leading down to the concrete boat docks below. The West and East Marinas consist of a combination of single-berth and side-tie dock space providing berthing to approximately 2,409 small craft.

The Marinas are fully sheltered from the open ocean by the 8,000 linear feet (lf) of the West Breakwater. The shoreline interface of Dana Point Harbor is protected by a combination of vertical bulkhead and side slope protection. The basin side slopes are protected within the mooring basins by

a grid of concrete panels set on grade. Areas outside of the mooring basins are armored with stone riprap.

## Scenic Corridors and Roadways

Within the project vicinity, the County of Orange General Plan identifies the Street of the Golden Lantern as a landscape corridor and PCH as a viewscape corridor. In addition, scenic resource areas and roadways are identified around Dana Point Harbor and include: the shore, Dana Point Harbor Drive, Dana Drive, Island Way, Street of the Golden Lantern, and portions of PCH located south of the Harbor.

## Light and Glare

Sources of light and glare located in the project vicinity include the commercial uses in the Harbor and the restaurant, hotel, and residential uses located on the bluffs overlooking the site to the north and west. Light sources include street and security lighting in addition to interior building lighting. Glare is generated from reflective surfaces on buildings and residential uses. Vehicles also generate small amounts of light and glare from car headlights.

The existing uses in the Marina produce light and glare typical of a small-craft Harbor, with relatively limited high-intensity lighting. Existing on-site light sources include security lighting and flood lighting at the boat docks. Light fixtures throughout the Marina include bulkhead lights with large unshielded lamps located at the seawalls along the channels. Glare generation in the Harbor is predominantly a nighttime event as there are few metallic (i.e., reflective) surfaces on existing facilities. With the exception of the Ocean Institute, there are no buildings that have large glass or polished surfaces. On-board boat lighting and the water surface of the Harbor waters and Pacific Ocean beyond provide additional sources of light and glare.

As stated in the Dana Point Harbor Revitalization EIR, to regulate the level and intensity of lighting uses in the Harbor, five lighting zones have been proposed with illumination characteristics from very dark to high. The waterside Marina is designated as Lighting Zone 2, which is characterized by dark illumination with a maximum 55 wattage. This lighting will utilize directional lighting techniques and low wattage bulbs (without compromising safety and security) that direct light downward and minimize light spillover. All outdoor lighting fixtures would be installed in conformance with the approved LCP policies and requirements and County of Orange Lighting Standards.

## Trees

All of the trees within Dana Point Harbor, including the native trees, were planted as landscaped ornamental trees. Of the approximately 525 eucalyptus (*Eucalyptus* sp.) trees, a nonnative species, approximately 175 are large with good ecological or aesthetic value; the remaining trees are small or leggy, with little canopy cover. Approximately 40 native California sycamore (*Plantus racemosa*) trees are located east of Island Way. The sycamore trees throughout the Harbor are typically large and healthy. Also located throughout the Harbor are approximately 25 pines (*Pinus* sp.) that are generally less than 20 feet (ft) in height. Additionally, there are Norfolk Island pines (*Araucaria heterophylla*) located near the OC Sailing and Events Center. Other common trees included Coral trees (*Erythrina*



sp.), Bay Fig (*Ficus macrophylla*), and various species of palm. None of the above-identified trees are proposed to be removed as part of the proposed Marina Improvement Project.

### Scenic Viewpoints/Viewsheds

PCH and Dana Point Harbor Drive offer limited long-range to mid-range (1–4 miles [mi]) scenic views of the Harbor and ocean, which are currently obstructed by existing landscaping and Harbor buildings. The project site is visible from a number of publicly accessible points that offer short-range views (less than 1 mi), including sidewalks along the Harbor, bridge sidewalks on the Island, and several Harbor facilities located around the Marinas. From nearby locations, the most prominent visual attributes of the project site are the Harbor and Pacific waters, boats, and masts of boats berthed in the Marinas.

Eight viewpoints were selected to represent the existing views of the project site. Views were captured from within the Harbor and areas adjacent to the Harbor. Existing views of the project site from surrounding areas and on-site locations are described below. The location of each viewpoint is shown on Figure 4.8-1, and existing views of the project site are shown on Figures 4.8-2–4.8-5.

**Key View 1: View of the Harbor Facilities from Cove Road.** Key View 1 (Figure 4.8-2) faces east and presents a typical panoramic view of both West and East Marinas from Dana Point Headlands. The Harbor's maritime setting is characterized by boats berthed in the Marina behind a breakwater. In both the West and East Marinas, the primary natural feature is water. This artificially calm water zone exemplifies nature transformed by human activity and is the area's most important visual feature. Other elements that contribute to the visual setting include Baby Beach, the riprap seawall on West Island, access roads, surface parking lots, grassy and planted areas, and additional buildings outside of the project boundaries. The Harbor is visually divided into four quadrants, separated east and west by the Island Way Bridge and north and south by the Harbor's inner channel. The commercial areas surrounding the project site are somewhat masked by the large ornamental trees located throughout the Harbor.

**Key View 2: View of the West Marina from the West Cove Boardwalk.** Key View 2 (Figure 4.8-2) faces south from West Cove and presents a typical view of boats berthed in West Marina. The primary visual features within this view include the water, berthed boats, and tall masts. Other elements that contribute to the visual setting include docks, pilings, and seawalls, and in some locations, the gangways, gates, adjacent restroom facilities, surface parking lots, sidewalks, and grassy and planted landscaped areas. The boats in the West Marina are configured in a north-south direction. Direct views of the ocean, ocean breakwater, or the ocean horizon are limited within the foreground of the Marinas.

**Key View 3: View of the East Marina from the East Cove Boardwalk.** Key View 3 (Figure 4.8-3) faces south from East Cove and presents a typical view of boats berthed in East Marina. Similar to West Marina, the primary visual features within this view includes the water, berthed boats, and tall masts; however, the main differences from West Marina are the east-west configuration of the boats and the denser appearance of the berthed boats.

**Key View 4: View of the OC Sailing and Events Center.** Key View 4 (Figure 4.8-4) faces east from the pier and presents a typical view of the Orange County Sailing and Events Center docks. The primary visual feature includes OC Sailing and Events Center buildings outside of the project area and OC Sailing and Events Center docks within the project area. Baby Beach, located north of the OC Sailing and Events Center, is also visible from this viewpoint.

**Key View 5: View of the Harbor Patrol Docks facing West.** Key View 5 (Figure 4.8-4) faces west from the end of East Island and presents a typical view of the Harbor Patrol facilities. Similar to the rest of the boats in East Basin, the Harbor Patrol boats are oriented in an east-west configuration. The Harbor Patrol docks appear less dense than the surrounding docks, having larger areas of open water surrounding them.

**Key View 6: View of Marine Services Docks.** Key View 6 (Figure 4.8-5) faces northeast near the boat launch toward the marine services docks. This view shows boats of varying sizes berthed in both east-west and north-south configurations. The primary visual features are the water, boats and masts, and the marine services buildings outside the project area.

**Key View 7: View of the East Turning Basin and East Breakwater.** Key View 7 (Figure 4.8-5) faces northeast from the end of East Island toward the east breakwater and includes views of the fuel dock and bait barge. The primary visual feature includes the open water and east breakwater. Other elements that contribute to the visual setting include the hills and residences in the distant background.

## 4.8.2 REGULATORY SETTING

### California Coastal Act

The project site is located entirely within the Coastal Zone and is subject to regulation under the California Coastal Act of 1976 (CCA). The Harbor is under the land use planning and regulatory jurisdiction of the City of Dana Point (landside areas) and the California Coastal Commission (CCC) (waterside areas).

The policies included in Article 6 of the California Coastal Act (CCA) are intended to protect the scenic beauty of the coastal landscape as a resource of public importance. The following Coastal Act policy is relevant to the Dana Point Harbor Revitalization Plan in terms of scenic and visual resources:

Coastal Act §30251 provides, in part: *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas.*

### **Dana Point Harbor Revitalization Plan and District Regulations**

Implementation of the Dana Point Harbor Revitalization Plan required a series of subsequent approvals by the City of Dana Point and the CCC to modify existing regulatory documents, including the City's LCP. The Revitalization Plan and District Regulations therefore required an LCP Amendment (LCPA). The LCPA includes a Land Use Plan (LUP) component and an Implementation Plan (IP) component, which together establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the Coastal Act. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

The Dana Point Harbor Revitalization Plan and the proposed Marina Improvement Project are consistent with the goals and provisions of the Coastal Act. The Plan identifies its compatibility with Section 30251 of the Coastal Act related to aesthetic resources, as identified above.

Dana Point Harbor Revitalization Plan and District Regulations provide the following Scenic and Visual Resource Policies applicable to the Marina Improvement Project:

- 8.4.1-1** Protect and enhance public views to and along the coast through open space designations and innovative design techniques. (Coastal Act Section 30251)
- 8.4.1-2** Ensure development within designated and proposed scenic corridors are compatible with scenic enhancement and preservation and shall not significantly impact public views through these corridors. (Coastal Act Section 30251)
- 8.4.1-3** Site and architectural design shall respond to the natural landform whenever possible to minimize grading and visual impact. (Coastal Act Section 30251)
- 8.4.1-9** All exterior lighting will be designed and located to avoid intrusive effects on the adjacent uses atop the bluffs and Doheny State Beach. New light fixtures will be designed to direct light on-site, away from other areas and where feasible (not interfering with public safety), minimize impacts to nesting birds or other sensitive biological resource areas within the boundaries of the LCP. (Coastal Act Section 30251)

## County of Orange

**General Plan.** According to the Orange County General Plan, the County coast is recognized as offering a variety of coastal forms from sandy beaches, tidelands, and marine refuges to scenic viewpoints and Harbors. Therefore, the County acknowledges the importance of provision, enhancement, and protection of scenic vista points from publicly accessible places.

The Transportation Element of the County's General Plan contains three components: Circulation Plan, Bikeways Plan, and the Scenic Highways Plan. The Scenic Highways Component of the General Plan identifies the County's scenic highway routes. The primary purpose of the Scenic Highways Component is to define the policy guidelines pertaining to implementation of the Scenic Highways Plan. The Scenic Highways Plan attempts to incorporate safety, utility, economy, and aesthetics into the planning, design, and construction of scenic highways. The following goals, objectives, and policies pertain to the project vicinity:

*Goal 1: Preserve and enhance unique or special aesthetic and visual resources through regulation of development within the scenic corridor.*

*Objective 1.4 Preserve established Scenic Highways in order to protect the existing scenic qualities of these corridors.*

**Zoning Code.** The County of Orange Zoning Code includes standards for the use of night lighting to maintain adequate security of public areas and to minimize glare to surrounding properties by shielding sources of light and directing light in a downward fashion. All lighting fixtures selected to replace existing lighting will be in conformance with all applicable County of Orange requirements.

## City of Dana Point

The City of Dana Point General Plan Conservation/Open Space Element includes goals and policies to protect significant views and public access to the ocean and Harbor. The following goal and policies are applicable to the proposed Marina Improvement Project:

**Goal 6:** Encourage open space areas to preserve natural resources.

**Policy 6.2:** Protect and preserve the public views of the Dana Point Harbor. (Coastal Visual Resources Section 30251)

**Policy 6.4:** Preserve and protect the scenic and visual quality of the coastal areas as a resource of public importance as depicted in figure COS-5 "Scenic Overlooks from Public Lands", of this Element. Permitted development shall be sited and designed to protect public views from identified scenic overlooks on public lands to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. (Coastal Act Section 30251)

The Circulation Element of the City's General Plan identifies PCH as a designated urbanscape corridor. In addition, Dana Point Harbor Drive is identified and is considered to be a scenic corridor.

### 4.8.3 METHODOLOGY

To assist in the assessment of potential visual impacts associated with implementation of the proposed project, existing viewsheds, visual resources, and existing viewer groups were identified and characterized above. The potential visual changes resulting from project implementation were identified based on field reconnaissance, photographs taken from on- and off-site vantage points, and aerial photographs.

### 4.8.4 THRESHOLDS OF SIGNIFICANCE

Whether or not a project has an aesthetic impact is not quantifiable; therefore, a qualitative analysis is provided. The impact significance criteria used for this analysis are based on the Initial Study Checklist contained in Appendix G of the State CEQA Guidelines for aesthetics. The proposed project is deemed to have a potentially significant aesthetic impact if implementation of the project would:

- Have a substantial adverse effect a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

### 4.8.5 OVERVIEW OF PROGRAM FEIR AESTHETICS ANALYSIS

**Impacts.** The Program FEIR concluded that grading and construction activities associated with the Revitalization Project would temporarily affect the existing visual character and quality of the project site and its surroundings. However, analysis concluded that construction impacts are considered less than significant with implementation of the recommended Mitigation Measures. The Program FEIR concluded that the long-term operation of the Revitalization Project would affect views of the Harbor from surrounding roadways, parks, and State beaches; may create a new source of light and glare, which will adversely affect day and/or nighttime views in the area; and may obstruct scenic resources along State or local scenic highways. The Program FEIR concluded that impacts to scenic resources along State or local scenic highways and light and glare impacts were less than significant with implementation of Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs). However, the impacts to views of the Harbor from surrounding roadways, parks, and State Beaches were found to be significant and unavoidable even with implementation of PDFs and SCA.

Cumulatively, the Revitalization Project, along with landside Commercial Core projects and other future development, may result in alterations to the aesthetic character and quality of the project area. The Program FEIR concluded that cumulative aesthetic impacts would be less than significant.

PDFs, SCAs, and MMs identified in the Program FEIR and applicable to the Marina Improvement Project are listed below. During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

- PDF 4.2-9** The design and layout of the future developments shall be consistent with the approved Land Use Plan and preserve views of the bluff area. (LUP Policy 8.2.1-7)
- PDF 4.2-19** All exterior lighting will be designed and located to avoid intrusive effects on the adjacent uses atop the bluffs and Doheny State Beach. New light fixtures will be designed to direct light on-site, away from other areas and where feasible (not interfering with public safety), minimize impacts to nesting birds or other sensitive biological resource areas within the boundaries of the LCP. (LUP Policy 8.4.1-9)
- MM 4.2-4** Prior to the issuance of a building permit, an Exterior Lighting Plan (including outdoor recreation areas) for all proposed improvements shall be prepared. The lighting plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property. The Lighting Plan shall be subject to review and approval by OC Dana Point Harbor.

**Level of Significance after Mitigation.** The Program FEIR concluded that despite compliance with SC and MM, the Revitalization Project would result in significant and unavoidable impacts to views of the Harbor from surrounding roadways, parks, and State beaches.

## 4.8.6 IMPACTS AND MITIGATION

### Potentially Significant Impacts

#### **Degradation of the Existing Scenic Vistas, Visual Character, or Quality of the Site and its Surroundings.**

The project site is located within Dana Point Harbor, which contains several vantage points for scenic views of the Harbor and ocean. In addition, there are numerous vantage points from the coastal terrace and other high points along the coastline, which are identified as significant public view resources in the City's General Plan. The proposed project has the potential to temporarily alter the views to the West and East Marinas. The purpose of the docks and slip improvements is to improve access, provide safer boating for the users of the Marina (Americans with Disabilities Act [ADA] compliance), meet State design criteria, and accommodate changing demands and trends in boater needs. The project site is an existing Harbor and already serves as a boating facility for local and regional boaters. Therefore, the proposed project would not substantially alter the maritime character of the Harbor.

The proposed project consists of a number of improvements to the West and East Marinas that have the potential to impact the visual character or quality of the site. These improvements include new gates and gangways, new lighting, new docks and pilings, and the temporary dock near the east breakwater. Each of the dock areas with significant improvements were shown in Figures 4.8-2–4.8-5. Changes to these views are described below.

**Key View 1: View of the Harbor Facilities from Cove Road.** Key View 1 faces east and presents a typical panoramic view of both East and West Marinas from Dana Point Headlands. This type of similar view can be found from other nearby locations on the bluffs. Viewers from this vantage point would be able to see many of the construction activities throughout the Marina. The construction activities would impact the existing public views from lookout points in the vicinity of the Harbor. Large construction equipment such as cranes would easily be visible from this location. In addition, distant views would include the temporary docks located near the east breakwater that would occupy space that is currently open water. Upon project completion, the temporary docks may become docks for some yacht brokers who currently have docks in the East and West Basins, subject to separate agency approvals. However, the temporary/yacht broker docks would be consistent with the maritime character of the Marinas and would not substantially change or degrade the visual character or quality of the site. Implementation of Program FEIR PDF 4.2-4 and 4.2-7 and Mitigation Measures 4.8-1 and 4.8-2 would help to reduce the visual impact associated with construction equipment. Implementation of the PDFs and Mitigation Measures would reduce impacts associated with construction to less than significant levels.

After construction is complete, the boat docks in the Marina would be reoriented into the new configurations, as outlined in the Project Description, Figure 3-4. The viewer might notice the change in boat orientation and the additional docks in the East Marina; however, these distant views would not be substantially different from existing conditions and would not be a significant effect of the project.

**Key Views 2 and 3: View of the West and East Marina from the Cove Sidewalk.** Key Views 2 and 3 face south from the Cove and present a typical view of boats berthed in the West and East

Marinas. Impacts to these views were combined because the impacts in both Marinas would be similar. Reconfiguration of the Marina slips and docks will be conducted within nearly the same footprint as the existing Harbor; therefore, no substantial long-term changes to the viewshed would occur. The viewshed within the Marinas would remain nearly the same. The proposed project may result in the improvement in the visual quality and character of site as it renovates the deteriorating Marina and replaces it with aesthetically pleasant, new facilities.

Boats are a component of the existing views at the Marina, and would not substantially change the visibility of boats within the project area.

The proposed project would also alter the orientation of slips in the West Marina from a north-south configuration to an east-west configuration, similar to the existing condition in the East Marina. Therefore, dock layout would exhibit a more regular and uniform configuration between the two Marinas. This slip orientation would provide views of the broadside of some boats in West Marina, as opposed to views of the narrower bows or sterns. The reconfiguration of these slips would not substantially degrade or obstruct any scenic view, nor significantly alter the existing maritime character of the Marina.

Implementation of the proposed project includes installation of new gates and gangways. The existing Marinas currently do not have gangways that comply with ADA requirements. The proposed ADA compliant gangways would be 80 ft long. Two ADA gangways would be located in East Marina, two in the West Marina, two at the OC Sailing and Event Center docks, and one each at the Embarcadero/Dry Boat Storage Staging docks, the Sport Fishing docks, the guest slips/dinghy docks, and the temporary/yacht broker docks. However, the increased size of the gangways would be consistent with the overall maritime character of the Marinas and would not result in a significant impact on the aesthetic character of the Marinas.

Replacement of the East and West Marinas would result in encroachment into the inner channel. Both the East and West Marinas would result in a 20 ft encroachment on both the north and the south sides (for a total of 40 ft), with only a 20 ft encroachment at the entrances of the East and West Basins. The encroachment tapers back to 0 ft adjacent to the island bridge in order to allow vessels to more easily turn around at the bridge if needed (refer to Figure 3.13, Project Description). While this will reduce the open water between the cove and island side, the visual impact associated with the encroachment would be negligible. Viewers most sensitive to this change would be the boaters; however, this change is consistent with the existing maritime character of the Harbor. The visual impact associated with the encroachment into the inner channel would be less than significant.

Construction activities would temporarily change the physical character and quality of the Marinas. The construction phase would affect views from several vantage points from within the Marina, including Harbor restaurants. The views from the site will be limited and encroached upon due to the use of construction equipment. These visual impacts would be temporary and would cease upon project completion. Implementation of Program FEIR PDF 4.2-4 and 4.2-7 and Mitigation Measures 4.8-1 and 4.8-2 would help to reduce the visual impact associated with construction equipment. Implementation of the PDF and Mitigation Measures would reduce impacts associated with construction to less than significant levels.



**Key View 4: View of the OC Sailing and Events Center Docks.** Key View 4 faces east from the pier and presents a typical view of the OC Sailing and Events Center docks. The proposed project would add only 3 lf to the existing docks. Therefore, the surface area of the dock facilities in this area would not significantly increase. Viewers would see the encroachment of the docks into the west basin near Baby Beach because the docks would extend to the west of the seawall in this view. An ADA-compliant gangway would be located at the end of the OC Sailing and Events Center buildings to provide access to the docks located on the west side of the OC Sailing and Events Center buildings. The proposed changes on the west side of the OC Sailing and Events Center buildings would not intensify the density and the overall character and quality of the area would be generally similar to existing conditions. Therefore, impacts associated with the improvements in the OC Sailing and Events Center area would be less than significant, and no mitigation is needed.

**Key View 5: View of the Harbor Patrol Docks.** Key View 5 faces west from the end of East Island and presents a typical view of the Harbor Patrol facilities. Visual impacts to the Harbor Patrol docks would not significantly change. The proposed project plans indicate that one long dock near the channel will be renovated as a platform dock area. The platform design meets the Harbor Patrol's needs for emergency boat access and provides more deck space for potential emergency situations. The number of slips for the Harbor Patrol remains the same as under existing conditions at eight slips plus two emergency side-ties. The density in this area will not increase and will continue to be consistent with the overall maritime character of the Harbor. Therefore, impacts in this area are considered less than significant, and no mitigation is needed.

**Key View 6: View of the Marine Services Docks.** Key View 6 faces northeast near the boat launch toward the Marine Services docks and a portion of the future Dry Boat Storage Staging docks. The proposed project would add approximately 534 lf to the Embarcadero/Dry Boat Storage Staging docks in this area and would reduce the dock space currently allocated for marine services by approximately 294 lf; therefore, the surface area of the combined dock facilities would increase by approximately 240 lf. In addition to the docks, the Dry Boat Storage building, which was a part of the landside improvements addressed in the certified Program FEIR, will be supported on piles and will extend out over portions of the new docks. The Embarcadero/Dry Boat Storage Staging docks will continue to provide dock space for Embarcadero Marina operations, as well as for staging boats as they are taken in and out of the storage building.

Because the surface area of the dock facilities in this combined area would increase, the overall area may appear visually denser than existing conditions, but would still be consistent with the overall maritime character of the Harbor. Therefore, impacts in this area are considered less than significant, and no mitigation is needed.

**Key View 7: View of the Fuel Dock near the East Breakwater.** Key View 7 shows the east breakwater, where the temporary and possible yacht broker docks will be located. The visibility of the boats in this area would be a new visual element and would require relocation of the bait barge a short distance to the northeast. As stated previously, conversion of the temporary docks any permanent dock use would be subject to separate agency approvals.

The temporary/yacht broker docks would be visible from multiple areas throughout the Harbor. The addition of the temporary docks would not result in an adverse visual effect because the temporary docks would be visually consistent with the maritime character of the Harbor and would not significantly obstruct views. The potential continued use of the temporary docks as yacht broker docks would alter the visual character near the Harbor entrance by permanently placing boats in an area that is currently open water. In addition, the yacht broker docks could restrict the foreground view of the hillside in the distance, as viewed from the water, and result in a visibly more dense area than exists today. Whether the placement of permanent docks in open water is an adverse visual impact is a subjective opinion and varies from person to person. However, as stated above, the placement of these docks would be consistent with the overall maritime character and uses of the Harbor.

**Damage to Scenic Resources, including Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway.** PCH, which is a designated State Scenic Highway, is located north of the proposed project site. However, there are no scenic resources such as trees, rock outcroppings, or historic buildings in the immediate project area. The proposed project is an improvement of the waterside Marina and does not anticipate removal of any vegetation, including mature stands of trees within the viewshed of a State Scenic Highway. Therefore, no impacts to a State Scenic Highway are anticipated, and no mitigation is required.

Dana Point Harbor Drive, located adjacent to the Marina facilities, is designated as a Scenic Highway in the City's General Plan. Construction activities would have the potential to impact portions of the view of the project area from these streets. However, these impacts would be temporary during construction and would cease upon project completion. Nonetheless, Program FEIR PDF 4.2-4 and 4.2-7 and Mitigation Measures 4.8-1 and 4.8-2 have been proposed to minimize impacts associated with construction on the views from these streets. Implementation of the PDF and Mitigation Measures would reduce impacts associated with construction to less than significant levels.

**New Sources of Light and Glare.** The proposed project would include replacement of the existing lighting on the docks. The replacement lighting would be low-intensity lighting directed downward, with minimal spillover and would not substantially increase the amount of light and glare on site. Likewise, the replacement lighting would not increase the intensity of light to sensitive viewers such as residences in the surrounding area due to the distance and intervening uses between residences and the Marina. Therefore, the proposed project would not substantially increase the amount of light and glare on site and would not increase the intensity of light to sensitive viewers in the surrounding area. However, to ensure that light and glare are designed to minimize off-site spillage, Program FEIR PDF 4.2-19 and Mitigation Measure 4.8-3 are proposed to reduce impacts associated with lighting. Implementation of the PDF and Mitigation Measure 4.8-3 will ensure that potential impacts related to light and glare are reduced to a less than significant level.

### **Less than Significant Impacts**

No less than significant impacts were identified, and no mitigation measures are required.

## Mitigation Measures

The following measures are proposed to reduce the visual impact associated with construction equipment and materials to a less than significant level.

- 4.8-1** To reduce the visual impact associated with construction equipment and materials, OC Dana Point Harbor shall prepare a Construction Management Plan that establishes access and staging locations for construction equipment, separate from those used by the general public. The contractor's construction equipment and supply staging areas shall be established away from existing Marina operations. The Plan shall specify the following:
- During construction and grading, the Contractor shall keep the site clear of all trash, weeds, and debris.
  - The grading contractor shall not create large stockpiles of debris or soils, but shall seek to place smaller piles adjacent to each other to minimize visual impacts.
- 4.8-2** To reduce the visual impact associated with construction equipment and materials, the Director, OC Public Works (OC PW)/Subdivision and Grading, or designee, shall require OC Dana Point Harbor to provide screened construction fencing around the construction staging area to temporarily screen views of construction equipment and materials. The construction screening shall be in place prior to issuance of any construction permit for development within the Marinas (refer to Land Use Plan [LUP] I-8.1.1-30 and FEIR No. 591, Mitigation Measure 4.2-2).
- 4.8-3** To reduce impacts associated with lighting, an Exterior Lighting Plan (including outdoor recreation areas) for all proposed improvements shall be prepared prior to the issuance of a building permit. The lighting plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are directed downwards, confined to the property, away from other areas and, where feasible, to minimize impacts to sensitive biological resource areas. The Lighting Plan shall be subject to review and approval by the Director, OC Dana Point Harbor (refer to FEIR No. 591, Mitigation Measure 4.2-4).

## 4.8.7 CUMULATIVE IMPACTS

The cumulative study area for aesthetics impacts is limited to the immediate vicinity of the project area. Cumulative impacts occur when impacts from a proposed project combine with impacts from other past, present, or reasonable foreseeable projects in a similar geographic area and overall contribute to degradation of the existing view. Currently, there are several projects that would be considered within the cumulative study area for aesthetic impacts. The following projects are projects that are proposed or approved but are not yet fully constructed:

- The Headlands – Commercial 35,000 sf Retail/Office (CUP/CDP/SDP approved in 2007)
- The Headlands – Seaside Inn 90 Room Hotel (CDP not yet approved but included as part of HDCP approval)
- The Headlands – Custom Homes 118 SFD (CDPs approved, 25 building permits have been issued by the City)
- Dana Point Harbor Revitalization Plan (landside development)
- Doheny Hotel – 258-Room Hotel with conference room and restaurant facilities

The Dana Point Headlands Projects are anticipated to develop coastal bluffs west of Dana Point Harbor. Although the projects are not located in the immediate vicinity of the Marina Improvement Project, they would add new hotel and commercial uses facing the Harbor from the bluff. The Headlands Project, along with the landside development of the Revitalization Project, was included in the cumulative analysis for the Program FEIR, and therefore, because the Marina Improvement Project is a part of the Program FEIR, the cumulative land use impacts associated with these projects have already been considered for the proposed project and were found not to be significant.

The Dana Point Harbor Marina Improvement Project is a part of the Dana Point Harbor Revitalization Project, which encompasses all planning areas in the Harbor. Despite implementation of the PDF, SC, and MM, the Program FEIR for the Revitalization Project concluded that the plan would result in significant and unavoidable long-term off-site aesthetic impacts due to development of the Dry Boat Storage building, which would partially obstruct views from surrounding roadways, public parks, and Doheny State Beach. There are no visual incompatibilities between the proposed Marina Improvement Project and the related Revitalization Project, as the Marina Improvement Project does not contribute new uses or structures to the Harbor. Therefore, the contribution of the proposed project to potential cumulative aesthetic impacts in the project area is considered less than significant.

The Doheny Hotel project is located on the west corner of Dana Point Harbor Drive and Pacific Coast Highway. This project would also add new hotel uses facing the Harbor from a bluff area. There are no visual incompatibilities between the proposed Marina Improvement Project and the proposed Doheny Hotel project, as the Marina Improvement Project does not contribute new uses or structures to the Harbor. Therefore, the contribution of the proposed project to potential cumulative aesthetic impacts in the project area is considered less than significant.

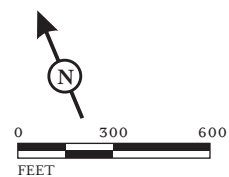
Implementation of the Marina Improvement Project would not have an adverse impact related to the lighting on surrounding Harbor land uses. Light and glare from the Marinas will be consistent with the proposed Lighting Plan as required in Mitigation Measure 4.8-3. The proposed project would not contribute to a cumulative adverse impact related to light and glare or shade and shadow because the proposed project would be consistent with the existing developed marine Harbor setting. Lighting for the project site and lighting for any present and future projects in the area must meet County requirements to minimize glare and spillover light, and must comply with Dana Point Harbor Revitalization Plan LUP Policy 8.4.1-9, requiring all exterior lighting to be designed and located to avoid intrusive effects on adjacent land uses. Therefore, the Marina Improvements Project would not contribute to a cumulatively significant impact related to light and glare in the project area.

#### **4.8.8 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

No significant unavoidable adverse impacts related to aesthetics have been identified.



L S A



# - Indicates Key View Locations

FIGURE 4.8-1

Dana Point Harbor Marina Improvement Project

Key View Locations



Key View 1: View of the project area from Cove Road.



Key View 2: View of the boats berthed in the West Marina from the boardwalk along the West Cove.

LSA

FIGURE 4.8-2

*Dana Point Harbor Marina Improvement Project*

Site Photos



Key View 3: View of the boats berthed in the East Marina from the East Cove along the boardwalk.

LSA

FIGURE 4.8-3

*Dana Point Harbor Marina Improvement Project*

Site Photos





Key View 4: View of the OC Sailing and Events Center.



Key View 5: View of the Harbor Patrol Slips.

LSA

FIGURE 4.8-4

*Dana Point Harbor Marina Improvement Project*  
Site Photos



Key View 6: View of the Marine Services docks.



Key View 7: View of the East Breakwater, location of the Temporary/Proposed Yacht Broker docks.

LSA

FIGURE 4.8-5

*Dana Point Harbor Marina Improvement Project*  
Site Photos

## 4.9 RECREATION

This section provides the recreational setting of the project site, including surrounding recreation facilities and an analysis of potential impacts that project implementation may have on existing recreation facilities. This section also addresses the proposed impacts to recreation resources with consideration of local, State, and California Coastal Commission (CCC) policies.

### 4.9.1 EXISTING SETTING

#### Project Facilities

Dana Point Harbor (Harbor) offers recreational boaters, Orange County (County) residents, tourists, and others a number of recreational activity, retail shopping, and dining opportunities. The County was designated over 30 years ago by the Tidelands Act as the trustee of the Harbor for the people of the State of California. The County is responsible for the operation and maintenance of all facilities and property within the Harbor.

The project addresses recreation-related areas within the Harbor as follows: docks and slip facilities in the East and West Marinas, the OC Sailing and Events Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, Marine Services docks, and sport fishing docks. Other project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with Americans with Disabilities Act (ADA) guidelines.

The West and East Marinas currently contain 2,409 slips, with an average length of 29.85 feet (ft). Due to changes in the boating needs, the proposed Marina Improvement Project includes adjustments to the number, size, and location of slips throughout the Marinas. At project completion the total number of boat slips under the County's preferred design may decrease from 2,409 to 2,293, resulting in a loss of approximately 116 slips. The average slip length would increase from 30 (29.85) ft to no greater than 32 ft.

#### Harborwide Recreational Boating Facilities

The Harbor is recognized as a regional recreation facility that offers a wide range of recreational opportunities to local and regional boaters, as well as the general public. The recreational activities and facilities are intended to meet the diverse interests of existing and future residents of the County, as well as visitors. In addition to the Harbor areas addressed in this Subsequent Environmental Impact Report (SEIR), the Harbor contains a variety of recreational facilities and activities within the Harbor itself, as indicated in the following list of amenities:

- A recently renovated public boat launch facility.
- Several locations in the Harbor provide boat and fishing charters, as well as boat rentals and personal watercraft, sailing instruction, cruises, whale-watching charters, and racing programs.

- Boater service buildings are located throughout the Harbor and provide restrooms, showers, laundry facilities for recreational boaters, and offices for marine/boating-related businesses.
- The OC Sailing and Events Center provides youth and adult programs in basic boating, rowing, canoeing, sailing, marine safety education, summer camps, and tidepool walks.
- Baby Beach is a popular beach location for picnics, beach activities, beginner sailing, kayaking, and private parties, with a launching area for nonmotorized craft.
- The Ocean Institute is an educational campus that is devoted to creating marine laboratory environments that serve as learning centers. Recreational uses within the Ocean Institute include the Old Cove Native Plant Preserve. The Institute offers Recreation Vehicle/Sea Explorer Cruises as educational cruises, the historic boat “Pilgrim” and “Spirit of Dana Point,” tidepool excursions, and other marine/coastal educational programs.
- A Marine Life Refuge is located at the far west side of Dana Point Harbor and can be reached by parking at the Ocean Institute lot and following the paved path to shore.
- Hiking walkways traverse the areas along the bottom of the bluffs and through the headlands, and walking trails are located around the perimeter of the marinas and throughout the Harbor. There are also small park areas for resting, barbequing, and picnicking in these passive recreation areas.
- A fishing pier is located between Baby Beach and the Ocean Institute.
- The Aventura Sailing Association located on the East Island offers sailing instruction in basic intermediate and advanced sailing as well as instruction in coastal navigation. Classes are open to the public, and membership is not required.

### **Doheny State Beach**

Doheny State Beach, park, and campground are located immediately east of the east breakwater.

## **4.9.2 REGULATORY SETTING**

### **California Coastal Act**

The Recreation Policies contained in Article 3 of the California Coastal Act (Coastal Act) are intended to provide protection for suitable oceanfront land to be used for recreational purposes as well as maintaining upland areas to support coastal recreation uses, where feasible. The policies prioritize water-oriented recreational activities and encourage increased recreational boating use of coastal waters by developing support facilities. The policies also place priority on the use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industries.

### **Dana Point Harbor Revitalization Plan and District Regulations**

The Dana Point Harbor District Regulations provide zoning designations for Dana Point Harbor and establish regulations for specific land use development projects. The District Regulations address division of the Dana Point Harbor into 12 planning areas and provide specific regulations, site

development standards, and discretionary permits applicable to all of these areas. The District regulations identify the Marina Improvement Project site within Land Use Planning Areas 8, 9, 10, 11, and 12, which are designated as M – Marina Waterways, Marine Services, Education Basin, and Harbor Entrance.

Implementation of the Dana Point Harbor Revitalization Plan required a series of subsequent approvals by the City of Dana Point and the CCC to modify existing regulatory documents, including the City's LCP. The Revitalization Plan and District Regulations therefore required an LCP Amendment (LCPA). The LCPA includes a Land Use Plan (LUP) component and an Implementation Plan (IP) component, which together establish zoning regulations and other implementing actions required for ongoing implementation of improvements and management of Dana Point Harbor pursuant to procedures set forth in the Coastal Act. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

The Dana Point Revitalization Plan and Marina Improvement Project are consistent with the goals and provisions of the Coastal Act, including the policies related to recreational resources, which are further discussed below.

### **County of Orange General Plan**

The County General Plan Recreation Element identifies the Harbor as a Regional Harbor. A Regional Harbor is defined as providing a variety of recreational facilities such as: boating, swimming, fishing, picnicking, play, and Marine preserve areas with facilities for both short- and long-term small craft anchorage. Such harbors are equipped with facilities for marine supply and aid and contain extensive commercial facilities of a tourist, recreational, and/or fishing nature.

The Recreation Element contains official policies pertaining to the acquisition, development, operation, maintenance, and financing of the County's varied recreation facilities, which are necessary to meet the County's existing and future recreation needs. The Master Plan includes goals, objectives, policies, and implementation programs to meet the changing recreation needs of the population and to provide recreation opportunities that satisfy those needs. The Recreation Element serves to guide and direct local government decision-making regarding recreation issues and facilitates the coordination of local, regional, State, and federal efforts.

### **City of Dana Point General Plan**

**Conservation Element/Open Space Element.** The Conservation and Open Space Element addresses the preservation and use of the City's important natural resources and open space areas by setting relevant goals and policies to address City parks and recreation. The Plan is concerned with protecting and enhancing natural and open space resources. Detailed planning and operation of non-County parks and recreation facilities are the responsibility of the Dana Point Community Services and Parks Department.

### 4.9.3 METHODOLOGY

Impacts to recreational facilities in and around the Harbor were determined by comparing goals and policies adopted in the Coastal Act, the Dana Point Harbor Revitalization Plan Land Use Plan Policies and District Regulations, the County General Plan Recreation Element, and the City's General Plan Conservation and Open Space Element with the existing and proposed improvements within the Harbor. The proposed project plans and anticipated activities were analyzed in relation to CEQA guidelines.

### 4.9.4 THRESHOLDS OF SIGNIFICANCE

Recreation impacts are assessed based on the physical effects of the proposed project on existing recreation facilities in the project vicinity. In addition, the project is analyzed relative to any adverse physical effects on the environment that might result from the facilities identified in the proposed project. The impact significance criteria used for this analysis are based primarily on Appendix G of the State CEQA Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The project may be considered to have a significant effect related to recreational resources if implementation would result in one of more of the following:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment

### 4.9.5 OVERVIEW OF PROGRAM FEIR RECREATION ANALYSIS

**Impacts.** The Program FEIR concluded that the Revitalization Project will improve the recreational facilities within the project area, thereby reducing impacts on surrounding recreational facilities. However, the Program FEIR found that implementation of the Revitalization Project may increase the use of existing neighborhood and regional parks and other recreational facilities, thereby creating the potential for the physical deterioration of each facility. The Program FEIR determined the Revitalization Project to be consistent with applicable plans and policies within the County of Orange Master Plan of Regional Recreation Facilities (Master Plan). The Program FEIR analysis concluded that impacts to recreational resources would be less than significant with implementation of Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs).

Cumulatively, the Revitalization Project, along with other future development, may potentially increase the use of existing recreational areas and facilities, thereby creating the potential for physical deterioration. Additionally, cumulative development may include recreational facilities (e.g., Marina) that could have physical impacts on the environment. The Program FEIR concluded that cumulative recreation impacts would be less than significant with implementation of PDFs, SCAs, and MMs.

PDFs, SCAs, and MMs identified in the Program FEIR and applicable to the Marina Improvement Project are listed below. During the subsequent approval process for the LUP component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and became LUP Policies within

the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

**PDF 4.12-3** Maintain and enhance boating use through the provision of various amenities to the waterside areas, including but not limited to improved boater drop-off areas, designated boater parking, upgraded boater service buildings and restrooms and dinghy docks planned to be relocated adjacent to Planning Area 2. (LUP Policy 4.1.1-5)

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Recreation were identified in the Program FEIR.

## **4.9.6 IMPACTS AND MITIGATION**

This discussion focuses on potential recreational impact issues. Other issues related to and affecting adjacent and on-site recreational facilities are discussed in the applicable SEIR sections such as air quality, noise, traffic/parking, and aesthetics.

### **Less Than Significant Impacts**

**Project Vicinity Recreational Facilities.** The proposed project would not substantially affect any of the existing off-site, adjacent recreational uses and activities such as surrounding City, County and State parks. In addition, the Marina Improvement project is not anticipated to increase employment nor increase the permanent population that would utilize the existing recreational facilities in the project vicinity.

The purpose of the proposed project is to renovate the existing Marina dock and slip facilities that have deteriorated over the many years since they were constructed. The improvements planned as part of the project would not cause a substantial physical deterioration of any nearby recreational facilities. Rather, the proposed project will renovate the existing Marina Basins within the Harbor and provide improved on-site recreational opportunities to better serve the public.

Implementation of the proposed project would not result in any physical change to area recreational uses. Significant impacts related to recreational facilities within the project vicinity will not occur, and no mitigation is required.

**Harborwide Recreational Facilities.** The proposed Marina waterside improvements are not anticipated to result in any substantial increased use of the Marina waterside facilities. Similarly, the proposed project is not anticipated to result in increased usage of other on-site recreational amenities or activities, including: guest docks, sport fishing facilities, and OC Sailing and Events Center docks. Temporary docks are included in the project in order to accommodate displaced boats during the

renovations. Implementation of the Marina Improvement Project will be phased over approximately eight years. This will provide for the continuation of recreational activities throughout the project and reduce construction impacts on recreational facilities and activities.

**California Coastal Act Policies.** The CCC retains jurisdiction over the Marina Improvement Project because the Marina Improvement Project area includes submerged lands. As discussed in the Program EIR, all waterside improvements must be approved as part of a Coastal Development Permit (CDP) issued by the CCC prior to project construction. An application for a CDP will be submitted following certification of the SEIR and approval of the Marina Improvement Project by the County. Therefore, the appropriate standard for review is consistency with the Chapter 3 policies of the California Coastal Act.

Table 4.1.A in Section 4.1 of this SEIR analyzes the project's consistency with applicable California Coastal Act policies. A brief discussion is included here as it relates specifically to recreation policies. Coastal Act Article 1 contains general policies and is not applicable to a recreation discussion. Similarly, Article 5 (Land Resources), Article 6 (Development), and Article 7 (Industrial Development) are not applicable to the recreational component of the project.

The following sections of the Coastal Act pertain to recreational facilities and are applicable to the proposed project:

Coastal Act Article 2, Public Access:

- *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs, and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. (Coastal Act Section 30210)*
- *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. (Coastal Act Section 30213)*

The remaining policies contained in Article 2 address new development, distribution of development, and implementation of public access policies, and are not applicable to the discussion of the project's potential recreational impacts.

Coastal Act Article 3, Recreation:

- *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses. (Coastal Act Section 30220)*
- *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area. (Coastal Act Section 30221)*



- *Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land. (Coastal Act Section 30224)*

The remaining policies contained in Article 3 address new development, coastal aquaculture, and upland areas, and are not applicable to the discussion of the project's potential recreational impacts.

Coastal Act, Article 4, Marine Environment:

- *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.(Coastal Act Section 30230)*
- *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry. (Coastal Act Section 30234)*
- *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected. (Coastal Act Section 30234.5)*

The remaining policies contained in Article 4 address biological productivity, water quality, hazardous materials, diking and dredging, alteration of the natural shoreline, water supply, and flood control, and are not applicable to the discussion of the project's potential recreational impacts.

As discussed in detail in Section 4.1, the proposed project is consistent with Coastal Act Sections regarding recreation resources. Proposed project elements that ensure compatibility with Coastal Act policies include the following:

- The proposed project provides for enhanced public access through rehabilitation of the Marina's access facilities, including docks and gangways. The project includes installation of ADA-compliant facilities, including ramp access to the docks, thereby increasing public access and improving public safety (Coastal Act Section 30224).

- The proposed project would enhance the existing water-oriented recreational activities of the Harbor and Marina facilities. The proposed project, which is adjacent to the ocean and oceanfront land, would enhance the existing recreational uses of the Harbor and Marina (Coastal Act Section 30224).
- The proposed project would renovate the existing Marina facilities and enhance the existing recreational boating facilities within the Harbor. The project does not involve any changes in land use or other issues that would preclude boating (Coastal Act Section 30221).
- The proposed project design would accommodate changes in the needs of boaters, and increased recreational opportunities because the renovated facilities would facilitate continued public use within the Coastal Zone (Coastal Act Sections 30221 and 30224).
- The Marina Improvement Project includes renovation to the commercial fishing dock area, thereby maintaining continued water-dependent business opportunities in the Harbor (Coastal Act Sections 30234 and 30234.5).

As indicated above, the policies within Chapter 3 of the Coastal Act are intended to provide protection for suitable oceanfront lands to be used for water-oriented and recreational purposes. The proposed project is consistent with the intent of these policies. The project consists of the improvement of the existing water-oriented recreational and visitor serving facilities within the Harbor. In addition, the Marina Improvement Project would further increase public recreational opportunities by providing facilities that satisfy ADA requirements, and impacts are considered less than significant. No mitigation measures are required.

**Dana Point Harbor Revitalization Plan and District Regulations.** The proposed Marina Improvement Project was contemplated as part of the Dana Point Harbor Revitalization Plan and the impacts are therefore considered less than significant, and no mitigation measures are required. Further, the proposed project has been designed to be consistent with the approved LUP component of the LCPA for the Dana Point Harbor Revitalization Project.

**County of Orange General Plan.** The following goals contained in the Orange County General Plan relate to the project site:

*Goal 1: To provide a regional recreation network to meet the regional recreation needs of existing and future residents of the entire family.*

*Goal 2: To develop regional recreation facility park sites with recreation facilities designed to respond to the diverse regional recreation interests of the citizens of the County.*

The proposed project would renovate the existing Marina facilities, thereby enhancing the existing recreational boating facilities within the Harbor to continue meeting the recreation needs of existing and future residents. The proposed project does not change the existing types of recreational and/or open space on site. The existing Marina-related recreation uses have been ongoing at the site for nearly 40 years, and the proposed project would therefore be consistent with the existing marine and water-related recreational uses on site. In addition, the project encourages boating use by providing

upgraded ADA facilities in response to the diverse regional recreation interests of the citizens of the County. Therefore, the proposed project is considered consistent with the County General Plan goals related to recreation, and impacts are considered less than significant. No mitigation measures are required.

**City of Dana Point General Plan, Conservation Element/Open Space Element.** The following policies relate to the Dana Point Harbor Marina Improvement Project:

*Policy 7.1: Encourage the provision of a range of recreational facilities and programs to meet the needs of City residents and visitors.*

*Policy 7.3: Coordinate park and open space planning with the appropriate State and County agencies.*

The proposed project includes renovations to existing facilities within the Marina and does not remove or preclude any existing recreational facility or affect the range of available recreational activities currently available in the Marina. In addition, the project ensures that public access to low-cost recreational facilities is protected and enhanced. It is the County's responsibility to provide long-term recreational uses to the Community within the Harbor and to complement similar facilities along the County coastline. The project includes the renovation of County recreation facilities within the City boundaries. Continued coordination between the County and the City will ensure that the recreational needs of residents and visitors are met.

Because the proposed project enhances existing recreational facilities and does not remove or otherwise affect any of the Harbor's recreational facilities, the project will have no long-term negative impact on the public's use or access to recreation facilities in the area, including Doheny State Park. Therefore, the proposed project is considered consistent with the Dana Point General Plan recreation policies listed above, and impacts are considered less than significant. No mitigation measures are required.

### **Potentially Significant Impacts**

No potentially significant impacts were identified, and no mitigation is required.

### **4.9.7 CUMULATIVE IMPACTS**

There are no recreational marinas in the immediate vicinity that would be considered to be within the cumulative study area for recreational impacts. Implementation of the proposed project in concert with the other Harbor Revitalization Projects is intended to increase lifespan and use of the recreational activities and associated facilities within Dana Point Harbor. As noted, this is the intent of the proposed project and would be considered a beneficial impact. The potential loss of 155 slips has been incorporated into the LUP component of the LCPA and effectively approved by the CCC as part of the LCPA process and is therefore, not considered cumulatively significant. In addition, the Dry Boat Storage building will provide 400 boat storage spaces. Therefore, the proposed project would not cumulatively, along with other projects in the vicinity, result in increased demand for

recreational facilities or require development or expansion of additional recreational facilities. Hence, cumulative impacts associated with recreation would be considered less than significant.

#### **4.9.8 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

No significant unavoidable adverse impacts have been identified.

## 4.10 HAZARDS AND HAZARDOUS MATERIALS

The hazards and hazardous materials analysis in this section is based on the following project-specific technical reports: Environmental First Search Report (FirstSearch) (Track Info Services, LLC, June 12, 2007) and Appendix I of the Dana Point Harbor Revitalization Project Program Final Environmental Impact Report (FEIR), Preliminary Hazardous Materials Assessment. The findings of this report are summarized. Copies of these reports are available for review at OC Dana Point Harbor offices.

This section describes known and potentially hazardous materials conditions in the vicinity of the project area, related potentially significant adverse public health impacts anticipated as a result of the proposed project, and includes mitigation measures (MM) for the impacts as appropriate. This section also addresses the proposed impacts with consideration of local, State, and federal regulations and policies and provides recommended MM pursuant to California Environmental Quality Act (CEQA).

### 4.10.1 EXISTING ENVIRONMENTAL SETTING

#### Project Site Conditions

The majority of the structures on site date to the late 1960s/early 1970s. The West and East Marinas provide accommodation for 2,409 boat slips with an average length of 29.85 feet (ft). The Harbor offers recreational boaters, County residents, tourists, and others a number of recreational activities, retail shopping, and dining opportunities. Boat refueling occurs at one location within the Harbor, the Dana Point Fuel Dock, located in Planning Area 11.

Marina-related uses may store and use hazardous materials such as cleaning agents, solvents, oils, and fuel. The storage, use, transport, and disposal of such hazardous materials are subject to local, State, and federal regulations. Review of available databases did not identify any environmental concerns on site; however, some environmental concerns have been found on the adjacent land uses.

All boats potentially carry solvents, paints, cleaners, oils, and fuel. In addition, boats may include bottom treatments and/or paints that contain heavy metals or other compounds that, when released into the water, provide a source of contamination; this occurs primarily at the time of repainting, bottom cleaning, or repair. In addition, the shipyard located in Planning Area 11 performs boat maintenance and repair services that could potentially release contaminants into the water.

**Waste Classification and Disposal** Hazardous materials and wastes are defined in the California Code of Regulations, Title 22, Sections 66261.1 through 66261.126. In accordance with these regulations, a waste is classified as hazardous if it exhibits ignitability, corrosivity, reactivity, or toxicity. Section 66261.24 states that a waste is considered toxic if: (1) it contains certain metals or organic substances at soluble concentrations greater than federal regulatory levels using a test method called the toxicity characteristic leaching procedure (TCLP); (2) it contains total concentrations of

certain substances greater than the total threshold limit concentration (TTLC) or soluble concentrations greater than the soluble threshold limit concentration (STLC); (3) it contains specified carcinogenic substances at a single or combined concentration of 0.001 percent; or (4) testing indicates toxicity greater than the specified criteria.

### **Sediment Quality in the Marinas**

As discussed in Section 4.3, Hydrology and Water Quality, a sediment analysis not associated with this project was conducted for the Harbor maintenance dredging.<sup>1</sup> The analysis divided the Harbor into three testing areas based on sediment grain size characteristics and geographic location: Area A, consisting of the West Anchorage and Main Channel West; Area B, consisting of Baby Beach, the West Turning Basin, the West Basin Channel, and Pilgrim Moorage; and Area C, consisting of the Boat Launch Ramp Basin, East Basin Channel, and East Basin Outfall. The sediment analysis shows that sediments from Area A contain relatively low values of contaminants; contaminant concentrations in Area A sediments are similar to or only slightly elevated above contaminant concentrations in the Capistrano and Baby Beach reference samples. Polycyclic aromatic hydrocarbon (PAH) concentrations in Area A samples range from 4 to 100 times higher than the reference samples, but are still considered relatively low.

Contaminants were not found in Area B in excess of Effects Range Low (ERL) screening values, while several contaminants (copper, total chlordane compounds, acenaphthene, benzo(a)pyrene, benzo(a)anthracene, total high molecular weight PAHs, and total PAHs) were found in Area C in excess of lower effects-based screening values. However, the study concluded that overall sediment contamination in Areas B and C will most likely not cause toxicity to benthic organisms. The bulk of the observed contamination in Area C can be attributed to the shoaled area in front of the 60-inch storm water outfall entering the East Basin. Therefore, sediments in the Harbor Marinas, while showing low levels of contamination, are not considered hazardous material.

### **Surrounding Conditions**

Multiple structures and a variety of land uses surround the West and East Marinas. To the north of the Marinas are the landside structures occupied by commercial uses, including restaurants, small Harbor tourist shops, and offices, as well as recreational and marine service uses. Bordering the south side of the Marinas is the Island, separating the West and East Marina from the Outer Channel. The Island is comprised of boat slips, parking lots, boater service buildings, yacht clubs, a restaurant, Harbor Patrol offices, and a passive recreational grass and walkway area. The structures within the Harbor are generally situated on concrete foundations and are of wood frame construction with stucco, concrete block, or wood siding. Some of the structures and associated areas are separated by wood, block, or chain-link fencing.

The OC Sailing and Event Center is located in the western portion of the West Marina on the cove side. Marine Services, including sport fishing docks, a shipyard, fuel dock, and boat maintenance areas are located in the eastern portion of the Harbor on the cove side. These marine-related uses have the potential to contribute to the release of hazardous substances.

<sup>1</sup> *Dredge Material Evaluation, Dana Point Harbor Maintenance Dredging*, Moffatt & Nichol, March 2007.

No physical presence of hazardous materials on adjacent properties was visibly evident during a site inspection conducted by LSA on April 10, 2007. No unusual or suspicious materials handling or storage practices were observed with respect to adjacent properties. However, mixed commercial and marine-related uses are located adjacent to the site's northern and northeast boundaries. The surrounding properties contain sites where hazardous materials are generated, stored, handled, and/or treated, including sites of existing and past land uses that used, stored, and disposed of hazardous materials and wastes such as gasoline service stations and boat repair facilities. Additionally, several off-site properties have been listed for activities associated with hazardous materials (transferring, storing, subsurface releases, remediation, etc.).

There are also ongoing boat-related maintenance practices that may contribute either indirectly or directly to the potential for a spot and/or temporary hazardous material condition within the Harbor, such as:

- Oil and fuel handling
- Boat cleaning, painting, and maintenance
- Underground storage tanks
- Hazardous material disposal stations

### **Contaminated Sites from Prior Known Hazardous Releases**

The Phase 1 Environmental Site Assessment (ESA) included a records search of various databases maintained by federal and State agencies regarding hazardous materials and wastes. The findings of this records search, as well as the First Search database search completed on June 12, 2007, are summarized below in Table 4.10.A. According to the FirstSearch Environmental Database, there were a total of nine release sites within 0.25 mile of the project site that may potentially impact soil or groundwater resources underneath the project site. The Emergency Response Notification System (ERNS) database identified one listing, and the Leaking Underground Storage Tank (LUST) database identified eight listings.

Eight of the nine total release sites are comprised of LUSTs. Out of the eight LUST sites, two sites have been identified multiple times. These sites include the Dana Point Harbor Patrol, identified twice at the same address, and the Dana Point Marina Company, listed twice under two different addresses. The remaining five sites are identified as Dana Point Fuel Dock, Dana West Marina, BMS Steam Cleaning Service, Embarcadero Marina, and Arco Station No. 447.

Seven of the eight sites listed in the LUST database have received closure letters from the Regional Water Quality Control Board (RWQCB), indicating that the existing soil and/or other groundwater contamination do not pose a significant enough risk to the underlying groundwater resources to require further remediation. Therefore, these seven sites are unlikely to pose a concern to the project site.

**Table 4.10.A: Known or Suspected Hazardous Material Releases within the Project Site**

Site Number	Case Type	Address, Distance from Subject Site	Tenant	Status
1	LUST	34661 Puerto Place, Dana Point, located at the project site	Dana Point Fuel Dock	A LUST containing diesel fuel was discovered on February 21, 1995. The contamination affected surface water only. The case was closed on December 18, 2002.
3	LUST	25005 Dana Drive, Dana Point, (0.02 mi) southwest of the project site	Dana Point Harbor Patrol	A LUST containing gasoline was discovered on October 1, 1996. The contamination affected surface water only. The case was closed on May 3, 2000.
3	LUST	25005 Dana Drive, (0.02 mi) southwest of the project site	Dana Point Marina Harbor Patrol	A LUST containing diesel fuel was discovered on May 16, 1990. The contamination affected soils only. The case was closed on December 9, 1992.
4	LUST	24705 Dana Drive, (0.02 mi) northeast of the project site	Dana Point Marina Company	A LUST containing waste oil was discovered on October 14, 1993. The contamination affected soil only. The case was closed on August 1, 1995.
5	LUST	24501 Dana Drive, (0.05 mi) northeast of the project site	Dana West Marina	A LUST containing waste oil was discovered on February 26, 1996. The contamination affected soil only. The case was closed on October 28, 1996.
6	ERNS	34451 Ensenada Place, (0.05 mi) northwest of the project site	BMS Steam Cleaning Service	There were no details available for this site. The status is identified as "unknown."
7	LUST	34553 Casitas Place, Dana Point, (0.07 mi) northeast of the project site	Dana Point Marina Company	A LUST containing waste oil was discovered on October 14, 1993. The contamination affected soil only. The case was closed on August 1, 1995.
8	LUST	34512 Embarcadero Place, (0.13 mi) northwest of the project site	Embarcadero Marina	A LUST containing gasoline was discovered on December 16, 1996. The contamination affected surface water only. The case was closed on September 8, 2000.
11	LUST	34342 Pacific Coast Highway, (0.25 mi) northeast of the project site	Arco No. 447	A LUST containing gasoline was discovered on January 17, 1995. The contamination affected soil and groundwater and began undergoing remedial action on February 5, 1997.

ERNS = Emergency Response Notification System

LUST = leaking underground storage tank

mi = mile



The remaining LUST site is identified as Arco No. 447 and is located approximately 0.25 mile northeast of the project site. As of February 5, 1997, the site had undergone remedial action. Although no additional details are available for this listing, no significant ground disturbance is anticipated in the immediate vicinity of the listed site. Therefore, this site is unlikely to pose a potential environmental concern to construction activities.

The remaining ERNS listed site is identified as BMS Steam Cleaning Service and is located approximately 0.05 mile northwest of the project site on Ensenada Place. Although no details are available for this listing, no ground disturbance is anticipated in the immediate vicinity of the listed site. Therefore, this listing is unlikely to pose a potential environmental concern to construction activities.

### **Underground Storage Tanks**

In 2005, a Phase I ESA inspection was conducted by RBF Consulting, Inc. (RBF) within the perimeter of the project site for the potential presence of the fill pipes, vent pipes, areas of abnormal or heavy staining, manways, manholes, access covers, concrete pads not homogenous with surrounding surfaces, concrete build-up areas potentially indicating pump islands, abandoned pumping equipment, or fuel pumps. Evidence of on-site underground storage tanks (USTs) were noted through visual observations and governmental records searched.

According to the Phase I ESA, visible evidence indicating the presence of USTs was observed during the site reconnaissance by the presence of manholes and fuel pumps on adjacent properties near the East Marina. Existing fuel pumps were observed on the adjoining docks. Evidence of an UST was observed near the Harbor Patrol office. However, there were no indications of leaks at the time of the site visit.

During the Phase I ESA site reconnaissance, visible evidence of USTs (primarily manholes and fuel pumps at the terminus of Puerto Place) was observed in the north-northeast area of the East Marina. Active fuel pumps supplied by USTs and several 55-gallon drums were also observed in this general area. These drums appeared to contain waste oil and appear to be properly maintained; no odor or staining was observed.

Although the Phase I ESA has indicated that there are potential environmental concerns associated with the presence of USTs in the surrounding area, no significant ground disturbance is anticipated for the proposed project. Therefore, it is unlikely that any impacted soils or groundwater resulting from LUSTs would be encountered during proposed project activities.

According to the Phase I ESA completed by RBF, evidence to support the existence of a recognized environmental condition (REC) on site was not visible during the review of the historical topographic maps and aerial photographs.

### **Asbestos**

The majority of the existing structures in the Harbor were built prior to 1978. Therefore, the potential for the asbestos-containing materials (ACMs) to be found on or adjacent to the site is very likely.

However, disturbance to or demolition of the existing structures is not included in the proposed Marina Improvement Project. Therefore, it is unlikely that any impacts associated with the exposure to ACMs will occur during construction activities.

### **Lead and Polychlorinated Biphenyls (PCBs)**

The majority of the existing structures present on or adjacent to the project site were built prior to 1978; therefore, the potential for lead-based paints (LBP) to be found on site is considered likely. It is likely that LBP is present underneath more recent layers of paint, and there is a potential for LBP to be present in the soil immediately surrounding the existing structures. However, the disturbance or demolition of existing structures is not anticipated for the proposed project. Therefore, it is unlikely that any impacts associated with the exposure to LBP will occur during proposed project activities.

Additionally, some marine-related uses (boat maintenance) that may contain PCBs are located on or within the immediate vicinity of the project site. Properties associated with boat maintenance and repair may use hydraulic lifts and associated fluids, which are susceptible to subsurface leakages; if so, they may result in health impacts. If old electrical transformers and light ballasts remain on site, they may contain PCBs. Pole-mounted transformers and hydraulic lifts associated with boat maintenance and repair facilities were observed on site during the Phase I site reconnaissance. However, no visible signs of staining or leakage from transformers were observed on-site. The primary concern with hydraulic lifts is the potential for subsurface leakages of hydraulic fluids from the lift's piston. However, the disturbance of these existing pole-mounted transformers and hydraulic lifts is not anticipated for the proposed project. Therefore, it is unlikely that any impacts associated with the potential release of PCBs will occur during proposed project activities.

## **4.10.2 REGULATORY SETTING**

Federal regulations related to hazardous materials and wastes include:

- Occupational Safety and Health, Title 29, Code of Federal Regulations (CFR), Regulations for General Industry (Part 1910) and Construction (Part 1926)
- United States Environmental Protection Agency (EPA), Title 40 CFR, National Emissions Standard for Hazardous Air Pollutants (NESHAPS), Part 61, Subpart A
- EPA, Title 40 CFR 700–799 (Toxic Substances Control Act)
- United States Department of Transportation (USDOT) Regulations, Title 49 CFR

State and local regulations related to hazardous materials and wastes include:

- Title 8 California Code of Regulations (CCR), California Occupational Safety and Health Administration (Cal-OSHA) Regulations, Chapter 4, Division of Industrial Relations, General Industry Safety Orders and Construction Safety Orders
- Title 22 CCR, Social Security, Division 2, Department of Social Services—Department of Health Services, and Division 4, Environmental Health

- Title 17 CCR, Public Health, Division 1, State Department of Health Services, Chapter 6—Lead Poisoning Prevention Program
- South Coast Air Quality Management District (SCAQMD), Rules and Regulations

### **Asbestos-Containing Materials**

The SCAQMD and the Orange County Department of Health Services (DHS) are the enforcement agencies for the project site. No project facilities potentially include asbestos, as no existing structures are to be altered or removed with this project. Therefore, there is no potential effect on the environment.

### **Lead**

Lead has been used in commercial, residential, roadway, and ceramic paint products; in electric batteries and other devices; as a gasoline additive; for weighting, in gunshot; and for other purposes. It is recognized as toxic to human health and the environment and is widely regulated in the United States. Structures constructed prior to 1978 are presumed to contain LBP unless proven otherwise, although buildings constructed after 1978 may also contain LBP. Lead is regulated as a criteria pollutant under the Clean Air Act (CAA), which has led to its elimination from automotive fuels. Aerially deposited lead (ADL) from past use of leaded fuels is a concern in unpaved areas adjacent to highly traveled roads. Lead is also regulated as a toxic pollutant under the federal Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act as well as under the federal and California safe drinking water acts.

Release of LBP into the environment is a violation of several laws, including OSHA, Resource Conservation and Recovery Act (RCRA), the CAA, and the CWA. The Phase I ESA identified suspect LBP structures on site. For the purposes of this analysis, it is assumed that LBP is present on site.

The Orange County DHS and SCAQMD are the enforcement agencies for the anticipated project-related activities.

### **Emergency Response Plan**

The City's Emergency Plan designates procedures that will be followed in responding to anticipated emergencies. The Plan describes how the City will prepare for, respond to, and recover from an emergency or disaster. The Plan is consistent with State and federal guidelines regarding disaster planning. Additionally, the City maintains an Emergency Operations Center (EOC) and communications equipment to coordinate City services during local emergencies.

The Orange County and Operational Area EOC is a unit responsible for managing and coordinating disaster response and recovery for County agencies, departments, and constituents. Pacific Coast Highway, Dana Point Harbor Drive, and Street of the Golden Lantern are designated as evacuation routes. The Dana Point Harbor Marina Improvement Project area is accessed via Dana Point Harbor

Drive, which can be reached via Pacific Coast Highway, Street of the Golden Lantern, or in a boat via the Pacific Ocean.

### **Clean Marina Toolkit Programs**

The *California Clean Marina Toolkit* (Toolkit), which was produced by the California Coastal Commission, is a guidebook designed to help a Marina operator manage and operate a “clean Marina.” A “clean Marina” complies with environmental laws and regulations and also strives to maintain a healthy, pollution-free environment by providing services that support clean boating, educating customers about clean boating practices, and training staff to be partners in the clean Marina program. The Toolkit recommends practices for addressing particular pollution problems and also provides guidelines to assist with educating Marina customers to be partners in clean Marina programs. The Toolkit also provides information of diverse Marinas in California and what they have done to operate as clean Marinas as well as sources for additional information.

The Dana Point Marina (East Basin) and the Dana Point West Marina (West Basin) were both certified as “Clean Marinas” on April 19, 2006. To obtain this designation, the Marinas implemented a number of best management practices (BMPs) that help reduce water pollution. Examples of BMPs implemented at Dana Point Harbor include good boat-keeping practices, education, signs, notices, Marina Rules and Regulations, waste receptacles, bilge pad exchange programs, and spill prevention and rapid clean-up plans. The program requires Certified Marinas to follow guidelines for Marina activities including, but not limited to, emergencies, topside boat maintenance and cleaning, and underwater boat hull cleaning. The Dana Point Harbor Marina rules and policies prohibit certain activities which could contribute to poor water quality. This includes prohibiting rebuilding, hull painting, and other major repairs, as well as restrictions for sanding, painting, and the use of chemicals on a boat while the boat is moored at the Marina. Owners and contractors are required to follow policies that specify proper methods of in-water boat maintenance and require contractors to be registered and carry identification for any in-water repairs or maintenance services.

### **4.10.3 METHODOLOGY**

Project impacts related to hazards and hazardous materials were evaluated based on the existing and proposed land uses in the proposed project area and the potential to expose sensitive receptors, including nearby residents and construction workers, as well as the surrounding environment, to hazards or hazardous materials during construction activities and after construction of the Marina. A Phase I ESA and Basic Site Reconnaissance and Records Search (Environmental First Search Report, Track Info Services, June 12, 2007) were prepared to determine any existing hazardous waste release issues related to former or current operations within the project limits and in the surrounding vicinity.

On April 10, 2007, LSA conducted a site visit, which included a visual observation of Dana Point Harbor and surrounding properties. The objective of the site reconnaissance was to identify RECs, including hazardous substances and petroleum products on the property (including soils, surface water, and groundwater) and with immediately adjacent properties. Multiple structures were observed within the boundaries of the project site. On-site structures were utilized for commercial uses, storage, and as maintenance facilities. The structures appeared to be in fair to good condition; were constructed of wood frame with either stucco, brick, or wood siding; and are all situated on concrete

foundations. Many of the structures and associated lots are separated by concrete block, wood or chain-link fencing.

Based on the findings of the screening, impacts were evaluated and MM were developed to address recognized environmental concerns as well as use and disposal of hazardous materials.

#### **4.10.4 THRESHOLDS OF SIGNIFICANCE**

The impact significance criteria used for this analysis are based primarily on Appendix G of the State CEQA Guidelines and the County of Orange Local CEQA Procedures Manual (2000). The project may be considered to have a significant effect related to hazards and hazardous materials if implementation would result in one of more of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands
- Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)

#### **4.10.5 OVERVIEW OF PROGRAM FEIR HAZARDS AND HAZARDOUS MATERIALS ANALYSIS**

**Impacts.** The Program FEIR concluded that the Revitalization Project implementation would have the potential to create a significant hazard to the public or the environment related to hazardous materials and would potentially create odors or foster disease vectors associated with implementation

of BMPs. Additionally, the Program FEIR stated that the Revitalization Project has the potential to create a significant hazard to the public or the environment through the release of ACMs into the environment, primarily during the demolition of landside structures, and would have the potential to create a significant hazard to the public or the environment through the release of LBP into the environment during demolition of older structures. The Program FEIR further found that the Revitalization Project could physically interfere with an adopted emergency response plan or emergency evacuation plan. However, the Program FEIR analysis concluded that with implementation of Project Design Features (PDFs), Standard Conditions of Approval (SCA), and MMs, no significant impacts are anticipated.

Cumulatively, the Revitalization Project along with other future development could increase exposure of the public to hazardous substances. However, the Program FEIR determined that compliance with federal, State, and local requirements on a project-by-project basis will reduce cumulative impacts to a less than significant level.

PDFs, SCAs, and MMs identified in the Program FEIR and applicable to the Marina Improvement Project are listed below. During the subsequent approval process for the Land Use Plan (LUP) component of the LCPA, several of the listed PDFs, SCAs, and MMs were clarified and LUP Policies within the revised Dana Point Harbor Revitalization Plan LUP. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.

#### **Project Design Features (PDFs), Standard Conditions of Approval (SCA), and Mitigation Measures (MMs)**

- MM 4.8-4** Any transformers to be relocated during site construction/demolition should be conducted under the purview of the local utility purveyor to identify property handling procedures regarding potential PCBs.
- MM 4.8-9** If unknown wastes or suspect materials are discovered during construction that the contractor believes may be or contain hazardous waste or materials, the contractor shall:
- Immediately stop work in the vicinity of the suspected contaminant, and remove workers and the public from the area;
  - Notify the Project Engineer of the implementing agency;
  - Secure the area as directed by the Project Engineer; and
  - Notify the implementing agency's hazardous waste/materials coordinator.
- MM 4.8-10** OC Dana Point Harbor or its designee shall store, manifest, transport, and dispose of all on-site generated waste that meets hazardous waste criteria in accordance with California Code of Regulations Title 22 and in a manner to the satisfaction of the Manager, HCA/Hazardous Materials Program. The County shall keep storage, transportation, and disposal records on site and open for inspection to any government agency upon request.

**MM 4.8-18** All finishing products used on site shall meet applicable SCAQMD regulations for solvent content, as required by SCAQMD Rules 1102 and 1171.

**MM 4.8-19** All uses of solvents shall be conducted in adherence to California OSHA regulations for exposure of workers during construction activities as required by CCR Title 8.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to hazards and hazardous materials were identified in the Program FEIR.

#### 4.10.6 IMPACTS AND MITIGATION

The Initial Study contained in Appendix A determined that the proposed project would not have a significant impact with respect to hazardous emissions pursuant to Government Code Section 65962.5; is not within the vicinity of an airport environs land use plan, private helipad, or airstrip; would not interfere with an emergency response plan; or expose people to wild land fires. The project site was not listed on the government database for use or release of hazardous materials. Therefore, these issues are not addressed further in this SEIR.

##### Less Than Significant Impacts

**Hazardous Materials During Construction.** Construction of the proposed project would involve the routine use, handling, storage, transport, and disposal of hazardous materials such as fuels, paints, and solvents, consistent with applicable federal, State, and local regulations. In compliance with existing federal, State, and local regulations, the amounts of these materials present during construction would be limited and would not pose a significant adverse hazard to workers or the environment. The construction contractor would be required to implement standard BMPs regarding hazardous materials storage, handling, and disposal during construction in compliance with the State General Permit to protect water quality.

As previously discussed, the project site was developed over 30 years ago, and existing buildings and other structures may be constructed of materials that contain ACMs, LBP, PCBs, and/or other hazardous materials. However, the proposed project does not include the removal of any building structures and would therefore not result in hazards related to the removal or handling of such materials as asbestos and LBP. In addition, the docks, pilings and related systems are not anticipated to contain hazardous materials that pose any safety concerns. Impacts related to the removal of such hazardous materials during construction of the Marinas are therefore considered less than significant, and no mitigation is required.

**Hazardous Materials during Operation.** The operation of the Marina as proposed would involve the use of small amounts of hazardous materials typical of such uses. The handling, use, storage, transport, and disposal of small amounts of substances used for boat cleaning and maintenance such as cleaners, solvents, and paints are subject to existing applicable federal, State, and local regulations. Because the uses on site remain the same as under current conditions, it can be assumed that these materials are already present on site and that their use will continue. Substantial changes to the

operational characteristics and types of potentially hazardous materials present on site are not anticipated, and no mitigation is required.

Operational activities within specific areas of the Harbor may change due to reconfiguration of docks and the availability of slightly longer slips. Although slips in the East and West Basins may be slightly larger on average, the regulations and BMPs related to water quality and boat maintenance activities will not change. As stated above, the Dana Point Harbor Marina rules and policies, as well as the requirements to retain the Clean Marina Certification, prohibit certain activities that could contribute to poor water quality. This includes prohibiting boat and engine rebuilding, hull painting, and other major repairs, as well as restrictions for sanding, painting, and the use of chemicals on a boat while the boat is moored at the Marina. Owners and contractors are required to follow policies that specify proper methods of in-water boat maintenance and require contractors to be registered and carry identification for any in-water repairs or maintenance services. Therefore, impacts related to the use of hazardous materials under operational conditions in the East and West Basins are considered less than significant, and no mitigation is required.

Changes to operations at the Embarcadero/Dry Dock Storage Staging dock area will occur. These docks will be located adjacent to the future Dry Boat Storage building in the basin area adjacent to the boat launch ramp. The Dry Boat Storage building is a part of the landside improvements addressed in the previously Certified Program FEIR. The Dry Boat Storage building will be supported on piles and will extend out over portions of new docks where boats will wait for staging before and after release from dry storage. Operations related to the Embarcadero Marina are anticipated to remain similar to existing conditions, with boat rentals, sailing lessons, and operation of one hoist for boats stored in surface spaces or on trailers. However, these docks will also provide dock space for staging boats as they are taken in and out of the storage facility. The impacts related to hazards and hazardous materials remain similar to existing conditions due to the existing Harbor regulations and BMPs related to water quality and boat maintenance activities. No increased risk of spill or deliberate emission of contaminants is anticipated.

In addition to changes at the Embarcadero/Dry Dock Storage Staging docks, the Marine Services docks currently contain 1,190 linear feet (lf) of dock space, which will be reduced to 896 lf with project implementation. The shipyard currently utilizes approximately 560 lf dock space for uses directly related to shipyard operations. The remainder of the dock space is used for monthly rental purposes (e.g. Jet Ski rentals). The possible future reduction of dock space at the Marine Services docks will proportionally reduce the amount of boating activity at this location. However, the impacts related to hazards and hazardous materials remain similar to existing conditions due to the existing Harbor regulations and BMPs related to water quality and boat maintenance activities. No increased risk of spill or deliberate emission of contaminants is anticipated.

As stated above, the impacts related to hazards and hazardous materials for all areas within the Harbor, including the Marine Services docks, remain similar to existing conditions subject to the Harbor regulations and BMPs related to water quality and boat maintenance activities. The Certified Clean Marina guidelines for Marina activities are anticipated to remain effective and will continue to guide public and commercial boater emergencies, topside boat maintenance and cleaning, and underwater boat hull cleaning. This includes prohibiting boat and engine rebuilding, hull painting, and other major repairs, as well as restrictions for sanding, painting, and the use of chemicals on a boat while the boat is berthed at the Marina. Owners and contractors are required to follow policies that specify proper methods of in-water boat maintenance and require contractors to be registered and carry identification for any in-water repairs



or maintenance services. Therefore, impacts related to the use of such hazardous materials during operations within any Harbor area are considered less than significant, and no mitigation is required.

The proposed Dana Point Harbor Marina Improvement Project would not produce hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste. In addition, these activities would not occur within 0.25 mile of an existing or proposed school. Therefore, there would be no significant adverse hazard to the public or the environment through the routine handling, storage, transport, use, or disposal of hazardous materials and/or wastes as a result of the proposed project.

Because the proposed project uses would not store, use, or generate large quantities of hazardous materials, the proposed project would not create a significant hazard to the public or to the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

### **Potentially Significant Impacts**

**Hazardous Materials during Construction.** The proposed renovations may pose a potential concern through the release of potentially hazardous materials during disturbance of any soils potentially contaminated by hazardous materials.

The Phase I identified one LUST-listed site and one ERNS-listed site that have not received closure letters from the RWQCB, indicating that the existing soil and/or other groundwater contamination could potentially pose a significant risk to the underlying groundwater resources. These two sites could have the potential to affect the project site through underground leaks and subsequent migration of contaminated groundwater. The LUST site is identified as Arco No. 447 and is located approximately 0.25 mile northeast of the project site. As of February 5, 1997, the site had undergone remedial action, but there is no closure letter on file. The ERNS-listed site is identified as BMS Steam Cleaning Service and is located approximately 0.05 mile northwest of the project site on Ensenada Place. It is possible that the BMS Steam Cleaning Service was a mobile cleaning service. No additional details are available for this listing.

The final design for the construction of the ADA gangways is not complete. However, the gangway to the ADA ramp will require installation of a concrete pad or concrete pilings on the inland side of the seawall. Either construction method would require a certain amount of soil disturbance. In addition, any trenching required for the replacement of utilities would require some soil disturbance. Although no significant ground disturbance is anticipated in the vicinity of the listed sites, MM 4.10-1 is proposed to ensure that appropriate measures are taken should contaminated groundwater or soils be encountered during excavation or trenching activities. Implementation of MM 4.3-4 requires compliance with safety measures required by the Occupational Safety and Health Administration (OSHA) and would mitigate potential impacts related to contaminated groundwater during construction to a less than significant level.

## Mitigation Measure

The following measure is proposed to address potential impacts related to Hazards and Hazardous Materials during construction, including potentially contaminated groundwater.

- 4.10-1** During all excavation and construction activities for the Americans with Disabilities (ADA) gangway platforms and utilities, OC Dana Point Harbor shall require that all construction subcontractors address site safety requirements by complying with the appropriate health and safety measures required by the Occupational Safety and Health Administration (OSHA). Applicable specifications prepared by OSHA related to earth resources consist of Section 29 Code of Federal Regulations (CFR) Part 1926, which are focused on worker safety in excavations. In the event that suspicious odors are observed in soil, construction shall be terminated until the soil is properly characterized for hazardous waste content. Appropriate measures shall be taken in compliance with all applicable regulations for the characterization and disposal of hazardous materials (refer to FEIR No. 591, Mitigation Measure 4.3-4).

## 4.10.7 CUMULATIVE IMPACTS

The Hazards and Hazardous Materials cumulative study area considered for cumulative impacts consisted of (1) the area that could be affected by proposed project activities, and (2) the areas affected by other projects whose activities could directly or indirectly affect the presence or fate of hazards or hazardous materials on site. In general, only projects occurring adjacent to or very close to the project site are considered due to the limited potential impact area associated with on-site hazards or the release of hazardous materials into the environment from Marina renovation activities. Other than landside Commercial Core Projects already considered in the Program FEIR, no other projects in the immediate vicinity of the project site have been identified that would have the potential to affect the presence of hazardous materials on site.

The proposed Marina Improvement Project does not require the demolition of buildings or removal of hazardous materials that would need to be tested, removed, and transported off site to an approved disposal facility. The potential for contaminated soils to be encountered is considered low. However, MM 4.10-1 is proposed to ensure compliance with the appropriate health and safety measures required by OSHA to ensure that there would be no significant adverse impact to the environment or to human health. Encountering contaminated groundwater would be a temporary condition that is subject to regulatory oversight. Once existing hazardous materials have been removed to the satisfaction of the Orange County DHS, SCAQMD, and the Orange County Fire Authority (as applicable), operation of the Marinas would involve the use and storage of household hazardous materials typical of Harbor uses and would not present a significant hazard to the environment with regulatory compliance procedures in place.

The proposed project would not create potential significant cumulative impacts related to hazardous materials off site, as hazardous materials are not expected to be encountered. Transportation of hazardous materials off site is not anticipated. In addition, the Orange County Sheriff, Orange County Fire Authority, and the Orange County Harbor Patrol are trained in emergency response procedures for safely responding to accidental spills of hazardous substances in the Harbor, further reducing

potential impacts. Therefore, transport of hazardous materials to and from the project site does not present a significant cumulative hazard.

With implementation of MM 4.10-1 and compliance with all federal, State, and local regulations concerning the storage and handling of hazardous materials, the impacts of the proposed project in combination with reasonably foreseeable projects in the surrounding areas would not contribute to significant cumulative impacts to people or the environment due to exposure to hazardous materials or hazards.

#### **4.10.8 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

There are no significant unavoidable adverse hazards or hazardous materials impacts associated with the proposed project.

## 4.11 GREENHOUSE GASES

This section discusses the potential project effects of building the proposed Dana Point Revitalization Project on global climate change (GCC) and the total greenhouse gas (GHG) emissions. This section describes the physical setting of the project area and the regulatory framework for GCC and GHG emissions; evaluates potential short- and long-term GHG impacts associated with the proposed project; and identifies Standard Conditions of Approval (SC) and mitigation measures recommended to address potentially significant adverse GHG impacts of the proposed project.

### 4.11.1 EXISTING SETTING

#### Global Climate Change

GCC is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose  $0.6 \pm 0.2^\circ$  Celsius ( $^\circ\text{C}$ ) or  $1.1 \pm 0.4^\circ$  Fahrenheit ( $^\circ\text{F}$ ) in the 20th century. The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide ( $\text{CO}_2$ ) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The six gases that are widely seen as the principal contributors to GCC are as follows:

- $\text{CO}_2$
- Methane ( $\text{CH}_4$ )
- Nitrous oxide ( $\text{N}_2\text{O}$ )
- Hydroflouorocarbons (HFCs)
- Perflouorocarbons (PFCs)
- Sulfur Hexaflouride ( $\text{SF}_6$ )

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as  $\text{CO}_2$ ,  $\text{CH}_4$ , and  $\text{N}_2\text{O}$ , some gases, like HFCs, PFCs, and  $\text{SF}_6$ , known collectively as chlorofluorocarbons (CFCs), are completely new to the atmosphere.

Some gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric

concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this analysis, the term “GHGs” will refer collectively to the above six gases only.

These six gases vary considerably in terms of Global Warming Potential (GWP): the relative effectiveness of a gas to absorb infrared radiation, remain in the atmosphere, and contribute to global warming. The GWP of each gas is measured relative to CO<sub>2</sub>, the most abundant GHG; thus, GHG emissions are typically measured in terms of pounds or tons of “CO<sub>2</sub> equivalents” (CO<sub>2</sub>e). Table 4.11.A shows the GWPs for each type of GHG. For example, sulfur hexafluoride is 22,800 times more potent in contributing to global warming than CO<sub>2</sub>.

**Table 4.11.A: Global Warming Potentials**

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide (CO <sub>2</sub> )	50-200	1
Methane (CH <sub>4</sub> )	12	25
Nitrous Oxide (N <sub>2</sub> O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF <sub>4</sub> )	50,000	7,390
PFC: Hexafluoromethane (C <sub>2</sub> F <sub>6</sub> )	10,000	12,200
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	22,800

Source: IPCC, 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the IPCC.

The following discussion summarizes the characteristics of the six GHGs listed above.

### Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form, as CO<sub>2</sub>. Natural sources of CO<sub>2</sub> include the respiration (breathing) of humans, animals and plants, volcanic outgassing, decomposition of organic matter and evaporation from the oceans. Human-caused sources of CO<sub>2</sub> include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. The Earth maintains a natural carbon balance and when concentrations of CO<sub>2</sub> are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO<sub>2</sub> to the atmosphere. Natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of man-made CO<sub>2</sub>, and consequently, the gas is building up in the atmosphere. The concentration of CO<sub>2</sub> in the atmosphere has risen about 30 percent since the late 1800s.<sup>1</sup>

<sup>1</sup> California EPA. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

In 2002, CO<sub>2</sub> emissions from fossil fuel combustion accounted for approximately 98 percent of man-made CO<sub>2</sub> emissions and approximately 84 percent of California's overall GHG emissions (CO<sub>2</sub>e). The transportation sector accounted for California's largest portion of CO<sub>2</sub> emissions, with gasoline consumption making up the greatest portion of these emissions. Electricity generation was California's second largest category of GHG emissions.

### **Methane**

CH<sub>4</sub> is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH<sub>4</sub> emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH<sub>4</sub> in California. CH<sub>4</sub> accounted for approximately 6 percent of gross climate change emissions (CO<sub>2</sub>e) in California in 2002. Total annual emissions of CH<sub>4</sub> are approximately 500 million tons, with manmade emissions accounting for the majority. As with CO<sub>2</sub>, the major removal process of atmospheric CH<sub>4</sub>—chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH<sub>4</sub> concentrations in the atmosphere are increasing.

### **Nitrous Oxide**

N<sub>2</sub>O is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N<sub>2</sub>O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N<sub>2</sub>O emissions in California. N<sub>2</sub>O emissions accounted for nearly 7 percent of climate change emissions (CO<sub>2</sub>e) in California in 2002.

### **Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride**

HFCs are primarily used as substitutes for ozone (O<sub>3</sub>) depleting substances regulated under the Montreal Protocol.<sup>1</sup> PFCs and SF<sub>6</sub> are generally emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs. HFCs, PFCs, and SF<sub>6</sub> accounted for about 3.5 percent of gross climate change emissions (CO<sub>2</sub>e) in California.

### **Emissions Sources and Inventories**

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks<sup>2</sup> of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes

<sup>1</sup> The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the O<sub>3</sub> layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for O<sub>3</sub> depletion.

<sup>2</sup> A sink is a natural or artificial reservoir that accumulates and stores some chemical compound for an indefinite period.

the latest information on global, United States, California, and local GHG emission inventories. However, because GHGs persist for a long time in the atmosphere (see Table 4.11.A), accumulate over time, and are generally well-mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

### **(1) Global Emissions**

Worldwide emissions of GHGs in 2004 were 27 billion metric tons of CO<sub>2</sub>e per year.<sup>1</sup> Global estimates are based on country inventories developed as part of programs of the United Nations Framework Convention on Climate Change (UNFCCC).

### **(2) United States Emissions**

In 2008, the United States emitted approximately 7.0 billion metric tons of CO<sub>2</sub>e or approximately 25 tons per year per person. Of the six major sectors nationwide— electric power industry, transportation, industry, agriculture, commercial, residential— the electric power industry and transportation sectors combined account for approximately 62 percent of the GHG emissions; the majority of the electrical power industry and all of the transportation emissions are generated from direct fossil fuel combustion. Between 1990 and 2006, total United States GHG emissions rose approximately 14.7 percent.<sup>2</sup>

### **(3) State of California Emissions**

According to California Air Resources Board (ARB) emission inventory estimates, California emitted approximately 474 million metric tons<sup>3</sup> of CO<sub>2</sub>e emissions in 2008.<sup>4</sup> This large number is due primarily to the sheer size of California compared to other states. By contrast, California has the fourth lowest per-capita carbon dioxide emission rate from fossil fuel combustion in the country, due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of growth by more than half of what it would have been otherwise.<sup>5</sup>

The Cal/EPA Climate Action Team stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO<sub>2</sub>e) was as follows:

- CO<sub>2</sub> accounted for 83.3 percent
- CH<sub>4</sub> accounted for 6.4 percent

<sup>1</sup> Combined total of Annex I and Non-Annex I Country CO<sub>2</sub>eq emissions. UNFCCC, 2007. *Greenhouse Gas Inventory Data*. Information available at [http://unfccc.int/ghg\\_data/ghg\\_data\\_unfccc/time\\_series\\_annex\\_i/items/3814.php](http://unfccc.int/ghg_data/ghg_data_unfccc/time_series_annex_i/items/3814.php) and [http://maindb.unfccc.int/library/view\\_pdf.pl?url=http://unfccc.int/resource/docs/2005/sbi/eng/18a02.pdf](http://maindb.unfccc.int/library/view_pdf.pl?url=http://unfccc.int/resource/docs/2005/sbi/eng/18a02.pdf).

<sup>2</sup> U.S. EPA. 2010. The 2010 U.S. Greenhouse Gas Inventory Report. <http://www.epa.gov/climatechange/emissions/usinventoryreport.html>. Accessed September 2010.

<sup>3</sup> A metric ton is equivalent to approximately 1.1 tons.

<sup>4</sup> California ARB, Greenhouse Gas Inventory Data - 1990 to 2004. <http://www.arb.ca.gov/cc/inventory/data/data.htm>. Accessed November 2010.

<sup>5</sup> California Energy Commission (CEC), 2007. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 - Final Staff Report, publication # CEC-600-2006-013-SF, Sacramento, CA, December 22, 2006; and January 23, 2007 update to that report.

- N<sub>2</sub>O accounted for 6.8 percent
- HFCs, PFC, and SF<sub>6</sub> accounted for 3.5 percent<sup>1</sup>

The ARB estimates that transportation is the source of approximately 38 percent of the State's GHG emissions in 2004, followed by electricity generation (both in-State and out-of-State) at 23 percent, and industrial sources at 20 percent. The remaining sources of GHG emissions are residential and commercial activities at 9 percent, agriculture at 6 percent, high global warming potential gases at 3 percent, and recycling and waste at 1 percent.<sup>2</sup>

The ARB is responsible for developing the California Greenhouse Gas Emission Inventory. This inventory estimates the amount of GHGs emitted to and removed from the atmosphere by human activities within the State of California and supports the AB 32 (Pavley, 2006) Climate Change Program. The ARB's current GHG emission inventory covers the years 1990-2004 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, agricultural lands). The emission inventory estimates are based on the actual amount of all fuels combusted in the State, which accounts for over 85 percent of the GHG emissions within California.

The ARB staff has projected statewide unregulated GHG emissions for the year 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, will be 596 million metric tons (MMT) of CO<sub>2</sub>e. GHG emissions from the transportation and electricity sectors as a whole are expected to increase, but remain at approximately 38 percent and 23 percent of total CO<sub>2</sub>e emissions, respectively. The industrial sector consists of large stationary sources of GHG emissions and the percentage of the total 2020 emissions is projected to be 17 percent of total CO<sub>2</sub>e emissions. The remaining sources of GHG emissions in 2020 are high global warming potential gases at 8 percent, residential and commercial activities at 8 percent, agriculture at 5 percent, and recycling and waste at 1 percent.<sup>3</sup>

## 4.11.2 REGULATORY SETTING

### Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the Environmental Protection Agency (EPA) has the authority to regulate CO<sub>2</sub> emissions under the federal Clean Air Act (CAA). While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the EPA commenced several actions in 2009 that are required to implement a regulatory approach to global climate change.

On September 30, 2009, the EPA announced a proposal that focuses on large facilities emitting over 25,000 tons of GHG emissions per year. These facilities would be required to obtain permits that would demonstrate they are using the best practices and technologies to minimize GHG emissions.

<sup>1</sup> California Environmental Protection Agency. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

<sup>2</sup> California ARB, 2008. <http://www.climatechange.ca.gov/inventory/index.html>. September.

<sup>3</sup> California ARB, 2008. <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>. September.



On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six greenhouse gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change. This EPA action does not impose any requirements on industry or other entities. However, the findings are a prerequisite to finalizing the GHG emission standards for light-duty vehicles mentioned below.

On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a final joint rule to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. EPA is finalizing the first-ever national GHG emissions standards under the CAA, and NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The EPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide (CO<sub>2</sub>) per mile in model year 2016, equivalent to 35.5 miles per gallon (mpg).

### State Regulations

In a response to the transportation sector's significant contribution to California's CO<sub>2</sub> emissions, AB 1493 (Pavley, 2002) was enacted on July 22, 2002. AB 1493 (Pavley, 2002) requires the ARB to set GHG emission standards for passenger vehicles and light-duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. To set its own GHG emissions limits on motor vehicles, California must receive a waiver from the EPA. On June 30, 2009, the EPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Notice of the decision was published in the Federal Register on July 8, 2009.

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order (EO) S-3-05. This EO (Schwarzenegger, 2005) established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

California's major initiative for reducing GHG emissions is outlined in AB 32 (Pavley, 2006), the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The ARB has established the level of GHG emissions in 1990 at 427 MMTCO<sub>2</sub>e. The emissions target of 427 MMTCO<sub>2</sub>e requires the reduction of 169 MMTCO<sub>2</sub>e from the State's projected business-as-usual 2020 emissions of 596 MMTCO<sub>2</sub>e. AB 32 (Pavley, 2006) requires the ARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.<sup>1</sup> Emission reductions that are projected to result from the recommended measures in the Scoping Plan are expected to total 174 MMTCO<sub>2</sub>e, which would allow

<sup>1</sup> ARB. 2008. *Climate Change Proposed Scoping Plan: a Framework for Change*. October.

California to attain the emissions goal of 427 MMTCO<sub>2e</sub> by 2020. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The ARB rule-making process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by an ARB Board hearing and rule adoption.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 (Pavley, 2006) directed the ARB and the newly created Climate Action Team (CAT)<sup>1</sup> to identify a list of “discrete early action GHG reduction measures” that can be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed EO S-1-07, further solidifying California’s dedication to reducing GHGs by setting a new Low Carbon Fuel Standard. This EO (Schwarzenegger 2007) sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs the ARB to consider the Low Carbon Fuel Standard as a discrete early action measure.

In June 2007, the ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The ARB adopted additional early action measures in October 2007<sup>2</sup> that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of perfluorocarbons from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and sulfur hexafluoride (SF<sub>6</sub>) reductions from the non-electricity sector. The combination of early action measures is estimated to reduce State-wide GHG emissions by nearly 16 MMTCO<sub>2e</sub>.<sup>3</sup>

To assist public agencies in analyzing the effects of GHGs under CEQA, Senate Bill (SB) 97 (Chapter 185, 2007) required the Governor’s Office of Planning and Research (OPR) to develop CEQA guidelines on how to minimize and mitigate a project’s GHG emissions. On December 30, 2009, the Natural Resources Agency adopted CEQA Guidelines Amendments related to climate change. These amendments became effective on March 18, 2010.

SB 375 (Steinberg, 2008), signed into law on October 1, 2008, is intended to enhance the ARB’s ability to reach AB 32 (August 31, 2006) goals by directing the ARB to develop regional GHG emissions reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. The ARB will work with California’s 18 metropolitan planning organizations to align their regional transportation, housing, and land use plans and prepare a “Sustainable Communities

<sup>1</sup> CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of ARB’s jurisdiction.

<sup>2</sup> ARB. 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October.

<sup>3</sup> ARB. 2007. “ARB approves tripling of early action measures required under AB 32.” News Release 07-46. <http://www.arb.ca.gov/newsrel/nr102507.htm>. October 25.

Strategy” to reduce the number of vehicle miles traveled in their respective regions and demonstrate the region’s ability to attain its GHG reduction targets.

California Green Buildings Standards Code (Cal Green Code) (CCR, Title 24, part 11) was adopted by the California Building Standards Commission in 2010 and became effective in January, 2011. The Code applies to all new constructed residential, nonresidential, commercial, mixed-use, and State-owned facilities, as well as schools and hospitals. Cal Green Code is comprised of Mandatory Residential and Nonresidential Measures and more stringent Voluntary Measures (TIERS I and II).

Mandatory Measures are required to be implemented on all new construction projects and consist of a wide array of green measures concerning project site design, water use reduction, improvement of indoor air quality, and conservation of materials and resources. The Cal Green Building Code refers to Title 24, Part 6 compliance with respect to energy efficiency, however it encourages 15 percent energy use reduction over that required in Part 6. Voluntary Measures are optional, more stringent measures to be used by jurisdictions that strive to enhance their commitment towards green and sustainable design and achievement of AB 32 (Pavley, 2006) goals. Under TIERS 1 and 2, all new construction projects are required to reduce energy consumption by 15 percent and 30 percent, respectively, below the baseline required under CEC as well as implement more stringent green measures than those required by mandatory code.

### **Regional Regulations**

In April 2008, the SCAQMD, in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents, convened a “GHG CEQA Significance Threshold Working Group.”<sup>1</sup> The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until the ARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential; non-residential; industrial; etc. However, the threshold is still under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects in which it is the lead agency. This threshold uses a tiered approach to determine a project’s significance, with 10,000 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>) as a screening numerical threshold.

On September 28, 2010, the SCAQMD proposed the following draft-tiered interim GHG significance threshold for development projects:

- **Tier 1** consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. If the project qualifies for an exemption, no further action is required. If the project does not qualify for an exemption, then it would move to the next tier.

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<sup>1</sup> For more information see: <http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html>.

- **Tier 2** consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing consistency determination requirements in CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at a minimum, comply with AB 32 (Pavley, 2006), GHG reduction goals; include an emissions inventory agreed upon by either the ARB or the SCAQMD, have been analyzed under CEQA and have a certified Final CEQA document, and have monitoring and enforcement components. If the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If the project is not consistent with a local GHG reduction plan, there is no approved plan, or the GHG reduction plan does not include all of the components described above, the project would move to Tier 3.
- **Tier 3** establishes a screening significance threshold level to determine significance using a 90 percent GHG emission capture rate. The 90 percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the following methodology. Using the SCAQMD's Annual Emission Reporting (AER) Program, the reported annual natural gas consumption for 1,297 permitted facilities for 2006 through 2007 was compiled and the facilities were rank-ordered to estimate the 90th percentile of the cumulative natural gas usage for all permitted facilities. Approximately 10 percent of facilities evaluated comprise more than 90 percent of the total natural gas consumption, which corresponds to 10,000 MTCO<sub>2</sub>e/yr (the majority of combustion emissions comprise CO<sub>2</sub>). SCAQMD suggested the following GHG screening thresholds: Industrial (when SCAQMD is the Lead Agency): 10,000 tpy CO<sub>2</sub>e; Residential: 3,500 tpy CO<sub>2</sub>e; Commercial: 1,400 tpy CO<sub>2</sub>e; Mixed-use: 3,000 tpy CO<sub>2</sub>e. If a project's GHG emissions exceed the GHG screening threshold, the project would move to Tier 4.
- **Tier 4** establishes a decision tree approach that includes compliance options for projects that have incorporated design features into the project and/or implement GHG mitigation measures.
  - Efficiency Target (2020 Targets)
    - 4.8 MTCO<sub>2</sub>e per service population (SP) for project level threshold (land use emissions only) and total residual emissions not to exceed 25,000 mty CO<sub>2</sub>e
    - 6.6 MTCO<sub>2</sub>e per SP for plan level threshold (all sectors)
  - Efficiency Target (2035 Targets)
    - 3.0 MTCO<sub>2</sub>e per SP for project level threshold
    - 4.1 MTCO<sub>2</sub>e per SP for plan level threshold

If a project fails to meet any of these emissions efficiency targets, the project would move to Tier 5.
- **Tier 5** would require projects that implement off-site GHG mitigation that includes purchasing offsets to reduce GHG emission impacts to purchase sufficient offsets for the life of the project (30 years) to reduce GHG emissions to less than the applicable GHG screening threshold level.

### 4.11.3 METHODOLOGY

This analysis evaluates potential global climate-related emissions associated with the proposed project. Modeled project emissions are estimated using methodology similar to that used in the FEIR

No. 591 Air Quality analysis and is based on the project land uses, vehicle data, and project trip generation, among other variables. The cumulative impact of the project is analyzed by determining whether the project conflicts with or obstructs the implementation of GHG reduction measures under Assembly Bill (AB) 32 (August 31, 2006) and/or other applicable State regulations.

#### 4.11.4 THRESHOLDS OF SIGNIFICANCE

Land use projects may contribute to the phenomenon of GCC in ways that would be experienced worldwide, and with some specific effects felt in California. However, no scientific study has established a direct causal link between individual land use project impacts and global warming. AB 32 (Pavley, 2006) requires statewide GHG emissions to be reduced to 1990 levels by 2020. Although these statewide reductions are now mandated by law, no generally applicable GHG emission threshold has yet been established.

In accordance with Senate Bill (SB) 97 (Chapter 185, 2007), the Natural Resources Agency adopted amendments to the State CEQA Guidelines on December 30, 2009, which includes criteria for evaluating GHG emissions.<sup>1</sup> Specifically, Appendix G of the State CEQA Guidelines (Environmental Checklist Form) lists the following thresholds, under which a project may be deemed to have a significant impact on air quality if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Under CEQA, “the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data.” CEQA grants agencies with the general authority to adopt criteria for determining whether a given impact is “significant.” When no guidance exists under CEQA, the agency may look to and assess general compliance with comparable regulatory schemes.<sup>2</sup>

The SCAQMD is currently developing thresholds for GHG emissions. As noted previously, the SCAQMD recommends a tiered approach. The Tier 3 threshold requires that a project’s incremental increase in GHG emissions should be below or mitigated to less than the significance screening level (10,000 MTCO<sub>2e</sub> per year for industrial projects; 3,500 MTCO<sub>2e</sub> for residential projects; 1,400 MTCO<sub>2e</sub> for commercial projects; 3,000 MTCO<sub>2e</sub> for mixed-use or all land use projects). The Tier 4

<sup>1</sup> The adopted amendments may be viewed at the following website: <http://ceres.ca.gov/ceqa/guidelines/>. 2010.

<sup>2</sup> See *Protect Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1107 [“[A] lead agency’s use of existing environmental standards in determining the significance of a project’s environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution.”]. Lead agencies can, and often do, use regulatory agencies’ performance standards. A project’s compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 106-09 (upholding use of regulatory agency performance standard).

threshold requires that projects achieve a project-level efficiency target of 4.8 MTCO<sub>2</sub>e per service population per year by 2020 and 3.0 MTCO<sub>2</sub>e per year by 2035 (total emissions not to exceed 25,000 MTCO<sub>2</sub>e per year).

While a wide array of thresholds and standards have been presented, the amendments to the State CEQA Guidelines reaffirm that the lead agency has the discretion to determine how to evaluate a project's significance under CEQA. The State CEQA Guidelines includes a new Section 15064.4, which states that, when making a determination of the significance of GHG emissions, a lead agency shall have discretion to determine whether to use a model or methodology to quantify GHG emissions and/or rely on a qualitative analysis or performance based standards.

This section analyzes whether the project would make a cumulatively significant contribution to the impact of GCC under the following qualitative standard:

- The proposed project would result in a significant GCC impact if it would conflict with or obstruct the implementation of GHG reduction goals under AB 32 (Pavley, 2006) or other State regulations.

If a project implements reduction strategies identified in AB 32 (Pavley, 2006), the Governor's Executive Order S-3-05, or other strategies to assist in reducing GHGs to the level proposed by the Governor, it could reasonably follow that the project would not result in a significant contribution to the cumulative impact of GCC.

#### **4.11.5 OVERVIEW OF PROGRAM FEIR GHG ANALYSIS**

Because CEQA did not have thresholds addressing climate change or GHG emissions at the time FEIR No. 591 was prepared, an analysis of GHG emissions was not included in FEIR No. 591. Therefore, a technical analysis was prepared to support the Addendum to FEIR No. 591; to analyze the GHG emissions associated with the Revitalization Project as a whole. The analysis for the Marina Improvement Project is derived from the GHG Memorandum prepared for the Addendum to FEIR No. 591 and Air Quality Analysis conducted to support this SEIR. This section therefore addresses the GHGs resulting from the entire construction process of the waterside project and from future long-term operation of the waterside project. CEQA requires that Lead Agencies consider the reasonably foreseeable adverse environmental effects of projects considered for approval. According to a recent letter from California's Office of the Attorney General<sup>1</sup> and other State guidance, GCC can be considered an "effect on the environment," and an individual project's incremental contribution to GCC can have a cumulatively considerable impact.

#### **4.11.6 IMPACTS AND MITIGATION**

##### **Less Than Significant Impacts**

**Rising Ocean Levels.** Rising sea levels may affect the natural environment in the coming decades by eroding beaches, converting wetlands to open water, exacerbating coastal flooding, and increasing the

<sup>1</sup> State of California, Department of Justice, 2008. Comment letter to the City of Concord re "Concord Community Reuse Plan Draft Environmental Impact Report – SCH #2007052094." August 8.

salinity of estuaries and freshwater aquifers. Coastal headlands and beaches are expected to erode at a faster pace in response to future sea level rise. Cumulatively, the effects of sea level rise may be combined with other potential long-term factors such as changes in sediment input and nutrient runoff. The cumulative impacts of physical and biological change due to sea level rise on the quality and quantity of coastal habitats are not well understood.<sup>1</sup> As the proposed project site is an existing man-made harbor, there is little potential for the sea level change to adversely affect the ecosystem.

Rising sea levels may affect the built environment, including coastal development such as buildings, roads, and infrastructure. Potential adaptations for the built environment include the construction of dikes and seawalls; beach nourishment; and elevating structures and roadways. The approved Dana Point Harbor Revitalization Plan LUP Policy 8.6.3-1 requires that a Shoreline Management Plan be prepared for Dana Point Harbor and updated every five years. The plan is intended to assess seasonal and long-term shoreline changes and the potential for flooding or damage from erosion, sea-level rise, waves, storm surge or seiches. The plan is also required to evaluate the feasibility of hazard avoidance, planned retreat, retrofitting existing or proposing new protection devices. The project site is currently protected by breakwaters and is therefore unlikely to be significantly affected by the change in sea level. Further, due to the nature of the proposed project being a floating marina, impacts related to rising sea levels are expected to be less than significant.

### **Potentially Significant Impacts**

**GCC/GHG Emissions.** An individual project cannot generate enough GHG emissions to significantly influence climate change, but individual projects can incrementally contribute toward the potential for the cumulative emissions driving GCC. Consequently, it is difficult to determine how project-related GHG emissions would contribute to GCC and how GCC may impact California. Therefore, project-related GHG emissions are not project-specific impacts to global warming but are instead the project's contribution to this cumulative impact. Therefore, this Subsequent Environmental Impact Report (SEIR) analyzes whether the project's GHG emissions would contribute toward the potential for GCC on a cumulative basis. Cumulative impacts related to GCC and GHG emissions are discussed in Section 4.11.7 below.

### **Cumulative Impacts**

GHG emissions estimates are provided herein for informational purposes only, as there is no established quantified GHG emissions threshold. Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis below is based on methodologies and information available at the time this analysis was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered (after energy-efficient technologies have been implemented). While information is presented below to assist the public and decision

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<sup>1</sup> Climate Change Science Program (CCSP) 4.1 January 15, 2009, 1 of 784 Final Report, United States CCSP, Synthesis and Assessment Product 4.1. Coastal Sensitivity to Seal Level Rise: A Focus on the Mid-Atlantic Region. Lead Agency: United States Environmental Protection Agency, Other Key Participating Agencies: United States Geological Survey, National Oceanic and Atmospheric Administration. Contributing Agencies: Department of Transportation.

makers in understanding the project's potential contribution to GCC impacts, the information currently available is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular GCC impacts or between any particular proposed mitigation measure and any reduction in GCC impacts.

Construction and operation of project development would generate GHG emissions. Typically, more than 80 percent of the total energy consumption takes place during the use of buildings and less than 20 percent is consumed during construction.<sup>1</sup> However, as the proposed project is replacing an existing use with a similar facility, the long-term impact on energy consumption would be negligible.

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles and vessels, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment.
- **Solid Waste Disposal:** Solid waste generated by the project, including construction waste, could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH<sub>4</sub> from the anaerobic decomposition of organic materials. CH<sub>4</sub> is 25 times more potent a GHG than CO<sub>2</sub>. However, landfill CH<sub>4</sub> can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Preliminary guidance from OPR and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities. GHG emissions generated by the proposed project would predominantly consist of CO<sub>2</sub>. In comparison to criteria air pollutants such as O<sub>3</sub> and PM<sub>10</sub>, CO<sub>2</sub> emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs, such as CH<sub>4</sub>, are important with respect to GCC, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed project than are levels of CO<sub>2</sub>.

Construction activities produce combustion emissions from various sources, such as Vessel and utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

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<sup>1</sup> United Nations Environment Programme (UNEP), 2007. *Buildings and Climate Change: Status, Challenges and Opportunities*, Paris, France.



The actual details of the future construction schedule are not known. The only GHG with well-studied emissions characteristics and published emissions factors for construction equipment is CO<sub>2</sub>. The construction modeling (Table 4.5.D in Section 4.5) lists a peak daily emissions rate of 10,734 lbs/day of CO<sub>2</sub> during the removal of the existing piles and slips. The removal of the existing piles and slips will require up to 80 days to complete. The installation of the new piles and slips will require approximately 360 days. The total CO<sub>2</sub> generated during the project construction will be 2,041,000 lbs, or 925 metric tons.

Due to the global nature of this phenomenon and the scale of the emissions, total emissions are expressed in units of teragrams (a trillion [10<sup>12</sup>] grams or one million metric tons) per year (Tg/year). This is the standard metric unit used worldwide. As described above, the project will produce 925 metric tons of CO<sub>2</sub>, which is approximately 0.0093 Tg/year of CO<sub>2</sub>. As a comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 million metric tons of CO<sub>2</sub> per year and approximately 496.95 million metric tons of CO<sub>2</sub> per year for the entire State.

As described above, project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Consequently, it is difficult to determine how project-related GHG emissions would contribute to GCC and how GCC may impact California. Therefore, project-related GHG emissions are not project-specific impacts to global warming but are instead the project's contribution to this cumulative impact.

Implementation of the project would result in GHG emission levels that would not substantially conflict with implementation of the GHG reduction goals under AB 32 (Pavley, 2006) or other State regulations. The project would be required to implement the construction exhaust control measures (Standard Conditions) listed in Section 4.5.6 (in Section 4.5), including minimization of construction equipment idling and implementation of proper engine tuning and exhaust controls. Therefore, project-related impacts related to GCC are considered less than cumulatively significant. However, in order to ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32 (Pavley, 2006), the Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Mitigation Measure 4.5-1 is proposed. Implementation of this measure would further reduce GHG emissions from construction and energy consumption sources. In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project.

#### **4.11.7 MITIGATION MEASURES**

The following measure is intended to reduce GHG emissions from construction and energy consumption sources.

- 4.11-1** OC Dana Point Harbor shall review and specifically approve contract provisions requiring that the following measures be incorporated into the design and construction of the project:

**Energy Efficiency Measures.**

- Install energy-efficient lighting and lighting control systems

- Install solar or other energy-efficient outdoor lighting, such as light-emitting diodes (LEDs)
- Landscape with native or drought-tolerant species to reduce water consumption and provide passive solar benefits, where feasible.

**Solid Waste Measures.**

- Reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) to the extent feasible; and
- Provide storage areas for recyclables and green waste and adequate recycling containers located in public areas (refer to FEIR No. 591, Project Design Feature [PDF] 4.6-1).

#### **4.11.8 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS**

Project-related impacts in regard to GCC are considered less than cumulatively significant. Implementation of Mitigation Measure 4.11-1 would further reduce GHG emissions from construction and energy consumption sources. In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. Therefore, no significant unavoidable adverse impacts are anticipated.

## 5.0 ALTERNATIVES

### 5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report/ Subsequent Environmental Impact Report (EIR/SEIR) describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. This section sets forth the potential alternatives to the proposed project and evaluates them as required by CEQA and the CEQA Guidelines.

Key provisions in the CEQA Guidelines regarding alternatives (Section 15126.6) are summarized below to explain the foundation of the alternatives analysis herein.

- The SEIR will describe and analyze a range of reasonable alternatives to the project or the project's location that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant impacts of the project. The EIR/SEIR will also evaluate the comparative merits of the alternatives.
- The No Project/No Development Alternative shall be evaluated along with its impact. The No Project/No Development Alternative analysis shall discuss the existing conditions as well as what could be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an SEIR is governed by the "rule of reason," which requires the EIR/SEIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- Factors that may be taken into account when addressing the feasibility of alternatives are site suitability; economic viability; availability of infrastructure; General Plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site(s).
- Only alternative locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the SEIR.
- An SEIR need not consider an alternative under which the effect cannot be reasonably ascertained and implementation is remote and speculative.

In identifying alternatives for this SEIR, alternatives were selected by Orange County (County or OC) Dana Point Harbor (Harbor) that comply with CEQA requirements, would be reasonable and feasible for the project site, consider the existing uses of the project area, and are based upon public comments

received on both of the Notice of Preparations (NOPs)<sup>1</sup> and/or at the public scoping meeting for this SEIR, which was held on December 8, 2007.

In addition to the alternatives selected for evaluation, several possible alternatives are considered but rejected because they failed to meet the project objectives and/or were not deemed feasible. These considered but rejected alternatives are described in Section 5.5.

## 5.2 SELECTION OF ALTERNATIVES

Section 21100 of the Public Resources Code (PRC) and Section 15126 of the CEQA Guidelines require an EIR/SEIR to identify and discuss a No Project/No Development Alternative as well as a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts.

Alternatives to the proposed Harbor Marina Improvement Project considered for analysis in this SEIR are described below. These project alternatives should not be confused with several design alternatives considered by the County that presented differing mixes of boat slip sizes and layouts for the East and West Basins. These design alternatives were publicly represented as Alternatives 1 through 5; further, up to 15 variations of the designs were presented to and considered by a Boater Focus Group. It should be noted that these design alternatives are different from Alternatives 1 through 3 analyzed in this SEIR as CEQA identified alternatives to the proposed project. The previously considered design alternatives are further discussed in Section 5.5.

- **Alternative 1: No Project/No Development.** Consistent with Section 15126.6(e) of the CEQA Guidelines, the No Project/No Development Alternative is the existing condition of the project site at the time the NOP was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. This alternative evaluates circumstances under which the project does not proceed. Alternative 1 does not include any improvements or changes to the dock and slip facilities within the Harbor. Although the Marina Improvement Project is not included in this alternative, it is assumed that the overall Harbor Revitalization Project (“Revitalization Plan”) would continue to proceed through to implementation. Therefore, because some docks would be required to service the Dry Boat Storage building proposed as part of the overall Revitalization Plan, the Embarcadero/Dry Boat Storage Staging docks are presumed to be implemented with the landside projects, and the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and Dry Boat Storage building structure. Under the No Project Alternative it is assumed that the Embarcadero/Dry Boat Storage Staging docks would proceed through a separate environmental review and approval process.
- **Alternative 2: Reduced Project Alternative.** This alternative is a result of the input received during the public scoping process and was developed as a version of an alternative layout design (Design Alternative 1) intended to reduce the number of slips lost at project completion while updating the Marinas to be in compliance with Americans with Disabilities Act (ADA) and

<sup>1</sup> The NOP was distributed on November 27, 2007; due to the length of time that passed prior to release of this SEIR, the NOP was reissued on December 21, 2009.

California Department of Boating and Waterways (DBW) standards. Alternative 2 includes an average slip size of 29.51 feet (ft) and would result in 2,254 slips (a net loss of 155 slips) when compared to the existing layout. Alternative 2 replaces the docks in their current configuration and does not include channel narrowing or a realignment of the West Basin. This design alternative was originally rejected because it did not meet the demand for slips larger than 30 ft and because it did not help resolve the issue of placing boats in the appropriately sized slips. However, in light of the California Coastal Commission's (CCC) suggested modifications to the Land Use policies that the project result in a loss of no more than 155 slips with an average slip length not to exceed 32 ft, this design alternative has been included as a CEQA alternative for discussion in this SEIR. This alternative includes the construction of six ADA gangways (including two within each Marina). Alternative 2 would include the Embarcadero/Dry Boat Storage Staging docks, guest docks, dinghy docks, Harbor Patrol docks, sport fishing docks, and commercial fishing docks but would not include renovations to the Marine Services docks or OC Sailing and Events Center docks. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). In addition, this alternative would not include any temporary/yacht broker docks.

- **Alternative 3: Reduced Project Alternative - Americans with Disability Act Improvements.** Alternative 3 includes only improvements in the East and West Basins to meet ADA standards (four ADA gangways) and does not include any renovations to the existing dock and slip facilities in those basins. There may be a few locations in the East and West Basins where portions of the existing 3 ft and 4 ft wide fingers would need to be upgraded to the ADA 5 ft width requirement, and there may be a loss of a few slips in order to accommodate the installation of the ADA gangways, which are 80 ft long. However, the layout, configuration, and number of slips in the two Basins would remain essentially the same. Alternative 3 would also include construction of the Embarcadero/Dry Boat Storage Staging docks and sport fishing docks (including ADA gangways for each of those two dock areas), the guest docks, and the dinghy docks, but would not include renovations to the Marine Services docks, OC Sailing and Events Center docks, Harbor Patrol docks, or commercial fishing docks. Similar to Alternative 1, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks. In addition, this alternative would not include any temporary/yacht broker docks.

A complete discussion of each alternative is provided below. For each alternative, the analysis provides the following:

- A description of the alternative.
- An overview of the potential impacts of the alternative and the significance of those impacts (per CEQA Guidelines, the significant effects of an alternative shall be discussed but in less detail than those of the proposed project).
- A summary comparison of the alternative relative to the proposed project, specifically addressing whether the alternative would meet the project objectives and reduce impacts in comparison with the proposed project.

## 5.3 PROPOSED PROJECT

As previously noted, alternatives must be evaluated as to their ability to reduce or eliminate significant unavoidable adverse environmental impacts associated with the proposed project, including an alternate location, and to attain the basic objectives of the project. The comparative merits of the different alternatives are evaluated in accordance with CEQA.

The project addressed in this SEIR includes replacement of waterside facilities in the West and East Marinas in the Harbor, connection of dock gangways with the quay wall and bulkheads within those basins, realignment of the West Marina, inner channel narrowing, upgrading of pumpout stations, and replacement of gangways and security gates to both Marina areas (including ADA-compliant gangways and dock facilities). Additionally, new Embarcadero/Dry Boat Storage Staging docks and dinghy docks, along with renovations to the marine services docks, OC Sailing and Events Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed project. In order to accommodate displaced boats during project implementation, a temporary dock near the eastern breakwater is included in the project. The plan for this set of docks includes an option to retain all or a portion of the temporary docks as permanent yacht broker docks (any permanent use of these docks would require approval by the United States Army Corps of Engineers[Corps] and the CCC.)

### 5.3.1 Significant Unavoidable Environmental Impacts of the Proposed Project

The potential impacts of the proposed project are described in Section 4.0, along with feasible mitigation measures to reduce significant impacts. Many of the project impacts are below established thresholds of significance or can be reduced to below thresholds of significance with implementation of mitigation measures. Some impacts cannot be reduced to below a level of significance, even with mitigation, and are considered unavoidable adverse impacts. The unavoidable adverse impacts for the proposed project are discussed below.

**Air Quality Construction Impacts.** Implementation of the Marina Improvement Project would result in significant adverse impacts related to emissions of nitrogen oxide (NO<sub>x</sub>) and reactive organic compounds (ROC) during construction. While the adherence to South Coast Air Quality Management District (SCAQMD) rules and regulations and compliance with standard construction conditions would reduce impacts from construction activity, construction equipment/vehicle emissions would still exceed the SCAQMD-established daily emissions thresholds for NO<sub>x</sub> and ROC emissions. Therefore, impacts would remain significant and adverse. No feasible mitigation measures beyond compliance with SCAQMD rules and regulations and standard construction conditions are available to offset this significant impact. However, emissions from the proposed project's construction activities would not exceed SCAQMD's localized significance thresholds (LSTs), and significant adverse air quality impacts related to LSTs would not occur.

Construction activities for the Marina Improvement Project would also contribute to construction-related adverse cumulative air quality impacts because the South Coast Air Basin (Basin) is presently in nonattainment for ozone (O<sub>3</sub>), and the project, in conjunction with other planned projects, would contribute to the existing nonattainment status for O<sub>3</sub>. Therefore, the cumulative construction impacts of the proposed project would remain adverse and significant.

Although construction and operation of the project would result in greenhouse gas (GHG) emissions, implementation of the project would not result in GHG emission levels that would materially conflict with implementation of the GHG reduction goals under Assembly Bill (AB) 32 or other State regulations. Therefore, project-related impacts related to global climate change are considered less than cumulatively significant.

**Noise – Cumulative Construction Impacts.** Construction of the proposed project improvements would result in a temporary periodic increase in existing ambient noise levels in the project area. Pile driving will be the noisiest activity on site, generating up to 93 A-weighted decibels (dBA) maximum instantaneous level ( $L_{max}$ ) at a distance of 50 ft. Other construction equipment used on site, such as loaders and backhoes, would generate up to 86 dBA  $L_{max}$  at a distance of 50 ft.

The nearest sensitive receptors are the Dana Point Marina Inn, located approximately 200 ft from the closest project construction area, and the live-aboards who are in various locations throughout the Marina. These sensitive receptors would be subjected to short-term noise reaching 87 dBA  $L_{max}$  generated by project construction activities. Construction-related noise impacts from the proposed project would be potentially adverse. Implementation of Mitigation Measures 4.6.1 and 4.6.2 as proposed would reduce, but not entirely mitigate, the construction-related noise impacts. Although adhering to local restrictions related to hours of construction would normally reduce construction-related noise impacts to a less than significant level, the length of construction for the proposed project is anticipated to be up to eight years; therefore, project-related construction noise impacts are deemed to be significant and unavoidable due to the duration of construction activities. In addition, if the Commercial Core Project is under construction at the same time as the Marina Improvement Project, cumulative construction-related noise and vibration impacts would be considered significant and adverse. All other potential project impacts related to long-term operational noise are considered less than significant.

**Biological Resource Shading Impacts.** Shading impacts to marine biological resources due to new and additional dock coverage of water surfaces are considered significant and adverse for the temporary/yacht broker docks. Because the temporary docks will be present for the duration of construction activities (up to 8 years) and could possibly become permanent as yacht broker docks, and because there is no feasible mitigation to reduce shading impacts with the current project design, shading impacts in the temporary/yacht broker dock area are considered a significant and unavoidable adverse impact for both construction (short-term) and operational (long-term) conditions.

### 5.3.2 Existing Significant Environmental Conditions

**Geology and Soils Potential Liquefaction Impacts.** The mitigation measures described in Section 4.2, Geology and Soils, will reduce the project's potential geologic, seismic, and soils-related impacts and contribution to cumulative geology, seismic, and soils impacts to below a level of significance. However, liquefaction, which is an existing condition on site, will continue to have the potential to impact the seawall and gangway platforms in select locations in the event of an earthquake capable of producing liquefied conditions. Although the proposed project neither contributes to nor lessens the impacts associated with liquefaction, in the event of an earthquake that is capable of producing

liquefied conditions, the potential for liquefaction to impact the seawall, gangways, and platforms is considered potentially significant. Although this impact is not a direct project impact, but rather an existing condition, impacts associated with liquefaction are considered significant unavoidable adverse impacts.

## 5.4 PROJECT OBJECTIVES

Pursuant to Section 15124 of the CEQA Guidelines, the description of the proposed project contains a statement of the objectives sought for development of the proposed project. As described in Section 3.0, Project Description, the primary goals of the project are to revitalize the Harbor as a popular destination for boaters, local residents, and tourists while maintaining the unique character of the Harbor.

The Harbor Revitalization Plan was developed with the intent to enhance public access opportunities, provide updated visitor-serving commercial and marine recreational amenities, and promote coastal resource preservation throughout the Harbor. To this end, the Harbor Marina Improvement Project is intended to renovate and replace the dock and slip facilities, which are more than 35 years old. Specifically, the proposed project objectives are to:

- Maintain the Harbor's overall current character and family atmosphere
- Renovate and replace the deteriorating docks and slips
- Satisfy ADA requirements for dock areas of the Harbor
- Maintain a full-service Harbor
- Enhance the level of services for boaters
- Update commercial fishing facilities
- Maximize the number of slips available in the East and West Marinas for public rental by relocating many of the yacht broker slips to another area of the Harbor.
- Relocate guest dock facilities and provide new dinghy docks convenient to Day-Use Commercial uses
- Upgrade utility infrastructure to all areas of the Marinas
- Maintain a safe environment for the boating community, Harbor users, and merchants
- Provide improvements in accordance with DBW standards, including placing boats in appropriately sized slips
- Update sport fishing dock.

The project objectives listed above are intended to implement the 12 Plan Priorities developed in 1997 by the Task Force comprising merchants, boaters, residents, and representatives from the City of Dana Point (City) and the County. The 12 Plan Priorities have been, and will continue to be, the guiding principles for the Harbor Revitalization Plan and include the following:



1. Keep the Harbor's character and family atmosphere.
2. Harbor structures need a facelift/renovation.
3. Maintain a full-service Harbor.
4. Do not commercialize the Island.
5. Ensure future of Yacht Clubs.
6. Improve water quality.
7. Better utilization of existing parking.
8. Address overall mix of land uses.
9. Need more parking in commercial area.
10. Keep existing parkland, beach and landscape.
11. Balance of revenue and nonrevenue land uses.
12. Need restroom/showers near docks.

## **5.5 ALTERNATIVES CONSIDERED BUT REJECTED**

Section 15126.6(c) of the CEQA Guidelines requires EIRs to identify any alternatives that were considered by the Lead Agency but were rejected during the scoping process and briefly explain the reasons underlying the Lead Agency's determination. In evaluating an appropriate range of alternatives to the proposed project, a number of alternatives were considered and rejected for differing reasons by OC DPHD.

The alternatives considered and rejected for the proposed project are listed below.

### **5.5.1 Alternative Locations**

CEQA Guidelines Section 15126.6(f)(2)(A) states, "The key question [with regard to alternative locations] and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." Further, CEQA Guidelines Section 15126.6(f)(1) states that alternative locations only need be considered if the project proponent can reasonably acquire or already owns the identified alternative site. The proposed project is location-specific, as the project is to upgrade and replace the Harbor docks and slip facilities that are more than 35 years old. Because the project is specific to the Harbor, there are no alternative locations; therefore, the SEIR will not include analysis regarding alternative locations. This alternative was also rejected in the Program FEIR.

### **5.5.2 Design Alternatives**

In addition to the alternatives considered but rejected, as described above, the County considered several design alternatives that presented differing mixes of boat slip sizes and layouts for the East

and West Basins. These design alternatives were publicly represented as Alternatives 1 through 5; further, up to 15 variations of the designs were presented to and considered by a Boater Focus Group. It should be noted that these design alternatives are different from Alternatives 1 through 3 analyzed in this SEIR as alternatives to the proposed project. The design alternatives included four slip size categories: 30 ft and under; 31–38 ft; 39–49 ft; and over 50 ft. All five design alternatives and variations thereof were configured to meet ADA and DBW standards. These design alternatives were presented to the public and available for review on the County's Web site.<sup>1</sup> Public input was solicited and considered when developing the preferred project and project alternatives to be considered in this SEIR. The design alternatives for the project include the following:

- **Design Alternative 1.** This design alternative included an average slip size of 29.51 ft and resulted in a net loss of 155 slips when compared to the existing layout. Design Alternative 1 replaced the docks in their current configuration and did not include a realignment of the West Basin or channel narrowing. The percentages of slips in all four size categories remained the same as the existing percentages and resulted in a loss of slips in all size categories. Seventy-five percent of the slips under this alternative would remain 30 ft or less, resulting in a large percentage of smaller slips, which would not meet the demand for slips 30 ft and larger as indicated by the waitlist (approximately 92 percent of the waitlist was for slips 30 ft and larger at the time the first NOP was prepared for this SEIR).<sup>2</sup> Under Design Alternative 1, many hundreds of boats remain larger than their slips and hundreds more exceed the 3 ft overhang rule. This design alternative was originally rejected because it did not meet the demand for slips larger than 30 ft and because it did not help resolve the issue of placing boats in the appropriately sized slips. However, in light of the CCC's mandated goal of 'no net loss' of slips in the Harbor (or maximum loss of 155 slips), with an average slip length not to exceed 32 ft, a variation of this design alternative has been included as CEQA Alternative 2 for discussion in this SEIR.
- **Design Alternative 2.** This design alternative included an average slip size of 30.03 ft and resulted in a net increase of 30 slips when compared to the existing layout. Design Alternative 2 included a realignment of the West Basin to a north–south orientation and narrowing of the inner channels by 20 ft on each side and 40 ft on each side near the bridge. Under Design Alternative 2, 33 percent of the 30 ft and under category of slips were designed as doublewides. Seventy-four percent of the slips under this alternative would remain 30 ft or less, resulting in a large percentage of smaller slips, which would not meet the demand for slips larger than 30 ft as indicated by the waitlist (approximately 92 percent of the waitlist was for slips 30 ft and larger at the time the first NOP was prepared for this SEIR). This alternative resulted in a slight increase in the number of slips in all size categories. However, similar to Design Alternative 1, under Design Alternative 2 many hundreds of boats remain larger than their slips and hundreds more exceed the 3 ft overhang rule. This design alternative was rejected because it did not meet the demand for larger slips and because it did not help resolve the issue of placing boats in the appropriately sized slips.
- **Design Alternative 3.** This design alternative resulted in an average slip size of 33.97 ft with a net loss of 477 slips. This design alternative did include realigning the West Basin to a north–south orientation, but did not include inner channel narrowing. Under Design Alternative 3, 33 percent of the 30 ft and under category of slips were designed as doublewides. Forty-eight percent of the slips under this design alternative would remain 30 ft or less, resulting in the

<sup>1</sup> <http://www.dphplan.com/marinas.html>.

<sup>2</sup> November 2007.

greatest slip loss in the smallest category (in the existing Harbor layout, 75 percent of the slips are 30 ft or less). Although Design Alternative 3 partially addressed the need to place larger boats in appropriately sized slips and provided additional slips in the larger slip size categories (31–38 ft and 39–49 ft) to meet the current demand, it resulted in too many lost slips, particularly in the 30 ft and under category. Further, as a result of the CCC’s review of the Harbor-wide Revitalization Plan and mandated goal that the Marina Improvement Project result in the loss of no more than 155 slips, this alternative design is no longer viable and has been rejected from consideration.

- **Design Alternative 4.** This design alternative included an average slip size of 33.99 ft and resulted in a net loss of 374 slips. This design alternative was identical to Design Alternative 3, but included inner channel narrowing (20 ft on each side and 40 ft on each side near the bridge). Under Design Alternative 4, 33 percent of the 30 ft and under category of slips were designed as doublewides. Forty-eight percent of the slips under this design alternative would remain 30 ft or less, resulting in the greatest slip loss in the smallest category (in the existing Harbor layout, 75 percent of the slips are 30 ft or less). Although Design Alternative 4 partially addressed the need to place larger boats in appropriately sized slips and provided additional slips in the larger slip size categories (31–38 ft and 39–49 ft) to meet the current demand, it resulted in too many lost slips, particularly in the 30 ft and under category. Further, as a result of the CCC’s review of the Harbor-wide Revitalization Plan and mandated goal that the Marina Improvement Project result in the loss of no more than 155 slips, this alternative design is no longer viable and has been rejected from consideration.
- **Design Alternative 5.** This design alternative included an average slip size of 32.48 ft and resulted in a net loss of 251 slips. Design Alternative 5 included realigning the West Basin to a north-south orientation and inner channel narrowing (20 ft on each side and 40 ft on each side near the bridge). Design Alternative 5 resulted in 33 percent of the 30 ft and under category of slips designed as doublewides. This design alternative resulted in an increase of slips in the 31–38 ft and the 39–49 ft categories while still retaining 60 percent of slips in the 30 ft and under category. Because Design Alternative 5 helped address the need to place larger boats in appropriately sized slips by providing additional slips in the larger slip size categories (31–38 ft and 39–49 ft) to meet the current demand, had a net loss of fewer slips than the project as proposed at that time, and retained the largest percentage of slips in the 30 ft and under category (60 percent), it was the preferred design alternative. However, as a result of the CCC’s review of the Harbor-wide Revitalization Plan and mandated goal that the Marina Improvement Project result in the loss of no more than 155 slips, this alternative design is no longer viable and has been rejected from consideration.

## 5.6 ALTERNATIVE 1: NO PROJECT/NO DEVELOPMENT ALTERNATIVE

### 5.6.1 Description

Consistent with Section 15126.6(e) of the CEQA Guidelines, the No Project/No Development Alternative is the existing condition of the project site at the time the Notice of Preparation (NOP) was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. The setting of the site at the time of the NOP is described throughout Section 4.0 of this EIR with respect to individual environmental issues and the baseline of the impact assessment of the proposed project. This alternative will evaluate circumstances under which the

project does not proceed. This alternative assumes that the Harbor Revitalization Project, including the Local Coastal Program Amendment (LCPA) previously approved by the City and certified with suggested modifications by the CCC, would continue to proceed toward implementation. However, this alternative assumes that planned improvements to the waterside Marina facilities (Planning Areas 8–12), which require a separate, independent process for environmental clearance and approval, would not be implemented. In addition, because some docks would be required to service the Dry Boat Storage Staging building proposed as part of the overall Revitalization Plan, the Embarcadero/Dry Boat Storage Staging docks are presumed to be necessary; however, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks. Under the No Project Alternative it is assumed that the Embarcadero/Dry Boat Storage Staging docks would also proceed through a separate environmental review and approval process.

### **5.6.2 Environmental Analysis**

The No Project/No Development Alternative assumes that the existing on-site conditions would remain unchanged except for reasonably foreseeable maintenance and localized dock repairs as necessary and as is currently the case. Alternative 1 would be consistent with the LCPA for the Harbor Revitalization Plan. Therefore, impacts for this alternative related to consistency with the Harbor Revitalization Plan and District Regulations are considered less than significant, similar to the proposed project. Alternative 1 would not require a Coastal Development Permit (CDP) for the waterside improvements because no construction would take place. The planning effects (plan consistency) would therefore be fewer than the proposed project because this alternative would not require approval of a CDP. The Embarcadero/Dry Boat Storage Staging docks are presumed to be necessary for the development of the Dry Boat Storage building and therefore would be required to proceed through a separate environmental review and approval process.

In leaving the project area in its current condition, none of the physical impacts associated with construction of the proposed project would occur. There would be no construction traffic related to dock and slip replacement, and no construction air emissions or noise would be generated. Alternative 1 would result in no disturbance to marine habitat or species, would not cause impacts related to over-water shading, and would not reduce the number of slips in the Harbor. Current liquefaction concerns and the potential for impacts related to such concerns would continue to exist with this alternative, similar to the proposed project. Because this alternative eliminates the proposed construction activities, implementation of Alternative 1 would result in reduced environmental impacts as compared to the proposed project. Specifically, the No Project/No Development Alternative would avoid the significant unavoidable impacts related to construction air quality, cumulative construction noise, and marine habitat shading impacts associated with the proposed project. This alternative would not result in any significant long-term operational impacts.

However, under the No Project/No Development Alternative, dock and slip facilities that have reached the end of their useful life would not be replaced or brought up to current DBW standards. The slips would not provide Marina access for disabled persons, as no ADA-compliant facilities would be installed. Additionally, although dock repairs would continue to be conducted on an as-needed basis, repair expenditures and needed replacements would continue to increase over the years. As deterioration of the recreational facilities continued to occur, public access to coastal recreational resources could be impacted. The California Coastal Act of 1976 (Coastal Act) was created, in part, to maximize public access to and along the coast and maximize public recreational opportunities in the

Coastal Zone. Therefore, because this alternative would not provide ADA-compliant facilities and because the docks would continue to deteriorate, this alternative would have greater impacts related to consistency with CCC public access policies.

### **5.6.3 Attainment of Project Objectives**

The No Project/No Development Alternative would not achieve the project objectives. As described above, the deteriorating dock and slip facilities would not be replaced or renovated, ADA access would not be provided, and facilities would not be brought up to DBW standards. The Marina facilities would not be enhanced for boaters and overall serviceability would not be improved. The utility infrastructure provided to the docks would not be upgraded. In addition, the guest docks, now located in the West Marina, would not be relocated to a more convenient and central location near the commercial core. Finally, Alternative 1 would not meet the Harbor Task Force Plan Priority to implement a facelift/renovation to Harbor structures.

### **5.6.4 Conclusion**

This alternative would not result in any substantial physical environmental effects and would avoid significant project-related impacts to construction and cumulative air quality effects, cumulative construction noise in the project vicinity, and significant biological resource impacts due to shading. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, the project objectives would not be achieved with Alternative 1.

## **5.7 ALTERNATIVE 2: REDUCED PROJECT ALTERNATIVE - EAST AND WEST BASINS**

### **5.7.1 Description**

This alternative includes the East and West Marinas dock renovations, including the construction of seven ADA gangways (including two within each Marina). Alternative 2 replaces the docks in their current configuration and does not include channel narrowing or a realignment of the West Basin. This alternative would result in 2,254 slips, a loss of 155 slips as compared to the existing Marina layout. Alternative 2 would include the Embarcadero/Dry Boat Storage Staging docks, guest docks, dinghy docks, sport fishing docks, Harbor Patrol docks, and commercial fishing docks, but would not include renovations to the Marine Services docks or OC Sailing and Events Center docks. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). In addition, this alternative would not include any temporary docks or permanent yacht broker docks.

## 5.7.2 Environmental Analysis

### Land Use

Alternative 2 includes all renovations in the East and West Basins, the sport fishing docks, and the Embarcadero/Dry Boat Storage Staging docks, but does not include the improvements at other areas throughout the Harbor or construction of the temporary dock. Alternative 2 would continue to provide Marina-related recreation uses on the project site and would therefore be consistent with the existing marine and water-related recreational uses at the site. Alternative 2 would also be consistent with the Revitalization Plan LCPA. Therefore, impacts for this alternative related to consistency with the Harbor Revitalization Plan and District Regulations are considered less than significant, similar to the proposed project. As discussed in this SEIR, all waterside improvements must be approved as part of a CDP by the CCC prior to project construction. This alternative would still require approval of a CDP by the CCC due to the improvements being proposed within the waterside areas. Therefore, the planning effects (plan consistency) would be the same as under the proposed project because this alternative would require a CDP approval, similar to the proposed project.

Although Alternative 2 would provide ADA-compliant facilities at the East and West Marinas, guest docks, sport fishing docks, and the Embarcadero/Dry Boat Storage Staging docks, ADA-compliant facilities would not be provided for the OC Sailing and Events Center. The lack of ADA access improvements in this area would potentially reduce the public's access to the recreational opportunities provided at this location, thereby reducing this alternative's consistency with the Coastal Act, which is intended to maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone. Therefore, land use impacts compared to the proposed project are slightly greater due to the lack of ADA access at a portion of the Harbor areas as compared to the proposed project.

### Geology and Soils

Alternative 2 would not include as many structural improvements as the proposed project because it includes all renovations in the East and West Basins, the sport fishing docks, and the Embarcadero/Dry Boat Storage Staging docks, but does not include dock replacement in the additional Harbor areas or construction of the temporary dock. Impacts related to geology and soils focus primarily on soil disturbance related to the construction of the ADA gangway platforms and potential impacts related to liquefaction. Alternative 2 reduces the amount of dock construction within the Harbor and reduces the number of ADA gangways by two; a total of four ADA gangways with landside platforms would be installed in the East and West Basins, as well as one ADA gangway for the guest/dinghy docks, one ADA gangway for the sport fishing docks, and one ADA gangway for the Embarcadero/Dry Boat Storage Staging docks. Therefore, Alternative 2 would result in less soil disturbance and fewer potential geology-related impacts as compared to the proposed project.

Similar to the proposed project, Alternative 2 neither contributes to nor lessens the impacts associated with liquefaction. In the event of an earthquake that is capable of producing liquefied conditions, the potential for liquefaction to impact the seawall, gangways, and platforms is considered potentially significant. This impact is not a direct project impact, but rather an existing condition because the project area is subject to liquefaction in the event of an earthquake. Therefore, although Alternative 2 disturbs less soil than the proposed project, potential liquefaction impacts are still deemed to be similar to the proposed project. The direct project-related geology and soils impacts can be mitigated

to a less than significant level for both the proposed project and Alternative 2, but cumulative impacts due to existing liquefaction conditions remain significant and adverse, as they do for the proposed project.

There are no identified operational impacts for the proposed project related to geology and soils; Alternative 2 would have operational impacts related to geology and soils similar to the proposed project.

### **Hydrology and Water Quality**

Alternative 2 includes construction of dock facilities in the two basins and the sport fishing and Embarcadero/Dry Boat Storage Staging docks, but does not include dock replacement in the additional Harbor areas or the construction of the temporary dock. Similar to the proposed project, Alternative 2 would not increase the capacity of the Marina or add a new use and therefore, operational impacts related to the drainage pattern, runoff volumes, and pollutants from on and off site would remain essentially the same as in the existing condition. Therefore, operational drainage impacts for Alternative 2 related to hydrology and water quality are considered to be similar to the proposed project.

Similar to the proposed project, the potential water quality construction impacts associated with Alternative 2 can be mitigated to a less than significant level. However, under this alternative, potential hydrology and water quality impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor.

### **Transportation and Circulation**

Similar to the proposed project, Alternative 2 would result in a reduction in the overall number of slips in the East and West Basins. Although dock area would increase for the Embarcadero/Dry Boat Storage Staging docks, the linear footage for the sport fishing docks would remain the same, and this alternative would eliminate the dock replacements at the other Harbor areas. Neither the proposed Marina Improvement Project nor this alternative increases the capacity of the Harbor, and neither would have impacts on the surrounding circulation system. In addition, operational impacts associated with this alternative, similar to the proposed project, are considered to be less than significant, as there is adequate parking for operation of the Marinas.

Similar to the proposed project, the construction staging area in the West Cove parking lot (referred to as Zone C in the Program FEIR) would result in the loss of approximately 150 parking spaces for the duration of construction. The additional staging areas would be utilized as necessary, and impacts to these areas would be similar to the proposed project. Similar to the project, the loss of these spaces is considered less than significant for this alternative based on the Program EIR, which concluded that there was an excess of 168 parking spaces in Zone C under existing conditions and an excess of 209 parking spaces in Zone C with implementation of the Revitalization Plan. Based on revisions during the City and Coastal Commission review process, the current Revitalization Plan indicates that there will be an excess of 172 parking spaces in Zone C (now referred to as Zone III). Although this is fewer excess spaces than identified in the Program EIR, there is still an excess of parking spaces. This alternative will relocate some ADA parking spaces so that they are located next to the proposed ADA

gangways, but no other permanent changes to surface parking lots is planned. This alternative, therefore, is considered to have construction parking impacts similar to the proposed project.

Alternative 2 includes improvements within the East and West Basins, the sport fishing docks, and the Embarcadero/Dry Boat Storage Staging docks and would not include any renovations to the other Harbor areas. This alternative would result in fewer linear feet of dock space as compared to the proposed project. Therefore, this alternative's operational impacts would be potentially less than the proposed project's circulation and traffic impacts, although the proposed project's impacts are less than significant.

Under this alternative, potential construction-related circulation impacts would be fewer than those under the proposed project because no construction activities would occur within the areas associated with the Marine Services docks, OC Sailing and Events Center docks, or temporary docks. Because up to six phases/subphases would be eliminated from the construction schedule (see Preliminary Phasing Plan, Figure 3.14 in Chapter 3.0, Project Description), the duration of project construction would be significantly reduced, as well as the potential to impact on site circulation during construction activities. Therefore, although a Construction Management Plan would still be required as mitigation to ensure that there are no conflicts, potential construction-related circulation impacts would be fewer with Alternative 2 as compared to the proposed project.

The results of the Dana Point Harbor Boat Traffic Study (Moffatt and Nichol, November 2007) indicated that the proposed project's implementation would result in a slight decrease in the boating level of service for both basins, based on the capacity of the channel (maximum number of boats that can pass through a given segment of channel during a given time period) as a function of its navigable width (volume to capacity). However, the study concluded that the magnitude of these changes is considered to be so minimal that the net result would be considered to have no change from existing conditions. Alternative 2 would result in a loss of 155 slips in the East and West Basins, but fewer linear feet of dock space in the other areas of the Harbor; Therefore, due to the loss of more slips (resulting in fewer boats in the Marinas) than under the proposed project design, boat traffic impacts (which were determined to be less than significant for the project) would be reduced, and less than significant, for Alternative 2.

## **Air Quality**

Alternative 2 would include all improvements in the East and West Basins, the sport fishing docks, as well as construction of the Embarcadero/Dry Boat Storage Staging docks, but would not include renovations to the Marine Services docks, OC Sailing and Events Center docks. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). No temporary docks would be included under this alternative. Because construction for these additional areas would be eliminated, the duration of the project construction emissions would likewise be reduced. The peak construction emissions generated during slip and pile removal and installation periods during construction for the proposed project would result in NO<sub>x</sub> and ROC emissions that would exceed the SCAQMD-established daily emissions threshold for those pollutants. This alternative would similarly exceed these thresholds because similar construction activities would take place in similar phases for construction of the improvements in the East and West Basins. Although overall emissions and the duration of emissions



being generated by construction would be reduced compared to the proposed project, due to the elimination of several construction phases/subphases, air quality construction impacts would remain significant and adverse, which is the same as the proposed project.

As with the proposed project, this alternative would not result in any substantive changes in long-term on-site stationary sources or result in changes to off-site vehicle trips and therefore would not have any significant long-term operational air quality impacts; however, construction-related impacts would remain significant and unavoidable.

Similar to the proposed project, construction and operation of Alternative 2 would result in GHG emissions; however, implementation of this Alternative would not result in GHG emission levels that would substantially conflict with implementation of the GHG reduction goals under AB 32 Governor's Executive Order S-3-05, or other strategies to help reduce GHGs to the levels proposed by the Governor. Therefore, Alternative 2 impacts related to global climate change are considered less than cumulatively significant, similar to the proposed project.

## **Noise**

Alternative 2 would include improvements in the East and West Basin, the sport fishing docks, and the construction of the Embarcadero/Dry Boat Storage Staging docks, but would not include renovations to the other dock and slip areas or construction of the temporary dock. This alternative would reduce the duration of the construction operations and would eliminate the pile driving required for the construction of Marine Services docks and the OC Sailing and Events Center docks.. Therefore, the length of the construction-related noise impacts is reduced compared to those of the proposed project. However, implementation of this alternative is still expected to result in significant construction noise impacts due to the number of phases of construction still required and the duration of construction activities, including pile driving, similar to the proposed project. As with the proposed project, this alternative would not result in any significant long-term operational noise impacts.

## **Biological Resources**

Alternative 2 does not include renovations to the Marine Services docks or OC Sailing and Events Center docks. In addition, this alternative would not include any temporary docks. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). Because the amount of construction is reduced under this alternative, potential impacts to marine resources resulting from turbidity and accidental spills during construction activities, construction impacts to endangered species, and potential impacts related to the presence of eelgrass or *Caulerpa* would also be reduced from the proposed project, which is less than significant with incorporated mitigation measures. However, the potential for impacts to sensitive or protected birds and potential long-term water quality-related impacts to marine life would be similar to the proposed project. Impacts to the marine biological community within the Harbor would not be significantly reduced with this alternative.

Shading impacts to marine biological resources due to new and additional dock coverage of water surfaces under the proposed project are considered significant and adverse for the temporary/yacht

broker docks. Under Alternative 2, the potentially significant impacts to this area would not occur. Therefore, the significant and adverse impacts due to shading would be avoided as compared to the proposed project.

Impacts to the other marine biological communities within the Harbor would be reduced with this alternative, as implementation of mitigation measures would reduce impacts to a less than significant level for both the proposed project and this alternative. However, this alternative would have no significant and adverse shading impacts as compared to the proposed project and would avoid potential impacts to eelgrass habitat in the vicinity of the OC Sailing and Events Center docks; therefore, biological impacts are considered fewer for Alternative 2.

### **Aesthetics**

Alternative 2 does not include renovations to the Marine Services docks OC Sailing and Events Center docks or construction of the temporary dock. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). In addition, this alternative would not include any temporary docks. This alternative includes the renovations to the East and West Basins, similar to the proposed project (but with no realignment of the West Basin and no channel narrowing). As a result, views throughout the Basins would be similar to the proposed project, which were considered less than significant.

Under this alternative, potential aesthetic impacts related to construction would be somewhat reduced compared to impacts under the proposed project because no construction activities would occur within the Marine Services docks or OC Sailing and Events Center docks. In addition, no visual impacts would occur related to the temporary docks. Overall, Alternative 2 would result in less than significant impacts related to aesthetic resources, as does the proposed project.

### **Recreational Resources**

Alternative 2 does not include renovations to the Marine Services docks, OC Sailing and Events Center docks, or temporary dock. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). Similar to the proposed project, this alternative would replace the dock facilities in the East and West Basins, enhancing the existing recreational facilities. Neither this alternative nor the proposed project removes the Harbor's recreational facilities, and no potentially significant impacts are identified for either scenario. However, because this Alternative results in the loss of more slips than the proposed project (155 verses 116), there would be fewer recreational opportunities for boat owners and recreational boaters. Long-term recreational impacts would therefore be considered greater than the proposed project.

Although construction operations would be lessened with this alternative, replacement of the dock facilities in the East and West Basins would have construction-related impacts on recreational facilities similar to the proposed project, which were considered less than significant.

Alternative 2, similar to the proposed project, would not cumulatively, along with other projects in the vicinity, result in increased demand for recreational facilities or require development or expansion of additional recreational facilities. However, due to the loss of more recreational boat slips, impacts to recreational resources for Alternative 2 are considered greater than the proposed project.

### **Hazards and Hazardous Materials**

Alternative 2 does not include renovations to the Marine Services docks, OC Sailing and Events Center docks or construction of the temporary dock. However, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks and the Dry Boat Storage building structure (the landside building is part of the overall Revitalization Plan). Similar to the proposed project, this alternative would replace the dock facilities in the East and West Basins. Construction activities would be limited to the East and West Basins, the sport fishing docks, and a small portion of the Marine Services dock area, and the potential to encounter hazardous materials during construction of this alternative would therefore be reduced. Therefore, hazards and hazardous waste effects under this alternative would be incrementally less than the proposed project because Alternative 2 would require the disturbance of fewer areas. Alternative 2 would result in less than significant impacts with mitigation incorporated related to hazards and hazardous wastes, similar to the proposed project.

Long-term operational impacts related to hazards and hazardous materials for Alternative 2 would be similar to the proposed project because the uses would continue to be recreational marine uses. Due to the existing Harbor regulations and best management practices (BMPs) related to water quality and boat maintenance activities, impacts related to the use of hazardous materials during operations within any Harbor area are considered less than significant for Alternative 2, similar to the proposed project.

### **5.7.3 Attainment of Project Objectives**

Alternative 2 would achieve most of the project objectives, but not to the same extent as the proposed project because this alternative would not improve the level of boater services at the Marine Services docks or provide ADA access at the OC Sailing and Events Center docks. In addition, under Alternative 2, the temporary dock would not be constructed, and therefore, the yacht broker slips would not be relocated to another area of the Harbor. Further, utility infrastructure would not be upgraded in all areas of the Marinas. The goals of the Dana Point Task Force would be furthered, but not to the degree that would occur under the proposed project since this alternative does not include improvements, including ADA access, to all of the areas included in the proposed project.

### **5.7.4 Conclusion**

Compared to the proposed project, land use impacts are slightly greater for this alternative due to the lack of ADA access at a portion of the Harbor areas as compared to the proposed project. Construction-related geology, hazardous materials, hydrology/water quality, noise, and aesthetic impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor. However, operational impacts for these same topics would be similar to the proposed project.

Operational circulation and boat traffic impacts would be reduced as compared to the proposed project, due to the reduction in the number of slips as compared to the proposed project. However, with mitigation these impacts were less than significant for the proposed project. Operational impacts related to land use and recreational resources would be greater as compared the proposed project for this alternative.

This alternative would not avoid significant and adverse project-related impacts to construction and cumulative air quality effects or avoid significant and adverse cumulative construction noise in the project vicinity. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, this alternative would avoid the significant and adverse biological shading impacts as compared to the proposed project.

## **5.8 ALTERNATIVE 3: REDUCED PROJECT ALTERNATIVE – ADA IMPROVEMENTS**

### **5.8.1 Description**

Alternative 3 includes only improvements in the East and West Basins to meet ADA standards (four ADA gangways) and does not include any renovations to the existing dock and slip facilities in those basins. There may be a few locations within the East and West Basins where portions of the existing 3 ft and 4 ft wide fingers would need to be upgraded to the ADA 5 ft width requirement, and there may be a loss of a few slips in order to accommodate the installation of the ADA gangways, which are 80 ft long. However, the layout, configuration, and number of slips in the two Basins would remain essentially the same. Alternative 3 would also include construction of the Embarcadero/Dry Boat Storage Staging docks and sport fishing docks (including ADA gangways for each of those two dock areas), the guest docks, and the dinghy docks, but would not include renovations to the Marine Services docks, OC Sailing and Events Center docks, Harbor Patrol docks, or commercial fishing docks. Similar to Alternative 1, the Marine Services dock will need to be modified (northern portion removed) in order to construct the Dry Boat Storage Staging docks. In addition, this alternative would not include any temporary/yacht broker docks.

### **5.8.2 Environmental Analysis**

#### **Land Use**

Alternative 3 does not include any dock/slip replacements in either the East or West Basins, but does include the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, guest docks, and dinghy docks. No other dock replacements would occur with this alternative. Alternative 3 would continue to provide Marina-related recreation uses on the project site and would therefore be consistent with the existing marine and water-related recreational uses at the site. Alternative 3 would also be consistent with the Revitalization Plan LCPA. Therefore, impacts for this alternative related to consistency with the Harbor Revitalization Plan and District Regulations are considered less than significant, similar to the proposed project. As discussed in this SEIR, all waterside improvements must be approved as part of a CDP by the CCC prior to project construction. This alternative would still require approval of a CDP by the CCC due to the improvements being proposed within the

waterside areas. The planning effects (plan consistency) would be the same as under the proposed project because this alternative would require a CDP approval, similar to the proposed project.

Although Alternative 3 would provide ADA-compliant facilities at the East and West Basins, the Embarcadero/Dry Boat Storage Staging docks, the sport fishing docks, and guest docks, ADA facilities would not be provided for the OC Sailing and Events Center docks. The lack of ADA access improvements in this area would potentially reduce the public's access to the recreational opportunities provided at this location, thereby reducing this alternative's consistency with the Coastal Act, which is intended to maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone. Therefore, land use impacts compared to the proposed project are slightly greater due to the lack of ADA access at a portion of the Harbor as compared to the proposed project.

### **Geology and Soils**

Alternative 3 would not include the dock and slip replacements in the East and West Basins associated with the proposed project. This alternative would include the installation of four ADA gangways in the East and West Basins, one ADA gangway at each of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks (for a total of seven ADA gangways). This would result in two fewer ADA gangways than with the proposed project. Impacts related to geology and soils focus primarily on soil disturbance related to construction of the ADA gangway platforms and potential impacts related to liquefaction. There are no identified operational impacts related to geology and soils for either the proposed project or this alternative.

Similar to the proposed project, Alternative 3 neither contributes to nor lessens the impacts associated with liquefaction. In the event of an earthquake that is capable of producing liquefied conditions, the potential for liquefaction to impact the seawall, gangways, and platforms is considered potentially significant. This impact is not a direct project impact, but rather an existing condition, because the project area is subject to liquefaction in the event of an earthquake. Therefore, because Alternative 3 disturbs less soil than the proposed project (seven ADA gangways constructed instead of nine), construction impacts are considered to be less than compared to the proposed project. The direct project-related geology and soils impacts can be mitigated to a less than significant level for both the proposed project and Alternative 3, but cumulative impacts due to existing liquefaction conditions remain significant and adverse.

### **Hydrology and Water Quality**

Alternative 3 would not include all of the dock and slip replacements associated with the proposed project. This alternative would include the installation of four ADA gangways in the East and West Basins and construction of one ADA gangway at each of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, resulting in two fewer ADA gangways than with the proposed project. No other dock facilities would be replaced or upgraded, and no temporary docks would be constructed. Similar to the proposed project, Alternative 3 would not increase the capacity of the Marina or add a new use and therefore, operational impacts related to the drainage patterns, runoff volumes, and pollutants from on and off site would remain essentially the same as in the

existing condition. Therefore, operational drainage impacts for Alternative 3 related to hydrology and water quality are considered similar to the proposed project.

Similar to the proposed project, the potential water quality construction impacts associated with Alternative 3 can be mitigated to a less than significant level. However, under this alternative, potential hydrology and water quality impacts would be significantly fewer than those under the proposed project because construction activities would be limited to seven ADA gangways, the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, and would not involve Harbor-wide dock replacement.

### **Transportation and Circulation**

Alternative 3 would implement the improvements necessary for ADA compliance within the East and West Basins as well as constructing the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway. This Reduced Project Alternative would not include the extensive dock and slip replacements associated with the proposed project. Neither the proposed Marina Improvement Project nor this alternative increases the capacity of the Marina, and neither would have impacts on the surrounding circulation system. It is possible that a few slips would be lost due to the construction and configuration required to implement the ADA gangways. Although operational impacts would remain similar to existing conditions, operational traffic impacts may be greater with Alternative 3 than with the proposed project because this alternative would result in more boat slips in the West and East Basins (2,409 existing slips would remain versus the proposed project's 2,293 slips). However, similar to the proposed project, operational traffic impacts associated with this alternative are considered less than significant because the capacity of the Marina is not increased, and because there is adequate parking for operation of the Marina.

The construction staging area in the West Cove parking lot would be reduced in size compared to the proposed project due to the reduced construction associated with this Alternative. Similar to the project, the loss of parking spaces due to construction is considered less than significant for this Alternative based on the Program EIR, which concluded that there was an excess of parking spaces Harbor-wide under both existing conditions and with implementation of the Revitalization Plan. The additional staging areas would be utilized as necessary, but to a lesser extent than under the proposed project since the areas and amount of construction is reduced under this alternative. This alternative will relocate some ADA parking spaces so that they are located next to the proposed ADA gangways, but no other permanent changes to surface parking lots is planned. This alternative is considered to have fewer construction parking impacts than the proposed project.

Under this alternative, potential construction-related circulation impacts would be fewer than those under the proposed project because no construction activities would occur within the areas associated with the Marine Services docks, OC Sailing and Events Center docks, Harbor Patrol docks, commercial fishing docks, or temporary docks. In addition, construction activity in the East and West Basins would be limited to ADA improvements and not complete dock replacement. Because the majority of phases would be eliminated from the construction schedule, the duration of project construction would be significantly reduced, as well as the potential to impact on site circulation during construction activities. Therefore, although a Construction Management Plan would still be required as mitigation to ensure there are no conflicts, potential construction-related circulation

impacts would be fewer with Alternative 3 as compared to the proposed project due to its significantly reduced construction activity.

The results of the Dana Point Harbor Boat Traffic Study (Moffatt and Nichol, November 2007) indicated that the proposed project's implementation would result in a slight decrease in the boating level of service for both basins, based on the capacity of the channel (maximum number of boats that can pass through a given segment of channel during a given time period) as a function of its navigable width (volume to capacity). However, the study concluded that the magnitude of these changes is considered to be so minimal that the net result would be considered to have no change from existing conditions. Because Alternative 3 involves only the ADA improvements to the East and West Basins (no dock replacement) and construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway, this alternative would result in more boat slips than the proposed project (2,409 existing slips versus the proposed project's 2,293 slips), but approximately the same number as the existing condition. Further, there would be no channel narrowing or construction of temporary docks under this alternative. Therefore, impacts related to boating operations under Alternative 3 would be similar to the existing condition, which was determined to operate at a very high level of service, and essentially similar to the proposed project. Project-related boat traffic impacts were determined to be less than significant for the proposed project.

## **Air Quality**

Alternative 3 would include four ADA improvements in the East and West Basins and construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway, but would not include renovations to the Marine Services docks or OC Sailing and Events Center docks. No temporary docks would be included under this alternative. Because construction for these additional areas would be eliminated, the duration of project construction would be reduced. Therefore, construction-related emissions from all sources would likewise be reduced. In addition, because this alternative would not require removal and installation of piles and slips in the East and West Basins and because the renovations to the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks are a significantly smaller construction phase, construction air quality impacts would be substantially reduced.

This alternative requires removal and installation of significantly fewer piles and square feet (sf) of dock space as compared to the project's removal of 1,306 piles and 492,530 sf of dock space and installation of 969 piles and 459,540 sf of dock space. This alternative would not exceed the SCAQMD-established daily emissions threshold for NO<sub>x</sub> and ROC during construction and would therefore avoid the significant and adverse air quality impacts associated with the proposed project's construction impacts.

Although this alternative would result in more slips than the proposed project, neither the proposed project nor this alternative would result in any substantive changes in long-term on-site stationary sources or result in changes to off-site vehicle trips. Therefore, Alternative 3, similar to the proposed project, would not have any significant long-term operational air quality impacts.

Similar to the proposed project, construction and operation of Alternative 3 would result in GHG emissions; construction emissions would be less than the proposed project due to the reduction in

construction activities and duration. Implementation of this Alternative would not result in GHG emission levels that would substantially conflict with implementation of the GHG reduction goals under AB 32 or other State regulations. Therefore, Alternative 3 impacts related to global climate change are considered less than cumulatively significant, similar to the proposed project.

## Noise

Alternative 3 would include four ADA improvements in the East and West Basins and construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway, but would not include renovations to the other dock and slip areas. This alternative would reduce the duration of the construction operations and would eliminate the pile driving required for all other dock improvements associated with the proposed project. Therefore, the length of the construction-related noise impacts is substantially reduced compared to those of the proposed project. Implementation of this alternative is expected to result in significant construction noise impacts due to the construction equipment and activities required, similar to the proposed project. However, because construction activities would be substantially reduced<sup>1</sup> and would be considered short-term, this alternative would not result in project-specific significant and adverse construction-related noise impacts. This alternative would therefore have fewer noise impacts than the proposed project. All other potential impacts related to long-term operational noise for either the proposed project or this alternative are similar and considered less than significant.

Even though the length of construction is significantly reduced, if the Commercial Core Project is under construction at the same time as this alternative, cumulative construction-related noise and vibration impacts would be considered significant and adverse, similar to the proposed project. However, because this alternative could be constructed in approximately 4 to 5 months, this is considered a very short-term cumulative impact.

## Biological Resources

Alternative 3 does not include dock renovations to the East and West Basin docks, Marine Services docks, or OC Sailing and Events Center docks. In addition, this alternative would not include any temporary docks. Because the amount of construction is significantly reduced under this alternative, potential impacts to marine resources resulting from turbidity and accidental spills during construction activities, construction impacts to endangered species, and potential impacts related to the presence of eelgrass or *Caulerpa* would also be reduced compared to the proposed project, which is less than significant with incorporated mitigation measures. However, the potential for impacts to sensitive or protected birds and potential long-term water quality-related impacts to marine life would be similar to the proposed project.

Shading impacts to marine biological resources due to new and additional dock coverage of water surfaces under the proposed project are considered significant and adverse for the temporary/yacht broker docks. Under Alternative 3, the potentially significant impacts to this area would not occur.

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<sup>1</sup> Approximately 4–5 months of construction would be required under this alternative, per communication with URS Associates, June 2010.



Therefore, the significant and adverse impacts due to shading would be fewer (none) compared to the proposed project.

Implementation of mitigation measures would reduce other biological impacts to a less than significant level for both the proposed project and this alternative. However, impacts to the marine biological community within the Harbor would be significantly reduced with this alternative. In addition, this alternative would have no significant and adverse shading impacts compared to the proposed project; therefore, impacts are considered less for Alternative 3.

### **Aesthetics**

Alternative 3 would include four ADA improvements in the East and West Basins and construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway, but would not include renovations to the other dock and slip areas or temporary docks. This alternative would significantly reduce the duration of construction operations. Therefore, potential aesthetic impacts related to construction would be significantly fewer than the proposed project because no construction activities would occur for the East and West Basins, the Marine Services docks, or the OC Sailing and Events Center docks. In addition, no construction or visual impacts would occur related to the temporary docks.

Long-term views throughout the Basins would be similar to the proposed project, which is considered to be less than significant. However, because Alternative 3 involves significantly less construction than the proposed project, overall aesthetic impacts for this alternative are considered to be less than the proposed project.

### **Recreational Resources**

Alternative 3 includes ADA improvements, but does not include improvements to the dock facilities in the East and West Basins. Although the existing recreational facilities would not be replaced or enhanced, new ADA access would be provided. In addition, this alternative includes the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway which, similar to the proposed project, would improve access to and enhance these dock areas. Neither this alternative nor the proposed project removes the Harbor's recreational facilities, and no potentially significant impacts are identified for either scenario.

Although construction operations would be significantly reduced with this alternative, construction-related impacts on recreational facilities under the proposed project were considered less than significant.

Alternative 3, similar to the proposed project, would not cumulatively, along with other projects in the vicinity, result in increased demand for recreational facilities or require development or expansion of additional recreational facilities. Although there are more slips provided for recreational boating as compared to the proposed project, this alternative does not improve or increase the useful life of the recreational facilities at the Harbor. Overall, the impacts to recreational resources for Alternative 3 are considered similar to the proposed project.

## **Hazards and Hazardous Materials**

Alternative 3 would include four ADA improvements in the East and West Basins and construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with one ADA gangway, but would not include renovations to the other dock and slip areas or temporary docks. Construction activities would be limited to the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, and the areas associated with the ADA platforms. The potential to encounter hazardous materials during construction of this alternative would be reduced as compared to the proposed project. Therefore, hazards and hazardous waste effects under this alternative would be slightly fewer than the proposed project because Alternative 3 would require the disturbance of fewer areas. Alternative 3 would result in less than significant impacts with mitigation incorporated related to hazards and hazardous wastes, similar to the proposed project.

Long-term operational impacts related to hazards and hazardous materials for Alternative 3 would be similar to the proposed project because the uses would continue to be recreational marine. Due to the existing Harbor regulations and BMPs related to water quality and boat maintenance activities, impacts related to the use of hazardous materials during operations within any Harbor area are considered less than significant for Alternative 3, similar to the proposed project.

### **5.8.3 Attainment of Project Objectives**

Alternative 3 would not achieve the project objectives, except to provide ADA access in the East and West Basins, and new Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, each with an ADA gangway. As described above, the deteriorating dock and slip facilities throughout the Harbor would not be replaced or renovated, and facilities would not be brought up to DBW standards. Commercial fishing facilities would not be updated, and the yacht broker slips would not be relocated to other areas of the Harbor. The Marina facilities would not be enhanced for boaters, and overall serviceability would not be improved. In addition, Alternative 3 would not upgrade the utility infrastructure. Lastly, boats would not be placed in appropriately sized slips. The goals of the Dana Point Task Force would not be furthered since this alternative does not include improvements to all of the areas included in the proposed project.

### **5.8.4 Conclusion**

Compared to the proposed project, land use impacts are slightly greater for Alternative 3 due to the lack of ADA access at a portion of the Harbor as compared to the proposed project. Construction-related hydrology and water quality impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor. However, operational water quality impacts would be similar to the proposed project. Because Alternative 3 does not include any renovations to the existing dock and slip facilities in the East and West Marinas, the number of slips would remain similar to existing conditions (2,409 slips), resulting in approximately 116 more slips than under the proposed project. Operational circulation impacts would therefore be greater than the proposed project, because the number of slips would be greater, although with mitigation these impacts were less than significant for the proposed project. Construction-related traffic impacts would be reduced when compared to the proposed project. Aesthetic impacts related to construction would be less than the proposed project because construction would not occur in as many areas of the

Harbor; long-term views would be similar to the proposed project. Impacts related to recreational resources both during construction and for long-term recreational opportunities would be fewer than under the proposed project. Impacts related to hazardous materials would be similar to the proposed project for this alternative.

This alternative would avoid significant and adverse project-related impacts to construction and cumulative air quality effects and cumulative construction noise in the project vicinity. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, this alternative would avoid the significant and adverse biological shading impacts as compared to the proposed project.

## **5.9 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the physical impacts that would not occur with Alternative 1. If there were no changes to the existing conditions on site, there would not be physical environmental effects and the significant project-related impacts to construction and cumulative air quality effects, cumulative construction noise in the project vicinity, and significant biological resource impacts due to shading would be avoided. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, none of the identified project objectives would be achieved with Alternative 1.

The CEQA Guidelines require that if the environmentally superior alternative is the No Project Alternative, “the EIR also identify an environmentally superior alternative among the other alternatives” (CEQA Guidelines Section 15126.6(e)(2)). The environmental effects for both short-term (construction) and long-term (operational) impacts were evaluated for each alternative and are summarized numerically in Tables 5.A and 5.B.

The Environmentally Superior Alternative, in terms of avoiding, reducing, or minimizing direct physical effects on the environment under short-term conditions, is Alternative 3, the Reduced Project with ADA Improvements. Besides construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, Alternative 3 does not include any renovations to the existing dock and slip facilities in the Harbor. By eliminating the replacement of docks throughout the Harbor, construction impacts under Alternative 3 would be significantly reduced in both scope and duration.

Alternative 3 meets only a few of the project objectives, such as satisfying ADA requirements for some dock areas. Other project objectives attained to a lesser extent include enhancing the level of services for boaters and maintaining a safe environment for the boating community. Although several ADA gangways would be installed with this alternative, the benefits of renovating the dock facilities and bringing the Harbor into compliance with all DBW standards would not be achieved with Alternative 3.

**Table 5.A: Short-term (Construction) Alternatives Impact Comparison**

<b>Issue Topic</b>	<b>Proposed Project (Level of Impact after Mitigation)</b>	<b>Alternative 1: No Project/ No Development</b>	<b>Alternative 2: Reduced Project – Design Alternative 1</b>	<b>Alternative 3: Reduced Project – ADA Improvements Only</b>
<b>Attainment of Project Objectives</b>	Meets all of the project objectives	No, meets none of the project objectives	Meets most project objectives	Meets only a few of the project objectives
<b>Land Use</b>	Less than Significant	1	2	2
<b>Geology and Soils</b>	Less than Significant	1	1	1
<b>Hydrology/ Water Quality</b>	Less than Significant	1	1	1
<b>Traffic and Circulation</b>	Vehicles: Less than Significant Boats: Less than Significant	Vehicles: 1  Boats: 1	Vehicles: 2  Boats: 2	Vehicles: 1  Boats: 2
<b>Air Quality/GHG</b>	<b>Significant and Adverse</b>	Air Quality: 1 GHG: 1	Air Quality: 1 GHG: 1	Air Quality: 1 GHG: 1
<b>Noise</b>	<b>Significant and Adverse</b>	1	1	1
<b>Biological Resources</b>	Less than Significant	1	1	1
<b>Aesthetics</b>	Less than Significant	1	1	1
<b>Recreation</b>	Less than Significant	1	2	1
<b>Hazards and Hazardous Materials</b>	Less than Significant	1	1	1
<b>Environmentally Superior Alternative (Short-Term Construction Impacts)</b>		<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

1 = Impacts are less than the Proposed Project  
 2 = Impacts are similar to the Proposed Project  
 3 = Impacts are greater than the Proposed Project  
 GHG = greenhouse gases

**Table 5.B: Long-term (Operational) Alternatives Impact Comparison**

<b>Issue Topic</b>	<b>Proposed Project (Level of Impact after Mitigation)</b>	<b>Alternative 1: No Project/ No Development</b>	<b>Alternative 2: Reduced Project – Design Alternative 1</b>	<b>Alternative 3: Reduced Project – ADA Improvements Only</b>
<b>Attainment of Project Objectives</b>	Meets all of the project objectives	No, meets none of the project objectives	Meets most project objectives	Meets only a few of the project objectives
<b>Land Use</b>	Less than Significant	1	3	3
<b>Geology and Soils</b>	<b>Significant and Adverse</b>	2	2	2
<b>Hydrology/ Water Quality</b>	Less than Significant	2	2	2
<b>Traffic and Circulation</b>	Vehicles: Less than Significant Boats: Less than Significant	Vehicles: 2 Boats: 2	Vehicles: 1 Boats: 1	Vehicles: 3 Boats: 2
<b>Air Quality/GHG</b>	Less than Significant	Air Quality: 2 GHG: 2	Air Quality: 2 GHG: 2	Air Quality: 2 GHG: 1
<b>Noise</b>	Less than Significant	2	2	2
<b>Biological Resources</b>	<b>Significant and Adverse</b>	1	1	1
<b>Aesthetics</b>	Less than Significant	2	1	1
<b>Recreation</b>	Less than Significant	2	3	2
<b>Hazards and Hazardous Materials</b>	Less than Significant	2	2	2
<b>Environmentally Superior Alternative (Operational Impacts)</b>		<b>Yes</b>	<b>No</b>	<b>Yes</b>

1 = Impacts are less than the Proposed Project  
 2 = Impacts are similar to the Proposed Project  
 3 = Impacts are greater than the Proposed Project  
 GHG = greenhouse gases

Alternative 3 would avoid the significant and adverse impacts to biological resources due to shading effects, and project-related impacts to construction and cumulative air quality effects. However, Alternative 3 would not eliminate cumulative construction noise in the project vicinity if the Commercial Core Project is under construction at the same time as this alternative. Alternative 3 would also result in reduced overall construction impacts for traffic, water quality, hazardous materials, aesthetics, and recreation compared with the proposed project because improvements and construction activities would be limited to a much smaller area. However, impacts related to these topics would still result in less than significant impacts, as would the proposed project.

Identifying the Environmentally Superior Alternative, in terms of avoiding, reducing, or minimizing direct physical effects on the environment under long-term conditions, is difficult due to the varying degrees to which each alternative impacts the environment. Similar to the proposed project, none of the alternatives would reduce the significant and unavoidable geology and soils impacts related to the existing liquefaction conditions. However, because Alternative 3 physically disturbs a significantly reduced area, resulting in significantly reduced scope and duration of construction activities, and because this alternative eliminates the significant and unavoidable impacts to marine resources due to shading and the construction and cumulative air quality impacts associated with the project, Alternative 3 is considered the Environmentally Superior Alternative.

However, as noted above, Alternative 3 would not achieve the project objectives except to provide ADA access in the East and West Basins and at the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks.

## 6.0 LONG-TERM IMPLICATIONS OF THE PROJECT

### 6.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The Guidelines for the California Environmental Quality Act (CEQA), Section 15126.2 (c), require that an Environmental Impact Report (EIR) consider and discuss significant irreversible changes that would be caused by implementation of the proposed project. The CEQA Guidelines specify that the use of nonrenewable resources during the initial and continued phases of the project should be discussed because a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary and secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) should also be discussed because such changes generally commit future generations to similar uses. Irreversible damage can also result from environmental accidents associated with the project and should be discussed.

The proposed Dana Point Harbor Marina Improvement Project would improve an existing marina facility. The project includes replacement of existing docks and slip facilities in the West and East Marinas, connection of dock gangways with the quay wall and bulkheads within those basins, and replacement of gangways and security gates to both Marina areas. Additionally, new Embarcadero/Dry Boat Storage Staging docks and dinghy docks, along with renovations to the Marine Services docks, Orange County Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed project. In order to accommodate displaced boats during project implementation, a temporary dock near the breakwater next to Doheny State Beach is included in the project. The project would decrease the number of boat slips from 2,409 to 2,293 for a loss of 116 slips. A total of 1,306 existing piles will be removed and approximately 969 new piles will be emplaced. In addition, the proposed Marina Improvement Project includes the addition of Americans with Disability (ADA) access at gangway ramp and dock locations where it currently is not available.

Construction of the project will result in a commitment of limited, slowly renewable, and nonrenewable resources. Such resources may include certain types of lumber and other forest products; raw materials such as steel; aggregate materials used in concrete and asphalt such as sand and stone; water; petrochemical construction materials such as plastic; and petroleum-based construction materials. In addition, fossil fuels used by construction equipment will also be consumed.

Similarly, operation of the proposed project will result in the continued commitment of limited, nonrenewable resources and slowly renewable resources such as electricity, petroleum-based fuels, fossil fuels, and water. Electricity will be used for lighting associated with the Marina facilities. However, the Marina facilities are not being expanded; rather, they are being replaced with updated facilities. In addition, Title 24 of the California Code of Regulations requires conservation practices that will limit the amount of energy consumed by the proposed project.

Operation of the proposed project requires continuation of potable water to serve the Marina needs. However, due to the reduction in the number of boat slips, the project would result in a small

reduction in, or maintenance of, existing levels of service of potable water compared to existing conditions. The potable water use will not increase, but will continue to represent the existing long-term commitment of this essentially nonrenewable resource.

As discussed in Section 4.5, Air Quality, the proposed project would result in construction impacts related to air quality. However, the project would not result in any long-term on-site stationary sources and would cause little to no change in the off-site vehicle trips. The project will generate emissions of GHGs in the form of worker vehicle, project material transport, and equipment exhaust during construction. Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Because the proposed Marina Improvement Project would replace existing facilities and does not increase or expand Marina capacity or allow new uses that might generate emissions, operation of the Marina facilities after construction would not result in any long-term change in off-site vehicle trips, boat trips, or additional equipment usage. Implementation of the project would result in GHG emission levels that would not substantially conflict with implementation of the GHG reduction goals under AB 32 or other State regulations. Therefore, project-related impacts related to GCC are considered less than cumulatively significant.

As discussed in detail in Section 4.10, Hazards and Hazardous Materials, the proposed project does not pose a significant health risk as a result of any health and safety hazards. Because the proposed project does not include uses that would generate or use substantial amounts of hazardous waste, and construction activities or site operation will not cause additional significant short- or long-term health risks, the project does not contribute to potential long-term public health and safety impacts.

Overall, due to the possible reduction in boat slips, any change in marina usage patterns is expected to be negligible as a result of project implementation; hence, no increase in demand for resources is anticipated when compared to existing conditions. The commitment of limited, slowly renewable, and nonrenewable resources required for the construction of the proposed project will limit the availability of these resources for future generations or for other uses during the life of the project. However, the uses associated with operation of the project represent a continued, not increased, use of these resources. No other significant irreversible changes are expected to occur as a result of project implementation.

## **6.2 GROWTH-INDUCING IMPACTS**

Section 15126 (d) of the State CEQA Guidelines requires that an EIR analyze growth-inducing impacts. Further, the CEQA Guidelines state that an EIR should discuss the ways in which the project could foster economic or population growth or construction of additional housing, either directly or indirectly, in the surrounding environment. Impacts associated with the removal of obstacles to growth, as well as the development of new or expanded facilities that encourage or facilitate growth, are considered to be growth inducing. However, the CEQA Guidelines also state that it should not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The project site is a fully developed marina facility; the proposed project would implement improvements and/or replacement of existing Harbor facilities. The proposed project would not expand the existing facilities; rather, the project would decrease capacity due to the reduction in boat



slips. The proposed project site is currently served by all utilities and public services required for existing and proposed uses; it is anticipated that the utilities would be brought up to current code requirements in order to meet the needs of the boaters. The project will not remove obstacles to growth in a previously undeveloped area because the uses on site will not change.

The potential for the project to generate additional growth is unlikely because the proposed project is the replacement and improvement of the existing Marina facilities and is intended to continue to serve the existing population. The project does not result in the creation of new jobs and would therefore not create a need for any additional housing. Based on these considerations, the proposed project would not induce population growth in the community or result in economic growth.

## **7.0 MITIGATION MONITORING AND REPORTING PROGRAM**

### **7.1 MITIGATION MONITORING REQUIREMENTS**

Public Resources Code Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- I. The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- II. The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- III. A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- IV. Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

## **7.2 MITIGATION MONITORING PROCEDURES**

The mitigation monitoring and reporting program has been prepared in compliance with Public Resources Code Section 21081.6. It describes the requirements and procedures to be followed by the OC Dana Point Harbor to ensure that all mitigation measures adopted as part of the proposed Dana Point Harbor Marina Improvement Project will be carried out as described in this SEIR.

Table 7.A lists each of the mitigation measures specified in this SEIR and identifies the party or parties responsible for implementation and monitoring of each measure.

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.1 LAND USE AND PLANNING</b>		
None required		
<b>4.2 GEOLOGY AND SOILS</b>		
<p><b>4.2-1</b> To reduce potential seismic ground-shaking impacts associated with the Americans with Disabilities Act (ADA) platforms, OC Dana Point Harbor and the Director, OC Public Works (OC PW)/Building Permit Services shall, prior to issuance of building permits, review and approve final design plans to ensure that recommendations contained in the Geotechnical Evaluation prepared for the proposed project (Leighton Associates, Inc., January 2008) are incorporated into final site drawings. The potential damaging effects of regional earthquake activity shall be considered in the design of each structure. The seismic evaluation shall be based on basic data, including the Uniform Building Code (UBC) Seismic Parameters. Structural design criteria shall be determined in consideration of building types, occupancy category, seismic importance factors, and possibly other factors. Design construction shall be performed in conformance with the latest UBC, California Building Code, or International Building Code and County Ordinances. Conformance can be expected to satisfactorily mitigate the effect of seismic groundshaking (refer to FEIR No. 591, Mitigation Measures 4.3-9 and 4.3-12).</p>	OC Dana Point Harbor Director, OC PW/Building Permit Services	Prior to issuance of construction permits
<p><b>4.2-2</b> To reduce potential lateral and surcharge load impacts from construction equipment near the seawall, OC Dana Point Harbor shall review and specifically approve contract provisions requiring equipment and/or storage setbacks from the seawall prior to issuance of any contract to demolish or construct within the project area. To reduce potential impacts associated with the instability of the seawall due to increased lateral loads imposed by construction equipment, adequate setbacks shall be observed from bulkhead areas for cranes, pile-driving equipment, or any other heavy construction equipment. (refer to FEIR No. 591, Mitigation Measure 4.3-6).</p>	OC Dana Point Harbor Director	Prior to issuance of any construction or demolition contract
<b>4.3 HYDROLOGY AND WATER QUALITY</b>		
<p><b>4.3-1</b> To reduce water quality impacts related to pile removal and replacement, OC Dana Point Harbor shall verify, prior to the issuance of any construction permits, that authorization has been obtained from: (1) the United States Army Corps of Engineers (Corps) under the Section 404 Permit program for the discharge of material into jurisdictional waters; and (2) the Corps, under Section 10 of the Rivers and Harbors Act for the placement of piles. In addition, standard conditions of the Corps permits require Section 401 water quality certification by the Regional Water Quality Control Board (RWQCB). In order to obtain these authorizations, the County shall develop a mitigation plan subject to review and approval by the appropriate resource agencies (Corps, United States Fish and Wildlife Service [USFWS], National Marine Fisheries Service [NMFS], California Department of Fish and Game [CDFG], and RWQCB).</p>	OC Dana Point Harbor	Prior to the issuance of any construction permits

**Table 7.A: Mitigation and Monitoring Reporting Program**

<b>Mitigation Measures</b>	<b>Responsible Party</b>	<b>Timing for Mitigation Measure</b>
<p><b>4.3-2</b> To reduce water quality impacts related to pile removal and replacement, OC Dana Point Harbor shall verify, prior to the issuance of any construction permits, that best management practices (BMPs) for all pile removal and replacement activities have been incorporated into project plans in order to reduce impacts to water quality to the maximum extent practicable in a manner meeting the approval of the OC Public Works (OC PW) Director. The construction contractor shall be responsible for performing and documenting the application of silt curtains and other BMPs identified in this document.</p>	<p>OC Dana Point Harbor</p>	<p>Prior to the issuance of any construction permits</p>
<p><b>4.3-3</b> Prior to the issuance of any construction permits, OC Dana Point Harbor shall verify that a trash and debris containment boom has been incorporated into project plans and will be implemented during all dock removal and replacement activities in order to reduce impacts to water quality to the maximum extent practicable in a manner meeting the approval of the OC Public Works (OC PW) Director. The construction contractor shall be responsible for performing and documenting the application of the trash and debris containment boom.</p>	<p>OC Dana Point Harbor</p>	<p>Prior to the issuance of any construction permits</p>
<p><b>4.3-4</b> To reduce impacts related to dewatering or construction-related non-storm water discharges, the construction contractor shall determine, prior to commencement of grading activities, whether dewatering of groundwater will be necessary during project construction. Any dewatering will require compliance with the State General Permit for discharges to land with a low threat to water quality or a dewatering permit from the San Diego Regional Water Quality Control Board (RWQCB), consistent with National Pollutant Discharge Elimination System (NPDES) requirements. Once it receives and reviews the Notice of Intent (NOI), the RWQCB will decide which permit is applicable and whether sampling is required. A copy of the permit shall be kept at the Marina Improvement Project, available for City and/or RWQCB review upon request.</p>	<p>Construction Contractor</p>	<p>Prior to commencement of grading activities</p>
<p><b>4.3-5</b> To reduce impacts related to water quality during landside construction, the Construction Contractor shall prepare an Erosion and Sediment Control Plan (ESCP) for approval by the Director, OC Public Works (OC PW)/Building Permit Services to demonstrate compliance with local and State water quality regulations for construction activities. The ESCP shall be approved prior to the issuance of any construction permits and shall identify how all construction materials, wastes, or demolition debris, etc., shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion, or dispersion. The ESCP shall also describe how the applicant will ensure that all best management practices (BMPs) will be maintained during construction. A copy of the current ESCP shall be kept at the offices of OC Dana Point Harbor and be available for review on request (refer to FEIR No. 591, Standard Conditions of Approval [SCA] 4.4-7).</p>	<p>Construction Contractor, Director, OC PW/Building Permit Services</p>	<p>Prior to the issuance of any construction permits</p>
<p><b>4.3-6</b> To reduce impacts related to water quality during landside construction, the Construction Contractor shall submit for review and approval by the Director, OC Public Works (OC PW)/Inspection Services Division, an Amendment to the Dana Point Harbor Conceptual Water</p>	<p>Construction Contractor, Director, OC PW/Building Permit Services</p>	<p>Prior to the issuance of any construction permits</p>

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>Quality Management Plan (WQMP) specifically identifying best management practices (BMPs) that will be used on site to control predictable pollutant runoff. Any required Amendment to the Conceptual WQMP shall be approved prior to the issuance of any construction permits. The WQMP will specifically identify BMPs that will be used on site to minimize the volume, velocity, and pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively address dry weather nuisance flow control predictable pollutant runoff. The WQMP shall follow the model WQMP as outlined in Exhibit 7.1 1 of the 2003 Drainage Area Master Plan, prepared by the County of Orange Flood Control District on July 1, 2003, or the most recent version available. This WQMP shall also demonstrate conformance with the policies and provisions governing Water Quality and Hydrology identified in Chapter 2 of the Dana Point Harbor Revitalization Plan, Resource Protection section, including applicable provisions from the Project Design Features and Requirements section. The WQMP shall identify, at a minimum, the routine structural and nonstructural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Discuss regional water quality and/or watershed programs (if available for the project);</li> <li>• Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas and conserving natural areas;</li> <li>• Include the applicable Routine Source Control BMPs and where necessary, Treatment Control BMPs as defined in the DAMP; and</li> <li>• Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary (refer to Land Use Plan [LUP] I-6.1-6).</li> </ul>		
<b>4.4 TRANSPORTATION AND CIRCULATION</b>		
<p><b>4.4-1</b> To reduce potential boat congestion in the East and West Basins, OC Dana Point Harbor (Harbor) shall, beginning at the start of construction and in the areas of construction activity, provide education and outreach to ensure that the slow speed/no wake policy is adhered to and to ensure that speeds in the Inner Channel are maintained at 4 to 5 knots in order to maintain boat traffic flow and steerage. Additionally, no construction shall be permitted to block the main navigational channels in the Harbor and should minimize the disruption or loss of existing docks by providing temporary facilities to the greatest extent feasible (refer to Implementation Plan [IP] II-3 Special Provisions [SP] No. 3).</p>	OC Dana Point Harbor	Prior to and during construction activities

**Table 7.A: Mitigation and Monitoring Reporting Program**

<b>Mitigation Measures</b>	<b>Responsible Party</b>	<b>Timing for Mitigation Measure</b>
<p><b>4.4-2</b> Public and boater access shall be provided to all Harbor facilities and businesses to the extent that they can be safely accessed during construction activities and reduce parking congestion/conflicts. To reduce parking, public access, and circulation conflicts during construction operations, OC Dana Point Harbor shall prepare a Construction Management Plan (CMP) that establishes access and staging locations for staging areas, temporary access routes, and parking areas that are separate from those used by the general public. The CMP shall also include the locations for shuttle drop-off areas, the relocations of public transit facilities, and provisions for valet service (in the event that construction activities do not allow for convenient parking adjacent to existing businesses).</p> <p>The CMP shall be prepared and approved prior to issuance of any construction or building permits and shall include a construction sign program to direct Harbor visitors and boaters to available parking during all phases of construction (refer to FEIR No. 591, Mitigation Measures 4.5-3 and 4.1-3a, Land Use Plan [LUP] I-4.4.1-6 A, Implementation Plan [IP] II-14.6e, and IP II-3 Special Provisions [SP] No. 3).</p>	<p>OC Dana Point Harbor</p>	<p>Prior to the issuance of any construction permits</p>
<p><b>4.4-3</b> Construction phasing for implementation of all Dana Point Harbor Revitalization Plan improvements shall minimize the disruption of vehicular and pedestrian access routes and parking availability to the maximum extent feasible. Access to the Marine Services Commercial areas shall be maintained during all construction phases. To reduce parking, public access, and circulation conflicts during construction operations, OC Dana Point Harbor shall prepare a coordinated construction truck route and parking program should the Dana Point Harbor Revitalization Plan Commercial Core construction occur at the same time as construction of the Marina Improvement Project.</p> <p>In the event of temporary closures, alternative routes and clear directional signage shall be provided. Any temporary parking loss during construction shall be replaced prior to its removal and shall be located in reasonable proximity to the uses it serves to the maximum extent feasible. Temporary replacement parking spaces, located in reasonable proximity to the uses they serve, to the maximum extent feasible shall be provided prior to the removal of any existing parking spaces due to construction, in accordance with an approved Construction and Temporary Operations Plan (refer to Implementation Plan [IP] Section II-14.6e).</p> <p>The coordinated program shall be approved by the Director, OC Public Works/Building Permit Services, prior to the issuance of any construction permits, and shall identify construction haul routes, the hours of construction traffic, traffic controls and detours, and off-site vehicle staging areas and address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes.</p>	<p>OC Dana Point Harbor</p>	<p>Prior to the issuance of any construction permits</p>

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.5 AIR QUALITY</b>		
None Required		
<b>4.6 NOISE</b>		
<p><b>4.6-1</b> To reduce project construction noise impacts, OC Dana Point Harbor shall verify that construction hour limitations are noted on building and/or grading plans prior to issuance of any construction or building permits. Construction shall be limited to the hours of 7:00 a.m. to 8:00 p.m., Monday through Saturday. In accordance with the County of Orange and City of Dana Point Noise Ordinances, no construction activities shall be conducted outside of these hours or on Sundays and federal holidays.</p> <p>The following measures shall also be noted on building and/or grading plans and implemented to reduce potential construction noise impacts on nearby sensitive receptors:</p> <ol style="list-style-type: none"> <li>1. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from the sensitive receptors nearest the construction areas.</li> <li>2. The construction contractor shall locate equipment staging in areas farthest from noise-sensitive receptors nearest the project site during all project construction (refer to FEIR No. 591, Standard Conditions of Approval [SCA] 4.9-1 and 4.9-3).</li> </ol>	OC Dana Point Harbor	Prior to issuance of any construction permits
<p><b>4.6-2</b> To reduce construction noise impacts throughout the phased construction activities of the proposed project, OC Dana Point Harbor shall coordinate with those residents living on boats within the Marina to relocate them to be moved as far as feasible from the construction activities to minimize construction-related noise nuisance impacts. In addition, OC Dana Point Harbor staff shall provide Marina boat residents with information regarding the availability of other nearby Marina facilities. Information regarding the timing and location of the construction activities shall also be made available on the Harbor website, by postings throughout the Marina, and other means as appropriate.</p>	OC Dana Point Harbor	During construction activities
<b>4.7 BIOLOGY</b>		
<p><b>4.7-1</b> Prior to issuance of any construction permits, the Director, OC Dana Point Harbor, shall review and approve a Marina Construction Management Plan and confirm that the following construction best management practices (BMPs) are included to minimize turbidity plumes and possible contaminants released into the water column during construction activity:</p> <ul style="list-style-type: none"> <li>• No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to tidal erosion and dispersion. Construction materials shall not be stored in contact with the soil.</li> </ul>	Director, OC Dana Point Harbor	Prior to issuance of any construction permits



**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<ul style="list-style-type: none"> <li>• Hazardous waste and oil spill contingency plans and spill response equipment shall be kept on site or near the Harbor during Marina construction. The Construction Contractor shall have adequate equipment available to contain such spills immediately.</li> <li>• Any construction debris shall be removed from the site. All trash shall be disposed of in the proper trash receptacles at the end of each construction day.</li> <li>• Floating booms shall be used to contain debris discharged, and any debris discharged, including construction debris from the sea floor, shall be removed no later than the end of each day. A postconstruction bottom survey shall be conducted to ensure that all material has been successfully removed from construction areas.</li> <li>• Where feasible, silt curtains shall be deployed around work barges and the pile removal and placement operations in order to minimize the spread of turbid waters outside the project area.</li> <li>• Barges and work vessels shall be operated in a manner to ensure that sensitive resources within the Harbor are not impacted through grounding, propeller damage, or other activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.</li> </ul>		
<p><b>4.7-2</b> To reduce impacts related to potential disturbance to the shallow water marine substrate, OC Dana Point Harbor shall confirm that preconstruction and postconstruction eelgrass and <i>Caulerpa</i> monitoring surveys are conducted in accordance with the most currently approved National Marine Fisheries Service (NMFS) Control Protocol and the Southern California Eelgrass Mitigation Policy (SCEMP) as adopted by the NMFS, in consultation with the California Department of Fish and Game. The survey shall be conducted during the active growth period (typically March through October) when possible. The preconstruction survey reports shall be completed within 30 days prior to construction activities, and the postconstruction survey reports shall be completed within 30 days of completion of each phase of the project and shall be submitted to the California Coastal Commission and the United States Army Corps of Engineers. The survey shall provide recommendations to avoid areas of eelgrass if determined to be present and/or provide recommendations for appropriate mitigation.</p> <p>In the event that <i>Caulerpa</i> is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed disturbing activity is eliminated in accordance with the NMFS <i>Caulerpa</i> Control Protocol (NMFS 2007).</p> <p>An eelgrass mitigation plan shall be developed based upon the results of preconstruction and postconstruction surveys. The plan shall require that direct losses, if any, to eelgrass vegetation shall be mitigated at a ratio of 1.2:1 (mitigation to impact), and potential eelgrass habitat shall be</p>	OC Dana Point Harbor	Prior to the start of any construction activities

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
mitigated at a ratio of 1:1 according to requirements of the SCEMP. As detailed in the SCEMP, the actual amount of eelgrass to be mitigated shall depend on preconstruction and postconstruction surveys (refer to IP II-3 SP24).		
<p><b>4.7-3</b> To reduce potential impacts related to the presence of eelgrass, OC Dana Point Harbor shall hire a qualified marine biologist who shall implement the following measures during construction activities near Baby Beach and the OC Sailing and Events Center:</p> <ul style="list-style-type: none"> <li>• A qualified marine biologist shall mark the positions of eelgrass beds with buoys prior to the initiation of any construction to minimize damage to eelgrass beds outside the construction zone. Impacts to eelgrass beds shall be avoided where practical and feasible. To assist the construction crew in avoiding unnecessary damage to eelgrass, the project marine biologist shall meet with construction crews prior to construction to review areas of eelgrass to avoid and to review proper construction techniques.</li> <li>• Barges and work vessels shall be operated in a manner to ensure that eelgrass beds are not impacted through grounding, propeller damage, or other activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels</li> </ul>	OC Dana Point Harbor	Prior to the start of any construction activities
<p><b>4.7-4</b> To reduce potential construction impacts to sensitive habitats and endangered species, OC Dana Point Harbor shall hire a qualified marine biologist who shall conduct a pre-construction marine biological survey to identify sensitive marine biological resources (i.e., eelgrass, reefs and kelp beds, and seabirds). This survey shall be used to prepare a Marine Biological Impact Reduction Plan (MBIRP) to map sensitive biological resources and minimize construction impacts to marine resources. The marine biologist shall also meet with the construction crews prior to the issuance of any construction permits or any construction activities to review sensitive areas to avoid and to review proper construction techniques. The Marine Biologist shall:</p> <ul style="list-style-type: none"> <li>• Brief construction and work vessel crews on the potential for sea turtles to be present and provide crews with the identification characteristics of sea turtles since they may occasionally be mistaken for seals or sea lions.</li> <li>• Prepare an incident report of any green sea turtle activity in the project area and inform the construction manager to have the crew aware of the potential for additional sightings. The report shall be provided within 24 hours to the California Department of Fish and Game and the National Marine Fisheries Service.</li> <li>• A biological monitor shall be present on site during the start-up of each construction phase and periodically throughout construction activities to monitor the presence of endangered species (seabirds, marine mammals, and sea turtles). In the event that an endangered species</li> </ul>	OC Dana Point Harbor	Prior to issuance of any construction permits

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>is sighted within 100 meters (m) of the construction zone, all construction activity shall be temporarily stopped until the animal is safely outside the outer perimeter of construction. The on-site biological monitor shall have the authority to halt construction operation and shall determine when construction operations can proceed.</p> <ul style="list-style-type: none"> <li>In the event a marine mammal is injured or killed as a consequence of a vessel collision, the vessel operator and OC Dana Point Harbor shall immediately notify the National Marine Fisheries Service (Southwest Division) and shall submit a written follow-up report within 24 hours of the incident.</li> <li>Monitor the construction process on a regular basis to ensure that all water quality Best Management Practices (BMPs) are implemented and to assist the project engineer in avoiding and minimizing environmental effects to Harbor marine biological resources.</li> </ul>		
<p><b>4.7-5</b> Prior to issuance of any demolition or construction permits, OC Dana Point Harbor shall ensure that the following provisions are incorporated into the final project plans for the purpose of protecting migratory and sensitive nesting birds (blue herons, snowy egrets, the black crowned night heron, owls and raptors) within the study area during construction:</p> <ul style="list-style-type: none"> <li>If construction activities are performed during the breeding and nesting season (January through September), a preconstruction survey within 500 feet (ft) of the site for nests shall be performed by a qualified biologist at least 15 days prior to construction to document the presence/absence of all these species;</li> <li>If an active nest of any bird species listed pursuant to the federal or California Endangered Species Act, California bird species of special concern or a wading bird (herons or egrets), as well as owls or raptors, is found, construction activities within 300 ft (500 ft from any identified raptor nest) shall not exceed noise levels of 65-decibel (dB) peak until the nest is vacated and juveniles have fledged and there is no longer evidence of a second attempt at nesting.</li> <li>The qualified biologist shall monitor active nest sites on a weekly basis. If the biologist notes that all young have fledged from the nest, then the noise restriction near the nest is no longer required.</li> </ul>	OC Dana Point Harbor	Prior to issuance of any demolition or construction permits
<p><b>4.7-6</b> To ensure that potential pile-driving noise impacts to marine mammals remain less than significant, OC Dana Point Harbor shall ensure that the following provisions are incorporated into the final project plans for the proposed project:</p> <ul style="list-style-type: none"> <li>The contractor shall use sound abatement techniques to reduce noise and vibrations from pile-driving activities. Recommended sound abatement techniques shall include, but are not</li> </ul>	OC Dana Point Harbor	Prior to issuance of any construction or demolition permits

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>limited to, vibration or hydraulic insertion techniques, drilled or augured holes for cast-in-place piles, bubble curtain technology, and sound aprons if feasible for the project.</p> <ul style="list-style-type: none"> <li>At the initiation of each pile-driving event and after breaks of more than 15 minutes, the pile driving shall employ a “soft-start” in which the hammer is operated at less than full capacity (i.e., approximately 40–60 percent energy levels) with no less than a 1-minute interval between each strike for a 5-minute period. The operation of the hammer at 40–60 percent energy level during the soft start of pile driving is expected to result in similar levels of noise reduction (40–60 percent) underwater.</li> </ul>		
<p><b>4.7-7</b> To reduce potential long-term water quality-related impacts to marine life, OC Dana Point Harbor shall, prior to occupancy of any new dock or slip facilities, provide boater education material to tenants as part of lease materials, and to reduce the potential for water quality and degradation of Dana Point Harbor marine resources by boaters. In addition, OC Dana Point Harbor shall provide the following to boaters:</p> <ul style="list-style-type: none"> <li>A copy of all applicable regulations regarding vessel discharges of wastes, antifouling paint use, and refuse management (including handling of hazardous wastes);</li> <li>Information regarding procedures for notifying appropriate authorities regarding spills of hazardous materials, containment measures, and applicable penalties for violations;</li> <li>A regular cleaning schedule of the Marina dock facilities and vacuum sweeping of the parking lots;</li> <li>Adequate signage to identify the location off pump-out stations and hours of operation;</li> <li>A regular inspection and maintenance schedule for the pump-out facility;</li> <li>Educational information about the pump out station to tenant boaters;</li> <li>A list of existing local, State, and federal regulations that will be enforced pertaining to marine sanitation devices and the illegal discharge of boat sewage; and;</li> <li>A list of other local pump-out locations shall be made available to boaters.</li> </ul>	OC Dana Point Harbor	Prior to occupancy of any new dock or slip facilities
<b>4.8 AESTHETICS</b>		
<p><b>4.8-1</b> To reduce the visual impact associated with construction equipment and materials, OC Dana Point Harbor shall prepare a Construction Management Plan that establishes access and staging locations for construction equipment, separate from those used by the general public. The contractor’s construction equipment and supply staging areas shall be established away from existing Marina operations. The Plan shall specify the following:</p>	OC Dana Point Harbor	Prior to issuance of any demolition or construction permits

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>a. During construction and grading, the Contractor shall keep the site clear of all trash, weeds, and debris.</p> <p>b. The grading contractor shall not create large stockpiles of debris or soils, but shall seek to place smaller piles adjacent to each other to minimize visual impacts.</p>		
<p><b>4.8-2</b> To reduce the visual impact associated with construction equipment and materials, the Director, OC Public Works (OC PW)/Subdivision and Grading, or designee, shall require OC Dana Point Harbor to provide screened construction fencing around the construction staging area to temporarily screen views of construction equipment and materials. The construction screening shall be in place prior to issuance of any construction permit for development within the Marinas (refer to Land Use Plan [LUP] I-8.1.1-30 and FEIR No. 591, Mitigation Measure 4.2-2).</p>	Director, OC Public Works–Subdivision and Grading	Prior to issuance of a construction permit
<p><b>4.8-3</b> To reduce impacts associated with lighting, an Exterior Lighting Plan (including outdoor recreation areas) for all proposed improvements shall be prepared prior to the issuance of a building permit. The lighting plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are directed downwards, confined to the property, away from other areas and, where feasible, to minimize impacts to sensitive biological resource areas. The Lighting Plan shall be subject to review and approval by the Director, OC Dana Point Harbor (refer to FEIR No. 591, Mitigation Measure 4.2-4).</p>	Director, OC Dana Point Harbor	Prior to the issuance of a building permit
<b>4.9 RECREATION</b>		
None Required		
<b>4.10 HAZARDS AND HAZARDOUS MATERIALS</b>		
<p><b>4.10-1</b> During all excavation and construction activities for the Americans with Disabilities (ADA) gangway platforms and utilities, OC Dana Point Harbor shall require that all construction subcontractors address site safety requirements by complying with the appropriate health and safety measures required by the Occupational Safety and Health Administration (OSHA). Applicable specifications prepared by OSHA related to earth resources consist of Section 29 Code of Federal Regulations (CFR) Part 1926, which are focused on worker safety in excavations. In the event that suspicious odors are observed in soil, construction shall be terminated until the soil is properly characterized for hazardous waste content. Appropriate measures shall be taken in compliance with all applicable regulations for the characterization and disposal of hazardous materials (refer to FEIR No. 591, Mitigation Measure 4.3-4).</p>	OC Dana Point Harbor	During all excavation and construction activities for the ADA gangway platforms

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.11 GREENHOUSE GASES</b>		
<p><b>4.11-1</b> OC Dana Point Harbor shall review and specifically approve contract provisions requiring that the following measures be incorporated into the design and construction of the project:</p> <p><b>Energy Efficiency Measures.</b></p> <ul style="list-style-type: none"> <li>• Install energy-efficient lighting and lighting control systems</li> <li>• Install solar or other energy-efficient outdoor lighting, such as light-emitting diodes (LEDs)</li> <li>• Landscape with native or drought-tolerant species to reduce water consumption and provide passive solar benefits, where feasible.</li> </ul> <p><b>Solid Waste Measures.</b></p> <ul style="list-style-type: none"> <li>• Reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) to the extent feasible; and</li> <li>• Provide storage areas for recyclables and green waste and adequate recycling containers located in public areas (refer to FEIR No. 591, Project Design Feature [PDF] 4.6-1).</li> </ul>	OC Dana Point Harbor	Prior to the issuance of any construction permits

## 8.0 CERTIFIED FINAL PROGRAM EIR NO. 591 MITIGATION

### 8.1 INTRODUCTION

The Dana Point Harbor Revitalization Program EIR No. 591 (State Clearinghouse Number 2003101142) was certified by the Orange County Board of Supervisors on January 31, 2006. The Program EIR evaluated the entire Harbor Revitalization Plan at a program, or conceptual, level of detail and provided project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168. Consistent with CEQA Guidelines, Section 15168, the County is proceeding with the SEIR, building upon and tiering on the analyses in the certified Program EIR to address the environmental impacts of the project. Therefore, the Marina Improvement Project is now being evaluated at a project or construction level. In accordance with CEQA Guidelines Section 15162, this SEIR is being prepared to focus on project details and environmental effects not identified at the time the Program EIR was certified.

Implementation of the Dana Point Harbor Revitalization Plan required a series of subsequent approvals by the City of Dana Point and the California Coastal Commission (CCC) to modify existing regulatory documents, including an amendment to the City's Local Coastal Program (LCPA). The LCPA includes a Land Use Plan (LUP) component and an Implementation Plan (IP) component. The LUP component of the LCPA for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the CCC on October 8, 2009. The IP component was approved with suggested modifications by the CCC on January 12, 2011.

During the public and regulatory review and approval process with the City and the CCC, refinements to the LUP in the form of various suggested modifications were made to the proposed LCPA. Due to the incorporation of additional policies, regulations, and development standards by the CCC as part of the LCPA review and certification process, the previously certified FEIR No. 591 prepared for the project required review to determine whether the previous conclusions remain valid. Therefore, an Addendum to FEIR No. 591 was prepared to provide a record of the changes resulting from the LCPA approval process that occurred subsequent to the certification of FEIR No. 591. The Addendum concluded that no new or more severe significant environmental effects were associated with the changes to the project that occurred since the 2006 FEIR No. 591 was certified.

The analysis contained in this SEIR incorporates by reference the documentation contained in the certified Dana Point Harbor Revitalization Plan Program EIR No. 591 and Addendum to FEIR No. 591. As stated in the Program EIR, applicable mitigation measures developed in the Program EIR shall be incorporated into subsequent actions in the Dana Point Harbor Revitalization Plan Program. Table 8.A includes a list of standard conditions and mitigation measures from the Certified Final Program EIR No. 591 that are deemed applicable to the Marina Improvement Project, and that are being carried forward and incorporated into the current project to reduce potential impacts.

The listed PDFs, SCA and MMs are restated verbatim as included in the certified Program FEIR. However, as described above, during the subsequent approval process for the LUP component of the LCPA, several of these measures were clarified and became LUP Policies within the revised Dana

Point Harbor Revitalization Plan Land Use Plan. Where applicable, the wording has been revised to be consistent with the approved LUP Policy, which is indicated in parenthesis.



**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

<b>STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)</b>		<b>RESPONSIBLE PARTY</b>	<b>TIME OF VERIFICATION</b>
<b>LAND USE AND PLANNING</b>			
<b>PDF 4.1-1</b>	Construction phasing for new development shall be designed to minimize the disruption of vehicular and pedestrian access routes and parking availability <u>throughout the Harbor. In the event of temporary closures, alternate routes and clear directional signage will be provided.</u> (LUP Policy 8.1.1-34)	OC Dana Point Harbor	In the event of temporary closures during construction activities
<b>MM 4.1-1a</b>	Land uses and new development in Dana Point Harbor shall be consistent with the Dana Point Harbor Land Use Plan and applicable policies and regulations contained in the Dana Point Harbor Revitalization Plan and District Regulations. (LUP Policy 2.3.1-1)	OC Dana Point Harbor City of Dana Point Community Development Department California Coastal Commission	Coastal Development Permits
<b>MM 4.1-3a</b>	Access to the Marine Services Commercial areas shall be maintained during all construction phases. A Construction Management Plan shall be prepared identifying the configuration of construction staging areas temporary access routes, and parking areas and will be submitted with development permit applications. (LUP Policy 4.4.1-6)	OC Dana Point Harbor	Coastal Development Permits
<b>MM 4.1-3b</b>	A comprehensive signage program for public access shall be implemented in conjunction with the construction of the Commercial Core Area and subsequent Planning Areas within the Harbor to inform the public of the availability of and provide direction to public parking areas, coastal access and on-site recreational amenities. (LUP Policy 8.5.3-10)	OC Dana Point Harbor	Coastal Development Permits and Sign Permits
<b>4.2 GEOLOGY AND SOILS</b>			
<b>MM 4.3-4</b>	Site safety requirements shall address specifications of the Occupational Safety and Health Administration (OSHA). Applicable specifications prepared by OSHA related to earth resources consist of Section 29 CFR Part 1926, which are focused on worker safety in excavations.	OC Dana Point Harbor	Grading and Building Permits
<b>MM 4.3-6</b>	If cranes and pile-driving equipment are required, adequate setbacks shall be observed from bulkhead areas to prevent failures due to increased lateral and surcharge loads. (LUP Policy 8.6.7-9)	OC Dana Point Harbor	Coastal Development Permits, Grading and Building Permits
<b>MM 4.3-9</b>	Conformance with the latest Uniform Building Code, California Building Code, or International Building Code and County Ordinances can be expected to	Manager, OCPW/Subdivisions and Grading	Grading and Building Permits

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
satisfactorily mitigate the effect of seismic ground shaking. Conformance with applicable codes and ordinances shall occur in conjunction with the issuance of Building Permits in order to ensure that over excavation of soft, broken rock and clayey soils within sheared zones will be required where development is planned. (LUP Policy 8.6.7-13)	Manager, OCPW/Building Permits OC Dana Point Harbor	
<b>MM 4.3-14</b> Engineering design for all structures shall be based on the probability that new structures will be subjected to strong ground motion during the lifetime of development. Construction plans shall be subject to the County review and shall include applicable standards, which address seismic design parameters. (LUP Policy 8.6.7-14)	Manager, OCPW/Building Permits OC Dana Point Harbor	Grading and Building Permits
<b>MM 4.3-15</b> Mitigation of earthquake ground shaking shall be incorporated into the design and construction in accordance with Uniform Building Code requirements and site-specific design. (LUP Policy 8.6.7-15)	Manager, OCPW/Building Permits OC Dana Point Harbor	Grading and Building Permits
<b>MM 4.3-19</b> Further investigation and detailed characterization of the existing fill conditions is required to identify the extent of the potential for liquefaction and includes: <ul style="list-style-type: none"> <li>• Recommended new building setback distances from the quay wall ranging from 2 to 3 times the height of the bulkhead wall for localized liquefaction and lateral spreading failure to several times the height of the revetment slope and bulkhead system for global seismic instability, to be considered during the planning and design phases of the project;</li> <li>• Supporting proposed structures on deep foundations extending into bedrock;</li> <li>• Stiffened floor slab designs;</li> <li>• Total or partial removal of the potentially liquefiable soils and replacement with compacted fill;</li> <li>• Soil remediation and site improvement. (LUP Policy 8.6.7-11)</li> </ul>	Manager, OCPW/Subdivisions and Grading  Manager, OCPW/Building Permits  OC Dana Point Harbor	Grading and Building Permits

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<p><b>MM 4.3-20</b> Further evaluation of lateral spreading potential is required. If it is found that the lateral spreading potential is high, then Mitigation Measures shall include:</p> <ul style="list-style-type: none"> <li>• New building setback distances from the quay wall ranging from 2 to 3 times the height of the bulkhead wall;</li> <li>• Repair or replacement of existing seawall for site containment;</li> <li>• Total/partial removal of the potentially liquefiable soils and replacement with compacted fill; and/or</li> <li>• Soil remediation and site improvement.</li> </ul>	<p>Manager, OCPW/Subdivision and Grading</p> <p>Manager, OCPW/Building Permits</p> <p>OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>
<b>HYDROLOGY AND WATER QUALITY</b>		
<p><b>SCA 4.4-4</b> OC Dana Point Harbor shall obtain coverage under the NPDES Statewide Stormwater Permit for General Construction Activities from the State Water Resources Control Board. Evidence of receipt of permit approval must be presented prior to the issuance of a Grading Permit. (LUP Policy 7.6.1-2)</p>	<p>Manager, OCPW/Subdivision and Grading</p> <p>OC Dana Point Harbor</p>	<p>Grading Permits</p>
<p><b>SCA 4.4-5</b> As required for obtaining any Grading or Building Permits, OC Dana Point Harbor shall demonstrate compliance under California’s General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Manager, OCPW/Building Permit Services. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and available for review on request. (LUP Policy 7.6.1-3)</p>	<p>Manager, OCPW/Building Permit Services</p> <p>OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>
<p><b>SCA 4.4-8</b> As required for obtaining any Grading or Building Permit (whichever comes first), OC Dana Point Harbor shall prepare a Water Quality Management Plan (WQMP) and/or a project-specific amendment specifically identifying Best Management Practices (BMPs) that will be used onsite to minimize the volume,</p>	<p>Manager, OCPW/Inspection Services</p> <p>OC Dana Point Harbor</p>	<p>Coastal Development Permits, Grading and Building Permits</p>

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<p>velocity and pollutant load of runoff, including measures to prevent, eliminate and/or otherwise effectively address dry weather nuisance flow. The WQMP shall follow the model WQMP prepared by the County Flood Control District, July 1, 2003 or the most recent version available. This WQMP or amendment thereto shall also demonstrate conformance with the policies and provisions governing Water Quality and Hydrology identified in Chapter 2 of the Dana Point Harbor Revitalization Plan, Resource Protection section including applicable provisions from the Project Design Features and Requirements section. The WQMP may include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Discuss regional water quality and/or watershed programs (if available for the Harbor);</li> <li>• Address and include Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas, and conserving natural areas;</li> <li>• <i>Include the applicable Routine Source Control BMPs and where necessary Treatment Control BMPs as defined in the DAMP; and;</i></li> <li>• Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary. (LUP Policy 7.6.1-5)</li> </ul>		
<p><b>SCA 4.4-9</b> As required for obtaining any Grading or Building Permits (whichever comes first), OC Dana Point Harbor shall include in the WQMP the following additional Priority Project information:</p> <ul style="list-style-type: none"> <li>• Include post-construction Structural Treatment Control BMP(s) as defined in the DAMP; and</li> <li>• Include a conceptual Operation and Maintenance (O&amp;M) Plan that (1) describes the long-term operation and maintenance requirements for the</li> </ul>	<p>Manager, OCPW/Inspection Services  OC Dana Point Harbor</p>	<p>Coastal Development Permits, Grading and Building Permits</p>

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<p>post-construction Treatment Control BMP(s); (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced Treatment Control BMP(s); and (3) describes the proposed mechanism for funding the long-term operation and maintenance of the referenced Treatment Control BMP(s). (LUP Policy 7.6.1-6)</p>		
<p><b>SCA 4.4-10</b> As required for obtaining a Certificate of Use and Occupancy, OC Dana Point Harbor shall confirm compliance with the WQMP, including:</p> <ul style="list-style-type: none"> <li>• Demonstrate that all structural Best Management Practices (BMPs) described in the project’s WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;</li> <li>• Demonstrate that the County of Orange Dana Point Harbor has complied with all non-structural BMPs described in the project’s WQMP;</li> <li>• Submit for review and approval an Operations and Maintenance (O&amp;M) Plan for all structural BMPs for attachment to the WQMP; and</li> <li>• Demonstrate that copies of the project’s approved WQMP (with attached O&amp;M Plan) are available for each of the incoming occupants (LUP Policy 7.6.1-7)</li> </ul>	<p>Manager, OCPW/Inspection Services</p> <p>OC Dana Point Harbor</p>	<p>Certificates of Use and Occupancy</p>
<p><b>MM 4.4-1</b> OC Dana Point Harbor shall prepare an assessment of the potential impacts of inundation from a tsunami taking into account future sea-level rise on the existing and proposed building structures along the seawall. (LUP Policy 8.6.2-9)</p>	<p>Manager, OCPW/Current Planning</p> <p>OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>
<p><b>MM 4.4-2</b> OC Dana Point Harbor shall prepare an assessment of the potential wave run-up from a seiche or tsunami near the Harbor during a major seismic event including but not limited to an event on the Newport-Inglewood Fault and/or San Jacinto Mountains Faults prior to submittal of the first coastal development permit for development of the Commercial Core. (LUP Policy 8.6.3-6)</p>	<p>Manager, OCPW/Current Planning</p> <p>OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<b>TRANSPORTATION AND CIRCULATION</b>		
<b>PDF 4.5-1</b> The construction phasing plan for the Commercial Core includes early construction of the parking deck and ramp, augmenting parking for Harbor visitors and boaters.	OC Dana Point Harbor	Coastal Development Permits
<b>PDF 4.5-2</b> A seasonal water taxi service may be incorporated throughout the Harbor to reduce average daily trips (ADTs) during peak Harbor usage days. (LUP Policy 6.2.3-11)	OC Dana Point Harbor	Coastal Development Permits
<b>PDF 4.5-4</b> Designated boater drop-off areas and parking shall be provided in the Commercial Core. (LUP Policy 6.2.5-11)	OC Dana Point Harbor	Coastal Development Permits
<b>SCA 4.5-1</b> Prior to the approval of any Coastal Development Permit or Grading Permit for Revitalization Plan Improvements, OC Dana Point Harbor shall prepare a construction-phase Parking Management Plan (PMP) that ensures public access will be retained to the extent it can be safely provided and to reduce construction congestion/conflicts. (LUP Policy 6.2.5-13)	OC Dana Point Harbor	Coastal Development Permits and Grading Permits
<b>MM 4.5-2</b> OC Dana Point Harbor shall provide a construction sign program to direct Harbor visitors and boaters to available parking. (LUP Policy 8.5.3-9)	OC Dana Point Harbor	Coastal Development Permits, Grading and Building Permits
<b>MM 4.5-3</b> Access to the Marine Services Commercial areas shall be maintained during all construction phases. A Construction Management Plan shall be prepared identifying the configuration of construction staging areas, temporary access routes and parking areas and will be submitted with development permit applications. (LUP Policy 4.4.1-6)	OC Dana Point Harbor	Grading and Building Permits
<b>MM 4.5-7</b> OC Dana Point Harbor shall prepare a Traffic Management Plan (TMP) to include a provision for use of offsite locations for parking for peak Harbor use periods as necessary. (LUP Policy 6.2.5-14)	Manager, OCPW/Road Division OC Dana Point Harbor	Grading and Building Permits
<b>AIR QUALITY</b>		
<b>PDF 4.6-3</b> Reduction of vehicle trips is achieved by implementing the Transportation Management Plan, including: <ul style="list-style-type: none"> <li>• Seasonal water taxi service;</li> </ul>	OC Dana Point Harbor	Coastal Development Permit and Traffic Management Plan Approval

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<ul style="list-style-type: none"> <li>• Visitor boat slips and dingy docks located near restaurants and retail areas; and</li> <li>• Phased construction of the Revitalization Plan Improvements will minimize the size of areas subject to disruption from construction activities.</li> </ul>		
<p><b>MM 4.6-1</b> Prior to the start of construction, the Chief Engineer or Director, OC DPHD, or his designee, in consultation with the Manager, OCPW/Environmental Planning, shall confirm that the plans and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures, as specified in the South Coast Air Quality Management Districts Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures will reduce short-term fugitive dust impacts on nearby sensitive receptors:</p> <ul style="list-style-type: none"> <li>• On-site vehicles speed shall be limited to 15 miles per hour (mph);</li> <li>• All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized;</li> <li>• If dust is visibly generated that travels beyond the site boundaries, clearing, grading, earth moving, or excavation activities that are generating dust shall cease during periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 episodes; and</li> <li>• All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.</li> </ul>	<p>Manager, OCPW/Environmental Planning</p> <p>OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>
<p><b>MM 4.6-2</b> Prior to approval of the project plans and specifications, the Chief Engineer or Director, OC DPHD, or his designee, in consultation with the Manager, OCPW/Environmental Planning, shall confirm that the plans and specifications stipulate that, in compliance with SCAQMD Rule 403, ozone precursor emissions from</p>	<p>Manager, OCPW/Environmental Planning</p> <p>OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<p>construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer’s specifications, to the satisfaction of the Resident Engineer. The County Inspector will be responsible for ensuring that contractors comply with this measure during construction.</p>		
<p><b>MM 4.6-6</b> In order to reduce operational energy usage and reduce energy production air emissions, Harbor projects are required at a minimum to comply with Title 24 of the California Code of Regulations established by the California Energy Commission regarding energy conservation. (LUP Policy 8.9.1-11)</p>	OC Dana Point Harbor	Building Permits
<b>NOISE</b>		
<p><b>SCA 4.9-1</b> Prior to approval of the project plans and specifications by the DPHD, Chief Engineer, or his designee, in consultation with the Manager, OCPW/Environmental Planning, shall confirm that the plans and specifications stipulate that construction activities shall be limited to 7:00 a.m. to 8:00 p.m. on weekdays, including Saturdays, and no construction on Sundays and holidays. The County inspector will be responsible for ensuring that contractors comply with this measure during construction.</p>	<p>DPHD/Chief Engineer  Manager OCPW/Environmental Planning OC Dana Point Harbor</p>	Grading and Building Permits
<p><b>SCA 4.9-2</b> Prior to the issuance of any Grading or Building Permits, OC Dana Point Harbor shall prepare or obtain an acoustical analysis report and appropriate plans which demonstrate that the noise levels generated by Harbor land uses during their operation shall be controlled in compliance with the Orange County Codified Ordinances, Division 6 (Noise Control). The report shall be prepared under the supervision of a County-certified acoustical consultant and shall describe the noise generation potential of the project during its operation and the noise Mitigation Measures, if needed, which shall be included in the plans and specifications for the project to assure compliance with Orange County Codified Ordinances, Division 6 (Noise Control). (LUP Policy 8.1.1-24)</p>	OC Dana Point Harbor	Grading and Building Permits



**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

<b>STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME OF VERIFICATION</b>
<b>SCA 4.9-3</b>	Prior to approval of project plans, OC Dana Point shall confirm that the plans and specifications stipulate that stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors during construction activities. (LUP Policy 8.1.1-25)	DPHD, Chief Engineer  Manager, OCPW/Environmental Planning  OC Dana Point Harbor
<b>SCA 4.9-4</b>	OC Dana Point Harbor shall confirm that grading and drainage plans are reviewed with a geotechnical report and that the plans include the following notes:  a. All construction vehicles and equipment, fixed or mobile operated within 1,000 ft of a dwelling, shall be equipped with properly operating and maintained mufflers;  b. All operations shall comply with the County’s Noise Ordinance; and  c. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings. (LUP Policy 8.1.1-32)	Manager, OCPW/Subdivisions and Grading  OC Dana Point Harbor
<b>MM 4.9-2</b>	For projects within 1,000 ft of sensitive receptors, impact equipment (e.g., jack hammers, pile drivers, and rock drills) used for construction shall be hydraulically or electrical powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used.	OC Dana Point Harbor
<b>MM 4.9-3</b>	For projects within 1,000 ft sensitive receptors, sonic or vibratory pile drivers shall be used instead of impact pile drivers (sonic pile drivers are only effective in some soils) whenever possible. If sonic or vibratory pile drivers are not feasible, acoustical enclosures shall be provided as necessary to ensure that pile-driving noise does not exceed speech interference criterion at the closest sensitive receptor. Engine and pneumatic exhaust controls on pile drivers shall be required as necessary to ensure that exhaust noise from pile driver engines is minimized to the extent feasible. Where feasible, pile holes shall be pre-drilled to reduce potential noise and vibration impacts.	OC Dana Point Harbor

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<b>BIOLOGICAL RESOURCES</b>		
<p><b>MM 4.7-2</b> If an active nest of any bird species listed pursuant to the federal or California Endangered Species Act, California bird species of special concern or a wading bird (heron or egrets) as well as owls or raptors is found, construction activities within 300 feet (500 feet from any identified raptor nest) shall not exceed noise levels of 65 dB peak until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Surveys for the above bird species during their breeding season shall be conducted by a qualified biologist prior to commencement of construction. (LUP Policy 7.1.2-4)</p>	<p>Manager, OCPW/Environmental Planning  OC Dana Point Harbor</p>	<p>Grading and Building Permits (for work being completed during the breeding season February 1 through August 15)</p>
<p><b>MM 4.7-3</b> The following measures shall be utilized to protect nesting habitat of the raptors (red tailed hawk, Cooper’s hawk, osprey, etc):</p> <ul style="list-style-type: none"> <li>• If work is scheduled to be performed during the breeding season of any raptor (February 1 through August 15), a preconstruction survey within 500 ft of the site for raptor nests shall be performed by a qualified biologist to document the presence/absence of all nesting raptors; and</li> <li>• If active raptor nests are found, a buffer of 500 ft in diameter should be established around the nest and no construction activity shall occur within that buffer until the young have fledged.</li> </ul>	<p>Manager, OCPW/Environmental Planning  OC Dana Point Harbor</p>	<p>Grading and Building Permits (for work being completed during the breeding season February 1 through August 15)</p>
<p><b>MM 4.7-4</b> In order to minimize indirect impacts on biological resources that may be related to noise and construction activity, the OC Dana Point Harbor shall implement the following Best Management Practices (BMPs) prior to or during construction activities.</p> <ul style="list-style-type: none"> <li>• Limit construction and all project activities to a well-defined area; and</li> <li>• Construction limits shall be fenced or flagged adjacent to preserved trees and/or sensitive habitats to avoid direct impacts.</li> </ul>	<p>Manager, OCPW/Environmental Planning  OC Dana Point Harbor</p>	<p>Grading and Building Permits</p>

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<b>MM 4.7-5</b> Future waterside improvements to the east and west of the breakwaters (Planning Areas 8, 11 &12) shall be reconstructed within the seaward footprint of the existing structures except as necessary to provide for public safety or public access. Construction activities taking place below the mean higher high water (MHHW) mark shall prepare a focused marine biological survey to determine if sensitive species are present. (LUP Policy 7.2.1-15)	OC Dana Point Harbor	Coastal Development Permits
<b>MM 4.7-6</b> OC Dana Point Harbor shall require that standard BMPs be utilized in order to ensure impacts to water quality or the marine environment are minimized and include: <ul style="list-style-type: none"> <li>• Erosion to be controlled by landscaping (leave existing vegetation in place where possible), paving and drainage structures;</li> <li>• Perimeter barriers, such as berms or sand bags around all construction sites to catch run-off;</li> <li>• Tracking controls, such as rumble strips and gravel strips will be used to minimize dirt being tracked into and out of the project site;</li> <li>• Harbor basin inlets shall be protected by placing sediment barriers, such as wire mesh and gravel filter to intercept debris and soil runoff; and</li> <li>• Appropriate housekeeping activities to minimize the potential for pollutants from material storage or construction activities. (LUP Policy 7.2.1-16)</li> </ul>	Manager, OCPW/Subdivisions and Grading  OC Dana Point Harbor	Grading and Building Permits
<b>AESTHETICS</b>		
<b>PDF 4.2-9</b> The design and layout of the future developments shall be consistent with the approved Land Use Plan and preserve views of the bluff area. (LUP Policy 8.2.1-7)	OC Dana Point Harbor	Coastal Development Permits and Building Permits
<b>PDF 4.2-19</b> All exterior lighting will be designed and located to avoid intrusive effects on the adjacent uses atop the bluffs and Doheny State Beach. New light fixtures will be designed to direct light on-site, away from other areas and where feasible (not interfering with public safety), minimize impacts to nesting birds or other	OC Dana Point Harbor	Coastal Development Permits and Building Permits

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
sensitive biological resource areas within the boundaries of the LCP. (LUP Policy 8.4.1-9)		
<b>MM 4.2-4</b> Prior to the issuance of a building permit, an Exterior Lighting Plan (including outdoor recreation areas) for all proposed improvements shall be prepared. The lighting plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property. The Lighting Plan shall be subject to review and approval by OC Dana Point Harbor.	OC Dana Point Harbor	Building Permits
<b>RECREATION</b>		
<b>PDF 4.12-3</b> Maintain and enhance boating use through the provision of various amenities to the waterside areas, including but not limited to improved boater drop-off areas, designated boater parking, upgraded boater service buildings and restrooms and dinghy docks planned to be relocated adjacent to Planning Area 2. (LUP Policy 4.1.1-5)	OC Dana Point Harbor	Coastal Development Permits
<b>HAZARDS AND HAZARDOUS MATERIALS</b>		
<b>MM 4.8-4</b> Any transformers to be relocated during site construction/demolition should be conducted under the purview of the local utility purveyor to identify property handling procedures regarding potential PCBs.	Manager, OCPW/Environmental Planning  OC Dana Point Harbor	Grading and Building Permits
<b>MM 4.8-9</b> If unknown wastes or suspect materials are discovered during construction that the contractor believes may be or contain hazardous waste or materials, the contractor shall: <ul style="list-style-type: none"> <li>• Immediately stop work in the vicinity of the suspected contaminant, and remove workers and the public from the area;</li> <li>• Notify the Project Engineer of the implementing agency;</li> <li>• Secure the area as directed by the Project Engineer; and</li> <li>• Notify the implementing agency’s hazardous waste/materials coordinator.</li> </ul>	OC Dana Point Harbor	Grading and Building Permits

**Table 8.A: Final Program EIR Standard Conditions and Mitigation Applicable to the Marina Improvement Project**

STANDARD CONDITION (SCA), PROJECT DESIGN FEATURE (PDF) OR MITIGATION MEASURE (MM)	RESPONSIBLE PARTY	TIME OF VERIFICATION
<b>MM 4.8-10</b> OC Dana Point Harbor or its designee shall store, manifest, transport, and dispose of all on-site generated waste that meets hazardous waste criteria in accordance with California Code of Regulations Title 22 and in a manner to the satisfaction of the Manager, HCA/Hazardous Materials Program. The County shall keep storage, transportation, and disposal records on site and open for inspection to any government agency upon request.	OC Dana Point Harbor	Ongoing Operations
<b>MM 4.8-18</b> All finishing products used on site shall meet applicable SCAQMD regulations for solvent content, as required by SCAQMD Rules 1102 and 1171.	OC Dana Point Harbor	Grading and Building Permits
<b>MM 4.8-19</b> All uses of solvents shall be conducted in adherence to California OSHA regulations for exposure of workers during construction activities as required by CCR Title 8.	OC Dana Point Harbor	Grading and Building Permits
<b>PUBLIC SERVICES AND UTILITIES</b>		
<b>Police Protection:</b>		
<b>MM 4.10-7</b> Construction shall not block the main navigational channels of Planning Areas 8 through 12.	OC Dana Point Harbor	Coastal Development Permits
<b>MM 4.10-8</b> The emergency alley behind the Harbor Patrol office shall not be blocked during construction activities.	OC Sherriff, Harbor Patrol OC Dana Point Harbor	Grading and Building Permits
<b>Utilities:</b>		
<b>PDF 4.10-2</b> New utilities will be located underground to the extent feasible as part of the Project development. Utility undergrounding activities will be coordinated with the utility providers to ensure that service to adjoining utility customers is not interrupted.	OC Dana Point Harbor	Coastal Development Permits, Grading and Building Permits
<b>MM 4.10-9</b> The County of Orange shall continue to comply with the Building Code and Title 24 of the California Administrative Code relating to energy conservation.	OC Dana Point Harbor	Building Permits
<b>MM 4.10-10</b> Electrical, natural gas, and cable television services and equipment locations shall be coordinated with the applicable utility providers. Electrical, natural gas, and cable television services and equipment locations shall be coordinated with the applicable utility providers.	OC Dana Point Harbor	Coastal Development Permits, Grading and Building Permits

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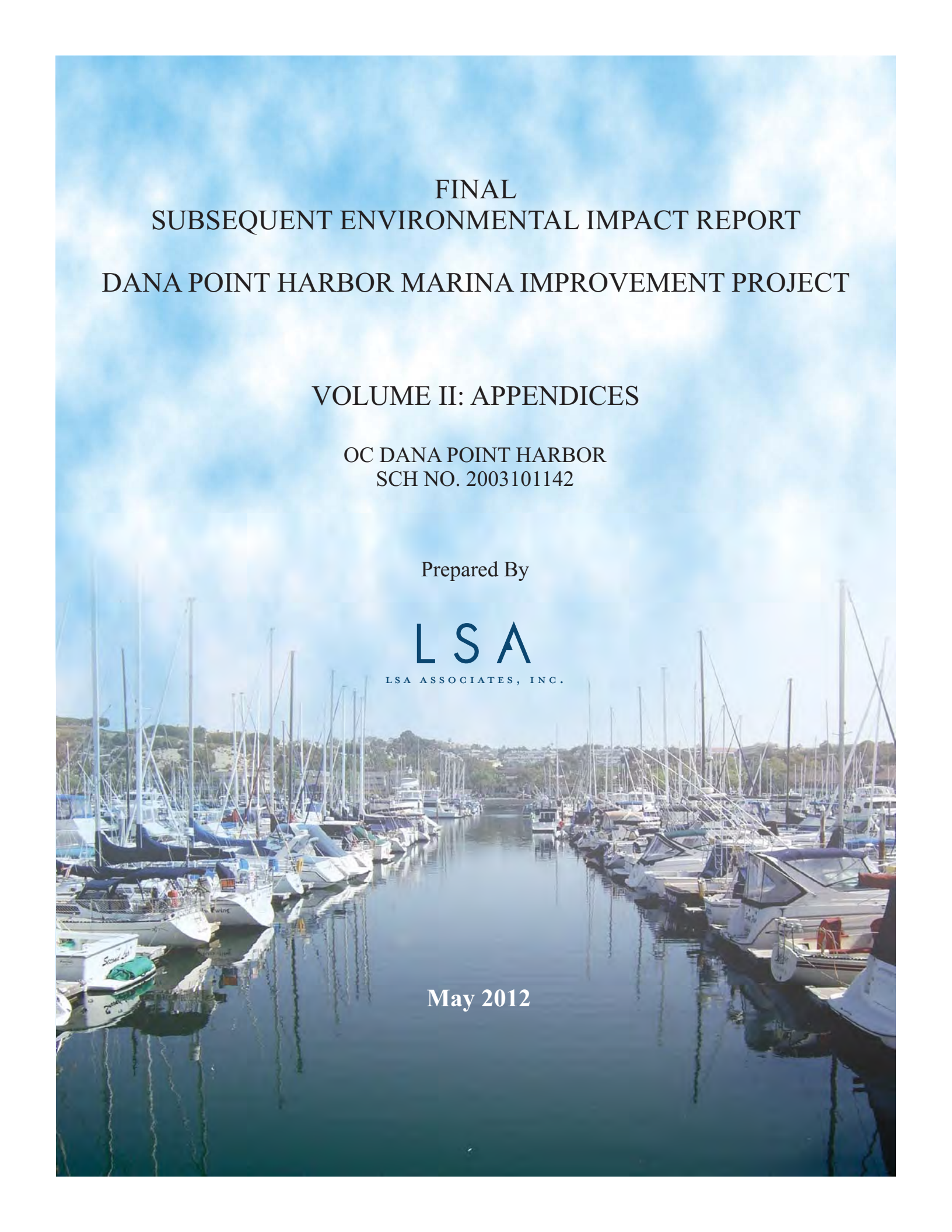
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FINAL  
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

VOLUME II: APPENDICES

OC DANA POINT HARBOR  
SCH NO. 2003101142

Prepared By

LSA

LSA ASSOCIATES, INC.

May 2012

DRAFT  
SUBSEQUENT ENVIRONMENTAL IMPACT  
REPORT

DANA POINT HARBOR MARINA  
IMPROVEMENT PROJECT  
SCH NO. 2003101142

VOLUME II: APPENDICES

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September 2011

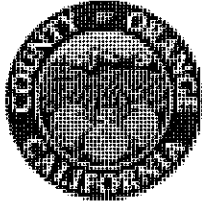
## **TABLE OF CONTENTS**

### **VOLUME II: TECHNICAL APPENDICES**

- A: INITIAL STUDY (IS), NOTICE OF PREPARATION (NOP), NOP COMMENTS, PROGRAM EIR EXECUTIVE SUMMARY
- B: GEOLOGICAL ENGINEERING REPORT, ADDENDUM TO GEOLOGICAL ENGINEERING REPORT AND GUIDE PILE MEMORANDUM
- C: DANA POINT HARBOR BOAT TRAFFIC STUDY
- D: AIR QUALITY ANALYSIS
- E: NOISE IMPACT ANALYSIS
- F: MARINE BIOLOGICAL RESOURCES REPORT, FOCUSED SURVEY REPORTS FOR EELGRASS AND INVASIVE ALGAE

## **APPENDIX A**

# **NOTICE OF PREPARATION (NOP), INITIAL STUDY (IS), NOP COMMENTS, AND PROGRAM EIR EXECUTIVE SUMMARY**



**NOTICE OF PREPARATION  
NOTICE OF SCOPING MEETING  
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT**

Date: November 27, 2007  
Subject: Notice of Intent to Prepare a Draft Subsequent Environmental Impact Report  
Project Title: Dana Point Harbor Marina Improvement Project  
Applicant: County of Orange – Dana Point Harbor Department

The Orange County Dana Point Harbor Department (County) has prepared an Initial Study (IS) for the proposed waterside Marina Improvement Project in the City of Dana Point (City) and has determined that a Subsequent Environmental Impact Report (SEIR) is required. The County is the lead agency for the project and will prepare the SEIR in accordance with the requirements of the California Environmental Quality Act (CEQA) and the CEQA implementing guidelines (Guidelines).

The project proposes renovation of the marinas and other facilities in the Dana Point Harbor. The Marina Improvement Project (Project) renovations include removal of nearly all floating docks and piles in the West and East Marinas; reconstruction of portions of the quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and supporting utilities within both marina areas. Additionally, new dry stack storage staging docks and dinghy docks, along with renovations to the Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. Other Project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. In order to accommodate boaters during the renovations, the Project also includes the construction of temporary docks to be located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach.

This Notice of Preparation (NOP) is being circulated pursuant to California Public Resources Code Section 21153(a) and CEQA Guidelines Section 15082. Public agencies and the public are invited to comment on the proposed scope and content of the environmental information to be included in the SEIR. Potential Responsible Agencies, federal agencies involved in funding or approving the project, and Trustee Agencies responsible for natural resources affected by the project areas are invited to comment regarding the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project. The project location map is included with this NOP. Based on the analysis contained in the IS, the probable environmental effects of the project to be analyzed in the DSEIR, include but are not necessarily limited to the following: aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, recreation, transportation and traffic, and utilities. Responses received to this NOP may modify or add to the preliminary assessment of potential issues addressed in the SEIR.

**A public SEIR scoping meeting will be held on Saturday, December 8, 2007, at 11:00 a.m. to 1:00 p.m. at the Dana Point Youth and Group Facility, Dana Cove Room, 34451 Ensenada Place, Dana Point Harbor, Dana Point, California 92629. A complete copy of the NOP and IS prepared for the proposed project may be reviewed at the Orange County Dana Point Harbor Department, 24650 Dana Point Harbor Drive, Dana Point, California 92629, or online at [www.dphplan.com](http://www.dphplan.com). Because of time limits mandated by State law, your response must be sent at the earliest possible date but *not later than 30 days* after receipt of this notice. The County will accept comments from agencies and others regarding this notice through the close of business on January 2, 2008. All comments to this notice must be submitted in writing to the following address, or by e-mail as indicated below:**

**COUNTY OF ORANGE**  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Attention: Brad Gross, Director  
Phone: (949) 923-2236  
[Marinaeir@dphd.ocgov.com](mailto:Marinaeir@dphd.ocgov.com)

# **NOTICE OF PREPARATION SUBSEQUENT ENVIRONMENTAL IMPACT REPORT DANA POINT HARBOR MARINA IMPROVEMENT PROJECT**

## **ENVIRONMENTAL SETTING**

The project site is located within the City of Dana Point (City) at Dana Point Harbor (Harbor) in Capistrano Bay on the Southern Orange County (County) coastline, between Los Angeles and San Diego Counties as shown on Figure 1, Project Location. The Harbor is bordered by the Pacific Ocean to the south; Dana Headlands and Old Cove Marine Preserve to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north.

The Harbor is a County facility located within the City and offers recreational boaters and County residents, tourists, and others a number of recreational activities, retail shopping, and dining opportunities. The facility operates under the direction of the Dana Point Harbor Department (DPHD), a County agency, and is owned by the County of Orange. The County of Orange was designated over 30 years ago by the Tidelands Act as the trustee of the Harbor for the people of the State of California. The Harbor is primarily accessible from Pacific Coast Highway and the Street of the Golden Lantern via Dana Point Harbor Drive. Secondary access is provided by Cove Road and the Pacific Ocean.

## **PROJECT HISTORY AND BACKGROUND**

The construction of Dana Point Harbor began in the late 1960s, and the Harbor was officially dedicated on July 31, 1971. Since its creation nearly four decades ago, the Harbor's infrastructure, including dock facilities and landside facilities such as storm drains, sewers, parking lots, and some of the buildings, is in need of modernization and/or replacement. In 1997, a Task Force was formed to help develop a plan to upgrade, refurbish, and expand existing landside Harbor facilities to meet current and projected needs of the merchants and Harbor visitors. The Dana Point Harbor Revitalization Plan (Revitalization Plan) was developed over the next several years and officially adopted by the County Board of Supervisors and the Dana Point City Council in 2006. A Program Final Environmental Impact Report (FEIR) was prepared for the overall Harbor Revitalization Project (landside and waterside areas) and certified by the Orange County Board of Supervisors on January 31, 2006 (County of Orange Dana Point Harbor Revitalization Program Environmental Impact Report [EIR] No. 591).

## **USE OF THE PREVIOUSLY CERTIFIED PROGRAM FEIR**

As stated above, the Dana Point Harbor Revitalization Program FEIR No. 591 (State Clearinghouse Number 2003101142) was certified by the Orange County Board of Supervisors on January 31, 2006. As defined by CEQA Guidelines Section 15168, "A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) A logical parts in the chain of contemplated actions; (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."

The Program EIR evaluated the entire Harbor Revitalization Plan at a program, or conceptual level of detail, and provided a project or construction level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168.

As illustrated on Figure 2, Existing Harbor Layout, the Harbor was divided into twelve (12) Planning areas for the purpose of establishing land use regulations and development standards. Planning Areas 1 and 2 (known as the Commercial Core) were analyzed at a project level since project-specific construction level details were available. The Program EIR provided a programmatic analysis of the remaining Planning Areas 3 through 12. The proposed Dana Point Harbor Marina Improvement Project addressed in this NOP is comprised of Planning Areas 8 through 12, as indicated on Figure 2. Planning Areas 3 through 7 will require future additional environmental review, as future projects and funding sources are identified.

The current Dana Point Harbor Marina Improvement Project was anticipated to require further environmental review in the Program EIR. There is more project-specific information and more detailed marina design and engineering plans available at this time, sufficient enough to address all environmental impacts at a detailed level not possible at the time of the Program EIR. Consistent with CEQA Guidelines Section 15168, the County is proceeding with the subsequent EIR utilizing the analyses in the previous certified Program EIR to address the environmental impacts of the Marina Improvement Project. Therefore, the Marina Improvement Project is now being evaluated at a project, or construction, level and in accordance with CEQA Guidelines Section 15162 a Subsequent EIR is being prepared to focus on significant effects not discussed in the previous Program FEIR.

## **PROJECT DESCRIPTION**

The Dana Point Harbor Marina Improvement Project addressed in this NOP, includes the West and East Marinas in Dana Point Harbor, the quay wall and bulkheads within those basins, and gangways and security gates to both marina areas. Additionally, new dry stack storage staging docks and dinghy docks, along with renovations to the Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed marina project. In order to accommodate boaters during the renovations, the project also includes potential temporary docks to be located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach as shown on Figure 3, Proposed Harbor Layout.

Marina renovations will include removal of all floating docks and piles; reconstruction of portions of the degraded quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. In addition, the reconfiguration of the Youth and Group docks may require dredging in the basin area on the northwest side of the facility. Other areas under the new slips may also require maintenance dredging not to exceed original design depths in the basin (this maintenance dredging is not a part of the Marina Improvement Project). Other waterside project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines.

The West and East Marinas currently contain 2,409 slips with an average length of 29.85 feet (ft). Due to changes in the boating needs of the public and in response to the market trend of increased demand for larger slips, the proposed marina improvements include adjustments to the number and location of slips throughout the marinas. Currently, the marina operators allow boats to be up to 3 ft. longer than their dock length; approximately 400 boats presently exceed this policy and should be placed in the next larger size slip category. Most of these are in the 30 ft. and under slip category. In consideration of all factors related to slip size, including oversized boats in smaller slips; boater feedback; waitlists; market demand; other marinas located throughout the state; design criteria; and California Coastal Commission (CCC) recommendations, California Department of Boating and Waterways (DBW) and ADA design requirements, the DPHD has concluded that a plan with a modified slip mix with a slightly larger average slip size is appropriate.

At project completion, the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips. However, the average slip length would increase from approximately 30 (29.85) ft. to approximately 34 (33.96) ft. While the total number of boat slips would decrease, the surface area of water currently occupied by floating docks would increase due to the proposed reconfiguration of the docks, which includes up to a 20 ft. encroachment (from each side) into both the East and West Marina channels and a 52.5 ft. encroachment (from each side) into both channels near the island bridge. One-third of the slips 30 ft. and under are also going to be constructed as double wide slips in an effort to limit the loss of slips. In addition, to maximize the number of boat slips, the West Marina would be realigned from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina. Implementation of the project is anticipated to be accomplished over approximately eight years after obtaining the necessary agency approvals.

## **RESPONSIBLE AND TRUSTEE AGENCIES**

In accordance with Sections 15050 and 15367 of the State CEQA Guidelines, the County is the designated Lead Agency for the project and has principal authority and jurisdiction for CEQA actions. Responsible Agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project. Trustee Agencies are State agencies that have jurisdiction by law over natural resources affected by a proposed project that are held in trust for the people of the State.

Project implementation will require discretionary and administrative (ministerial) approvals from the County of Orange and Responsible and Trustee Agencies, including (but not limited to) the City of Dana Point, the United States Department of the Interior, the United States Fish and Wildlife Service, the United States Army Corps of Engineers, the California Department of Fish and Game, the National Marine Fisheries Service (NMFS), the State of California Water Resources Control Board Region 9, the California Coastal Commission (CCC), and the California State Lands Commission.

## **ENVIRONMENTAL PROCEDURES**

This Notice of Preparation (NOP) for the proposed project will be submitted to the State Clearinghouse, Responsible Agencies, and Trustee Agencies that may have jurisdiction over some aspect of the proposed project, surrounding residents, boaters, merchants and other interested parties that have specifically requested a copy of the NOP.

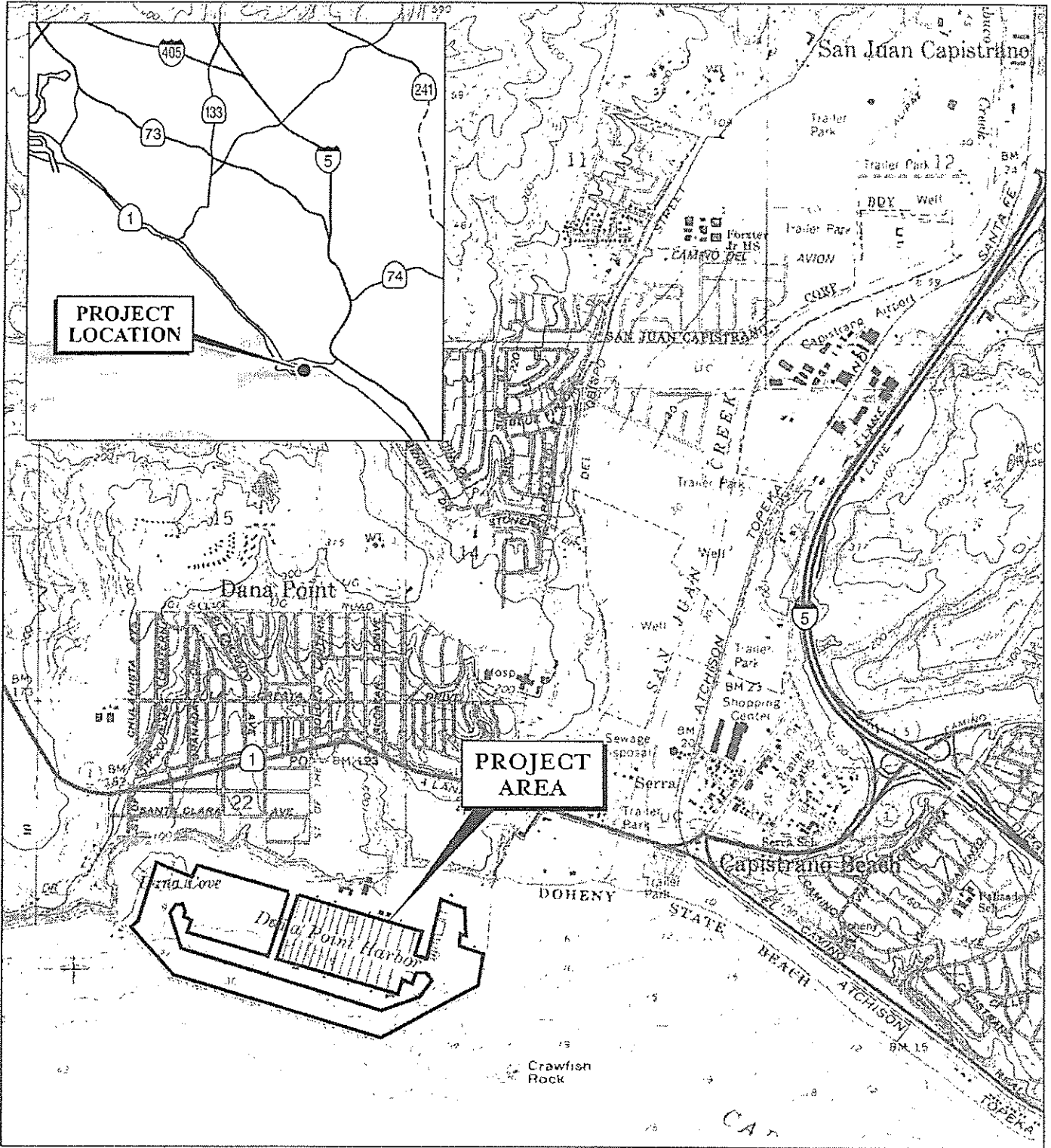
After the 30-day review period for the NOP is complete and all comments are received, a Draft Subsequent Environmental Impact Report (DSEIR) will be prepared in accordance with CEQA, as amended (Public Resources Code, Section 21000 et seq.), and the State Guidelines for Implementation of CEQA (California Code of Regulations [CCR], Section 15000 et seq.). The DSEIR will examine the proposed Marina Improvement Project in the context of the Revitalization Plan and other applicable plans, policies, and regulations. Analyses will be conducted in order to ascertain the proposed project's effects on the environment and the relative degree of impact prior to implementation of mitigation measures. Where impacts are determined to be significant, mitigation measures will be prescribed with the purpose of eliminating or reducing those impacts to the extent feasible.

Once the DSEIR is completed, it will be made available for public review and comment. Copies of the DSEIR will be sent directly to those agencies commenting on the NOP, and will also be made available to the public at a number of locations, including the Dana Point Harbor Department offices, and several public libraries in the area. The SEIR will serve as the CEQA mandated document for environmental clearance for all Marina (waterside) improvements included in the project.



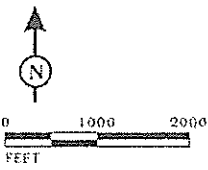
## TOPICS TO BE ANALYZED IN THE SEIR

Based on the analysis contained in the IS for the proposed project, the County has determined that an SEIR will be prepared. The SEIR will serve to further assess the proposed project's effects on the environment, to identify significant impacts, and to identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts. An analysis of alternatives to the proposed project will also be included in the SEIR. Topics to be analyzed in the DSEIR, as identified in the IS, include but are not necessarily limited to the following: aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, recreation, transportation and traffic, and utilities. Responses received to this NOP may modify or add to the preliminary assessment of potential issues addressed in the SEIR.



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FIGURE I



SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif"

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Dana Point Harbor Marina Improvement Project  
Project Location

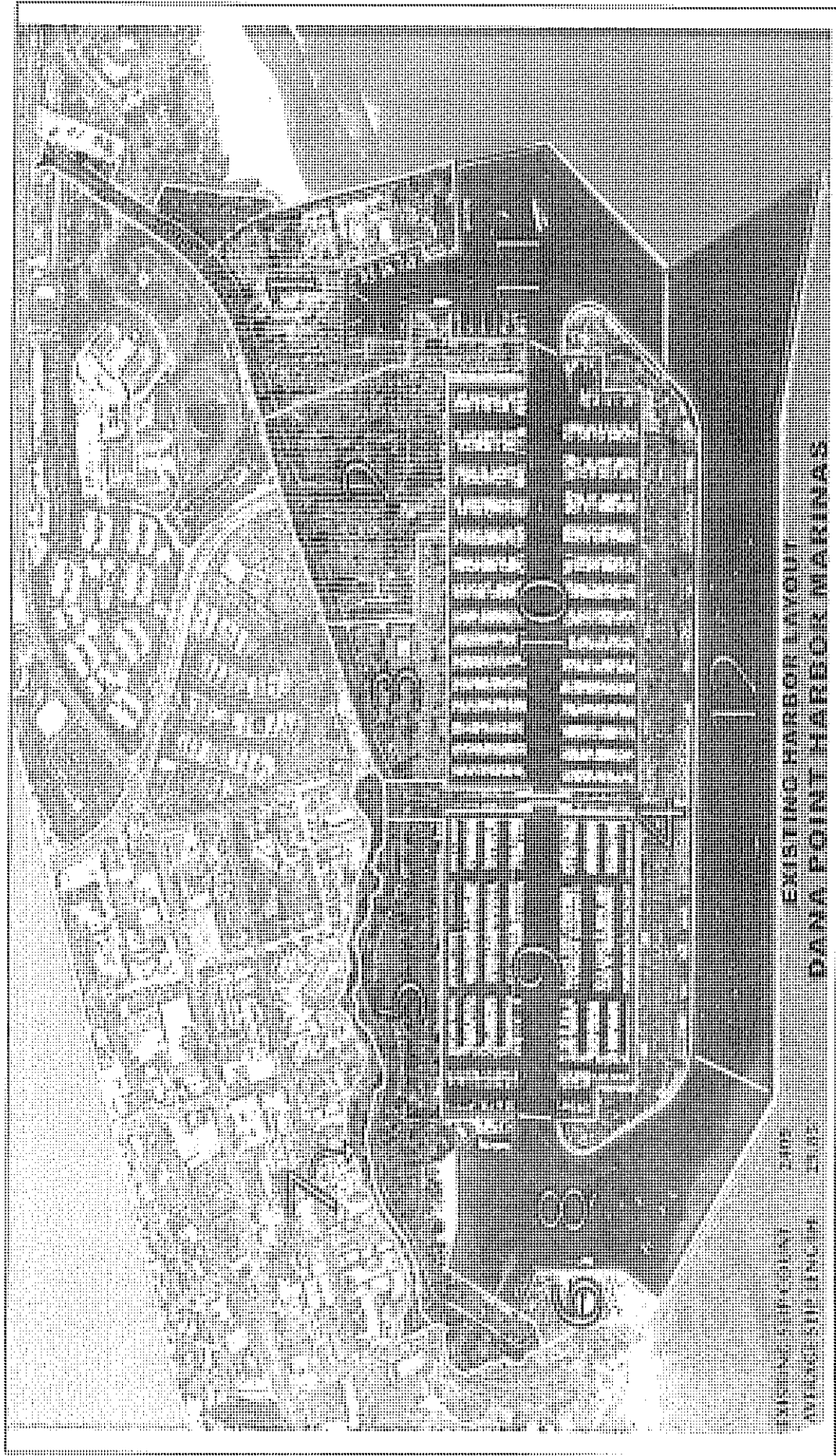
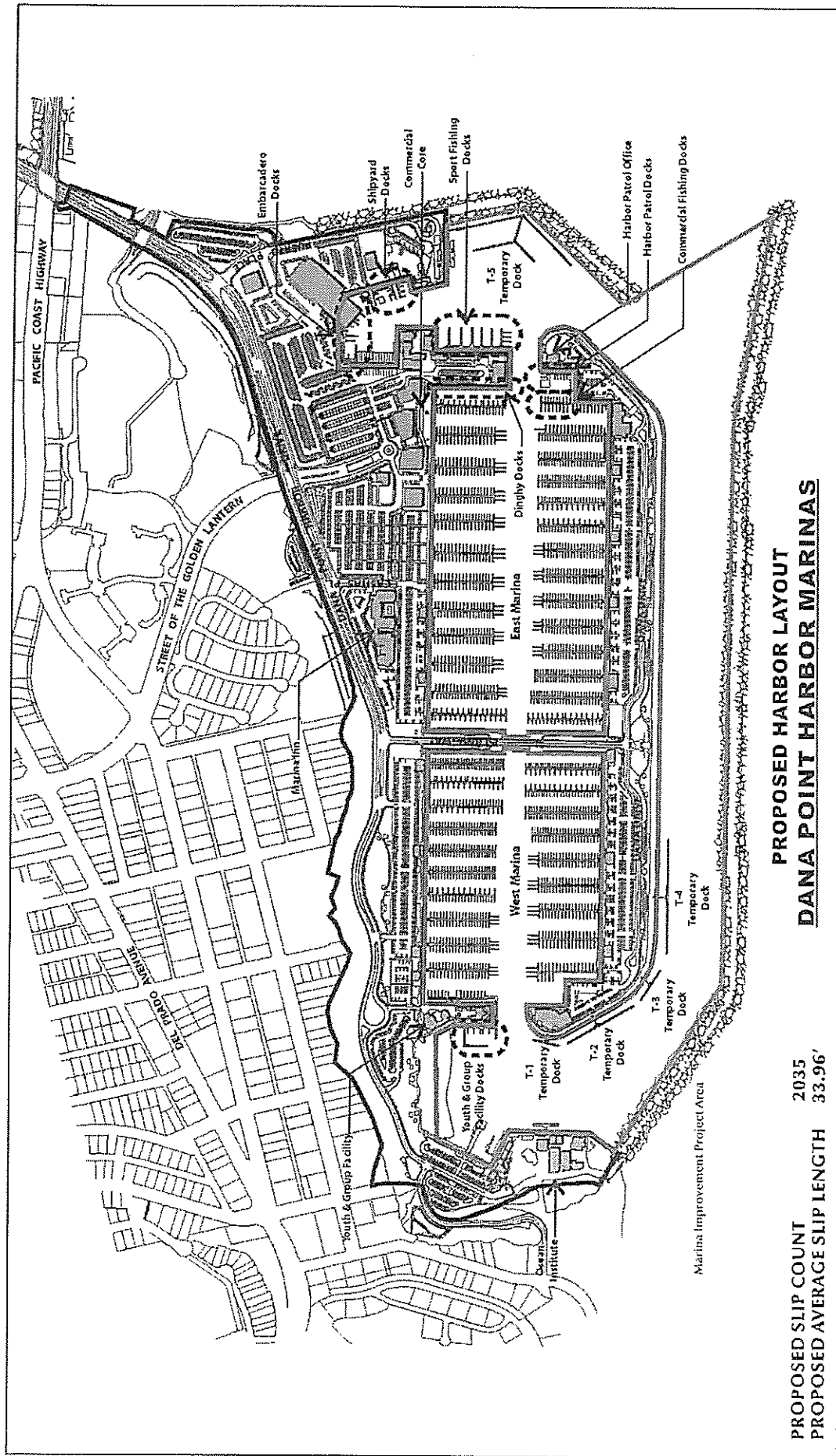


FIGURE 2

Dana Point Harbor Marina Improvement Project  
Existing Harbor Layout

SOURCE: URS/Cash & Associates

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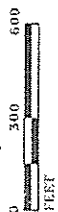
**PROPOSED HARBOR LAYOUT  
DANA POINT HARBOR MARINAS**

PROPOSED SLIP COUNT 2035  
PROPOSED AVERAGE SLIP LENGTH 33.96'

L S A

LEGEND  
 Boundary  
 Marina Improvement Project Area

NOTE: Landslide areas are shown in accordance with the Dana Point Harbor Revitalization Plan and District Regulations Land Use Plan.



SOURCE: URS/Cash & Associates

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FIGURE 3

*Dana Point Harbor Marina Improvement Project*  
Proposed Harbor Layout

INITIAL STUDY

DANA POINT HARBOR MARINA  
IMPROVEMENT PROJECT

Submitted to:

County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

Prepared by:

LSA Associates, Inc.  
20 Executive Park, Suite 200  
Irvine, California 92614-4731  
(949) 553-0666

LSA

November 2007

## TABLE OF CONTENTS

1.0 INTRODUCTION .....	1-1
1.1 PROJECT LOCATION .....	1-1
1.2 PROJECT HISTORY AND BACKGROUND .....	1-3
1.3 USE OF THE PREVIOUSLY CERTIFIED PROGRAM FEIR .....	1-3
1.4 PROJECT DESCRIPTION .....	1-5
1.5 CONTACT PERSONS.....	1-7
2.0 ENVIRONMENTAL ANALYSIS CHECKLIST INITIAL STUDY .....	2-1
3.0 ENVIRONMENTAL ANALYSIS CHECKLIST RESPONSES .....	3-1
3.1 LAND USE AND PLANNING .....	3-2
3.2 AGRICULTURAL RESOURCES.....	3-4
3.3 POPULATION AND HOUSING .....	3-5
3.4 GEOLOGY AND SOILS .....	3-6
3.5 HYDROLOGY AND WATER QUALITY .....	3-9
3.6 TRANSPORTATION/CIRCULATION .....	3-14
3.7 AIR QUALITY .....	3-17
3.8 NOISE .....	3-20
3.9 BIOLOGICAL RESOURCES.....	3-23
3.10 AESTHETICS .....	3-26
3.11 CULTURAL/SCIENTIFIC RESOURCES .....	3-28
3.12 RECREATION.....	3-29
3.13 MINERAL RESOURCES.....	3-31
3.14 HAZARDS AND HAZARDOUS MATERIALS .....	3-31
3.15 PUBLIC SERVICES .....	3-35
3.16 UTILITIES AND SERVICE SYSTEMS .....	3-38
3.17 MANDATORY FINDINGS OF SIGNIFICANCE.....	3-40

## FIGURES

Figure 1: Project Location .....	1-2
Figure 2: Existing Harbor Layout .....	1-4
Figure 3: Proposed Harbor Layout.....	1-6

## 1.0 INTRODUCTION

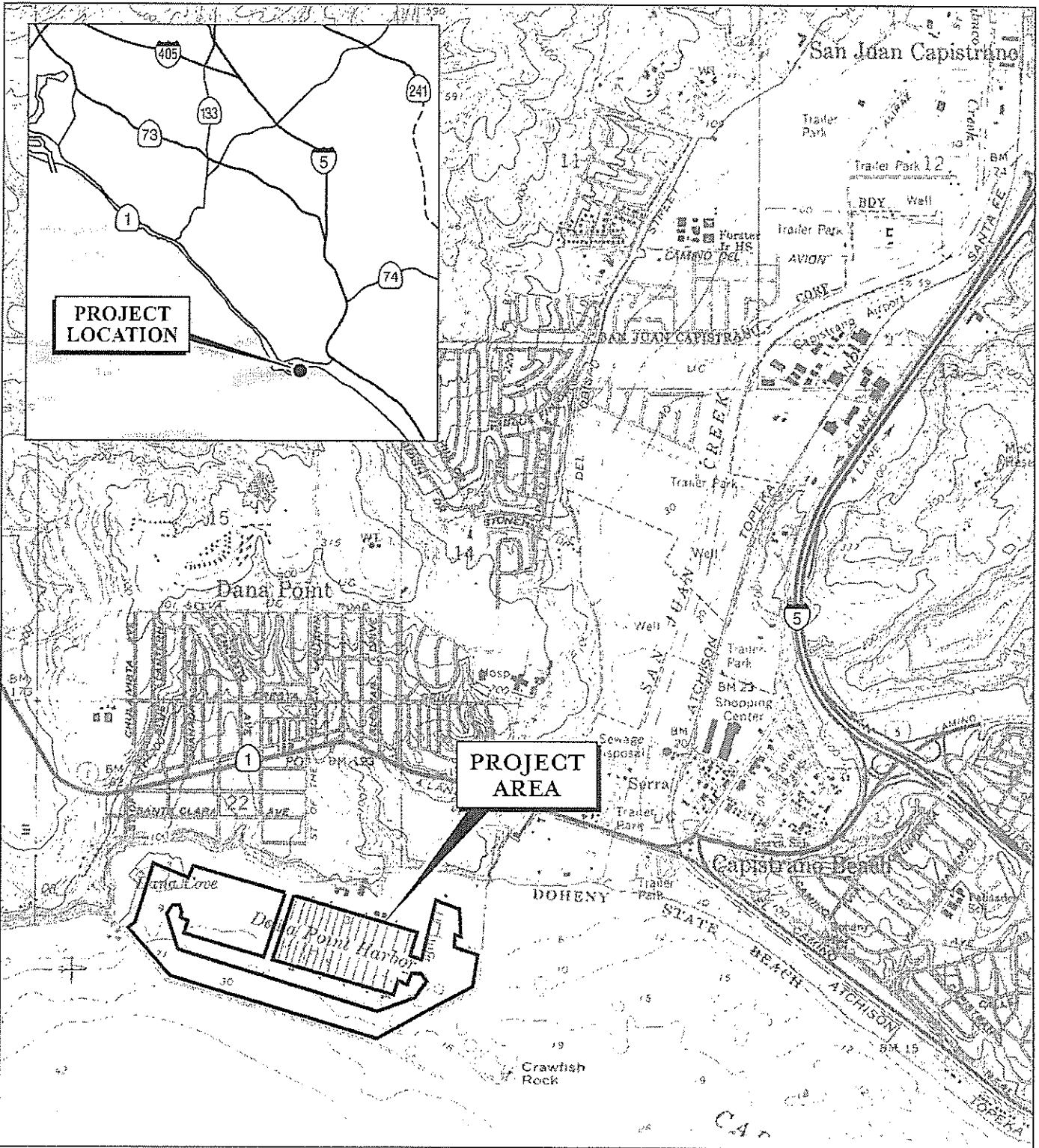
In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, this Initial Study (IS) has been prepared as preliminary environmental analysis and documentation for the proposed Dana Point Harbor Marina Improvement Project (hereinafter referenced as the "project"). This IS includes a description of the proposed project; an environmental checklist form identifying four categories of project impact (potentially significant impact, less than significant with mitigation incorporated, less than significant impact, and no impact); and response and analysis of each checklist topic. The County of Orange (County) is the Lead Agency under CEQA for the proposed project. The County Board of Supervisors is responsible for approval of the environmental documentation prior to approval of the project.

Previous environmental documentation on the Dana Point Harbor (Harbor) Revitalization Plan, including the proposed project, is noted below in Section 1.2, Project History and Background. The proposed project addressed in this IS was evaluated at a preliminary program level in the Program Final Environmental Impact Report (FEIR) No. 591 that was prepared for the overall Harbor Revitalization Project; conceptual construction plans have subsequently been developed; therefore, the project is now being evaluated at a project level in accordance with CEQA, as amended (Public Resources Code Section 21000, et seq.); the CEQA Guidelines (California Code of Regulations Section 15000, et seq.); and the County of Orange Environmental Procedures. The analysis included in this IS tiers off of the previously certified documentation. The analysis in this IS concludes that the County should prepare a Subsequent Environmental Impact Report (SEIR) to focus on significant effects not discussed in the previous Program FEIR, and to satisfy the requirements of CEQA for the proposed Waterside Improvement Project.

### 1.1 PROJECT LOCATION

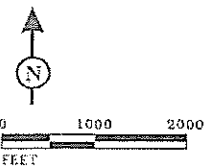
The Harbor is located in Capistrano Bay on the Southern Orange County coastline. The Harbor is a County facility located within the City of Dana Point (City) and offers recreational boaters, County residents, tourists, and others a number of recreational activities, retail shopping, and dining opportunities. The facility is operated under the direction of the Dana Point Harbor Department (DPHD), a County agency, and is owned by the County of Orange. The County of Orange was designated over 30 years ago by the Tidelands Act as the trustee of the Harbor for the people of the State of California. The Harbor is primarily accessible from Pacific Coast Highway and the Street of the Golden Lantern via Dana Point Harbor Drive (see Figure 1). Secondary access is provided by Cove Road and the Pacific Ocean.

The Harbor comprises three areas: a landside area along Dana Point Harbor Drive, adjacent to the bluffs; the Island area (connected by a bridge to the landside); and marinas consisting of docks, commercial fishing slips, federal anchorage areas, and tall ship docks for the Spirit of Dana Point, Sea Explorer, and the Pilgrim in addition to the Youth and Group docks, fishing pier, fuel dock, sport fishing dock, and bait barge.



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FIGURE 1



SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif."

Dana Point Harbor Marina Improvement Project

Project Location



## 1.2 PROJECT HISTORY AND BACKGROUND

The construction of Dana Point Harbor began in the late 1960s, and the Harbor was officially dedicated on July 31, 1971. Since its creation nearly four decades ago, the Harbor's infrastructure, including dock facilities and landside facilities such as storm drains, sewers, parking lots, and some of the buildings, are in need of modernization and/or replacement. In 1997, a Task Force was formed to help develop a plan to upgrade, refurbish, and expand existing landside Harbor facilities to meet current and projected needs of the merchants and Harbor visitors. The Dana Point Harbor Revitalization Project (Revitalization Plan) was developed over the next several years and officially adopted by the County Board of Supervisors and the Dana Point City Council in 2006. A Program FEIR was prepared for the overall Harbor Revitalization Project (landside and waterside areas) and certified by the Orange County Board of Supervisors on January 31, 2006 (County of Orange Dana Point Harbor Revitalization Program EIR No. 591). See Section 1.3 for further discussion regarding the use of the previously certified Program FEIR.

## 1.3 USE OF THE PREVIOUSLY CERTIFIED PROGRAM FEIR

As stated above, the Dana Point Harbor Revitalization Program FEIR No. 591 (State Clearinghouse Number 2003101142) was certified by the Orange County Board of Supervisors on January 31, 2006. As defined by CEQA Guidelines Section 15168, "A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) A logical parts in the chain of contemplated actions; (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."

The Program EIR evaluated the entire Harbor Revitalization Plan at a program, or conceptual, level of detail and provided a project- or construction-level EIR analysis where possible, consistent with CEQA Guidelines Sections 15146 and 15168.

As illustrated on Figure 2, the Harbor was divided into 12 Planning Areas for the purpose of establishing land use regulations and development standards. Planning Areas 1 and 2 (known as the Commercial Core) were analyzed at a project level since project-specific construction-level details were available for those Planning Areas. The Program EIR provided a programmatic analysis of the remaining Planning Areas 3 through 12. The proposed Dana Point Harbor Marina Improvement Project addressed in this Initial Study comprises Planning Areas 8 through 12, as indicated on Figure 2. Planning Areas 3 through 7 will require future additional environmental review as future projects and funding sources are identified.

The current Dana Point Harbor Marina Improvement Project was anticipated to require further environmental review in the Program EIR. There is more project-specific information and more detailed marina design and engineering plans available at this time, sufficient to address all environmental impacts at a detailed level not possible at the time of the Program EIR. Consistent with CEQA Guidelines Section 15168, the County is proceeding with the subsequent EIR, utilizing the analyses in the previous certified Program EIR to address the environmental impacts of the Marina Improvement Project. Therefore, the Marina Improvement Project is now being evaluated at a project, or construction, level, and in accordance with CEQA Guidelines Section 15162, a Subsequent EIR is being prepared to focus on significant effects not discussed in the previous Program FEIR.

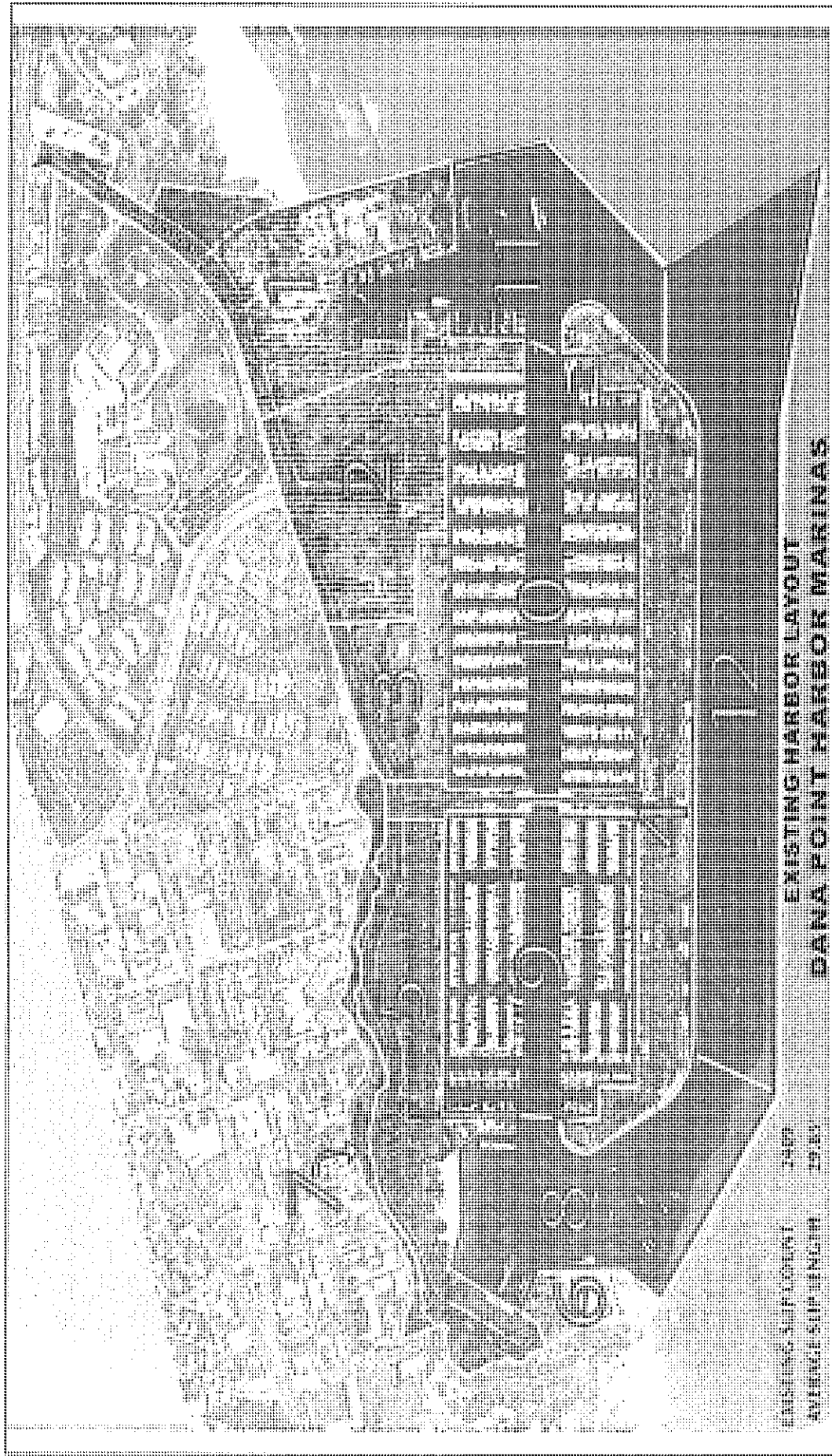


FIGURE 2

*Dana Point Harbor Marina Improvement Project*  
Existing Harbor Layout

SOURCE: URS/Cash & Associates.  
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The analysis contained in this IS incorporates by reference the documentation contained in the Dana Point Harbor Revitalization Plan Program FEIR. In addition, as stated in the Program FEIR, feasible mitigation measures and alternatives developed in the Program FEIR shall be incorporated into subsequent actions in the program. Therefore, each topic discussed in this IS includes an overview of the Program FEIR and a summary of applicable Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM) that are being carried forward and incorporated into the current Marina Improvement Project to reduce potential impacts.

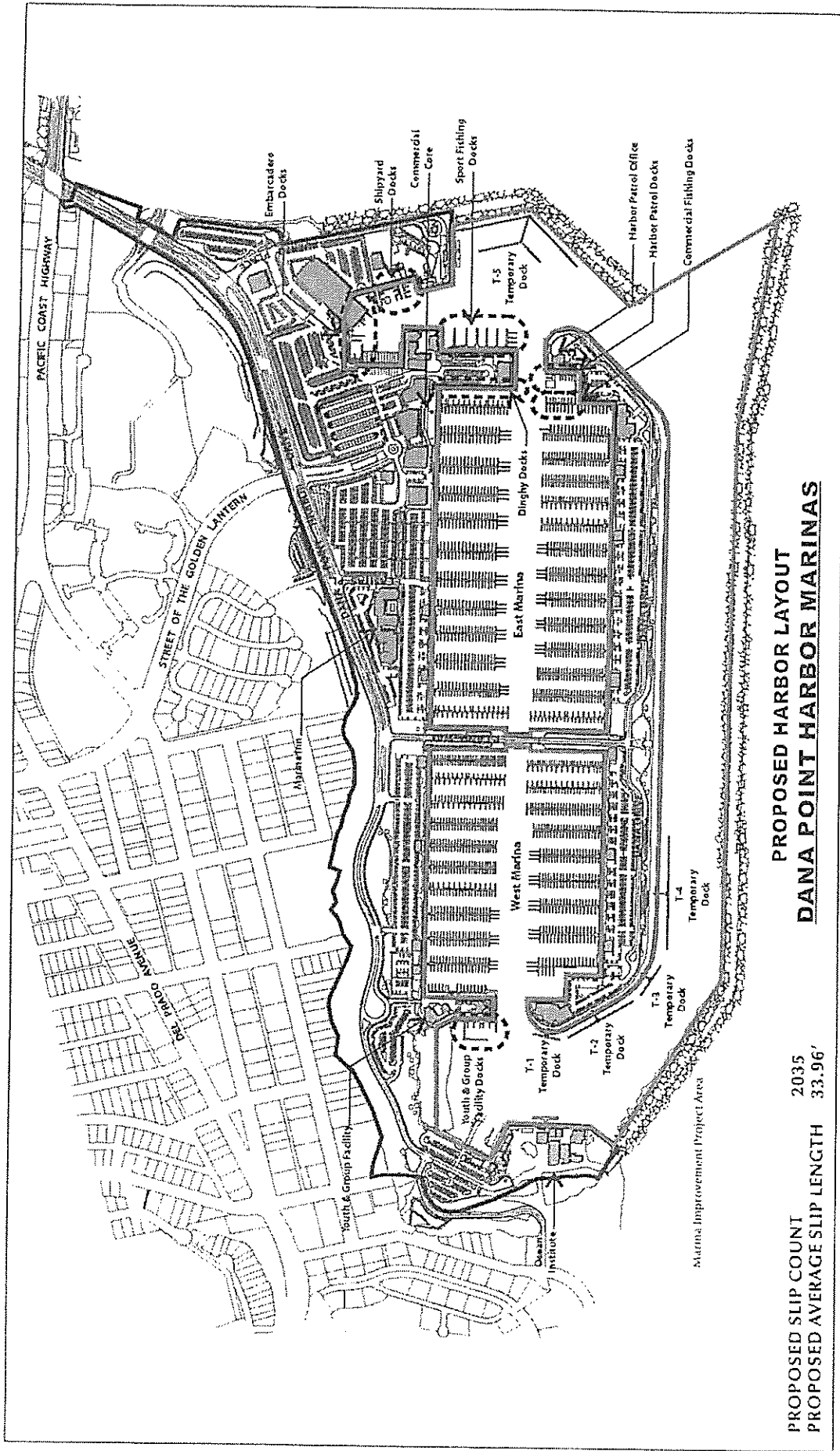
## 1.4 PROJECT DESCRIPTION

The Dana Point Harbor Marina Improvement Project addressed in this IS includes the West and East Marinas in Dana Point Harbor, the quay wall and bulkheads within those basins, and gangways and security gates to both marina areas. Additionally, new dry stack storage staging docks and dinghy docks, along with renovations to the Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed marina Project. In order to accommodate boaters during the renovations, the Project also includes potential temporary docks to be located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach as shown on Figure 3.

Marina renovations will include removal of nearly all floating docks and piles; reconstruction of portions of the degraded quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. In addition, the reconfiguration of the Youth and Group docks may require dredging in the basin area on the northwest side of the facility. Other areas under the new slips may also require maintenance dredging not to exceed original design depths in the basin (this maintenance dredging is not a part of the Marina Improvement Project). Other marina project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines.

The West and East Marinas currently contain 2,409 slips with an average length of 29.85 feet (ft.). Due to changes in the boating needs of the public and in response to the market trend of increased demand for larger slips, the proposed marina improvements include adjustments to the number and location of slips throughout the marinas. Currently, the marina operators allow for boats to be up to 3 ft. longer than their dock length; approximately 400 boats presently exceed this policy and should be placed in the next larger size slip category. Most of these are in the 30 ft. and under slip category. In consideration of all factors related to slip size, including oversized boats in smaller slips, boater feedback, waitlists, market demand, slip mixes at other marinas located throughout the state, design criteria, and California Coastal Commission (CCC) recommendations, California Department of Boating and Waterways (DBW) and ADA design requirements, the Dana Point Harbor Department (DPHD) has concluded that a plan with a modified slip mix with a slightly larger average slip size is appropriate.

At project completion the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips. However, the average slip length would increase from 30 (29.85) ft. to 34 (33.96) ft. While the total number of boat slips would decrease, the surface area of water currently occupied by floating docks would increase due to the proposed reconfiguration of the docks, which includes up to a 20 ft. encroachment (from each



**PROPOSED HARBOR LAYOUT  
DANA POINT HARBOR MARINAS**

PROPOSED SLIP COUNT 2035  
PROPOSED AVERAGE SLIP LENGTH 33.96'

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**LEGEND**  
 — Boundary  
 — Marina Improvement Project Area

NOTE: Landslide areas are shown in accordance with the Dana Point Harbor Revitalization Plan and District Regulations Land Use Plan.



SOURCE: URS/Cash & Associates

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FIGURE 3

Dana Point Harbor Marina Improvement Project  
Proposed Harbor Layout

side) into both the East and West Marina channels, and a 52.5 ft. encroachment (from each side) into both channels near the island bridge. One-third of the slips 30 ft. and under are also going to be constructed as double wide slips in an effort to limit the loss of slips. In addition, to maximize the number of boat slips, the West Marina would be realigned from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina. Implementation of the Project is anticipated to be accomplished over approximately eight years after obtaining the necessary agency approvals.

This IS has been prepared to determine the appropriate documentation required for compliance with CEQA. The analysis contained in the IS concludes that the Project may have different effects on the environment than were analyzed in the previous Program FEIR and that substantial new information and analyses are needed to assess the impacts on the environment. At the time the Program FEIR was prepared for the Revitalization Project, specific construction-level detail was not available for the waterside improvements. CEQA Guidelines (Section 15163) state that a Subsequent EIR should be prepared for a project under certain circumstances where major additions or changes to the previous EIR are required, and when new information of substantial importance not known at the time of the previous EIR shows that the Project will have significant effects not discussed in the previous EIR. Therefore, because conceptual construction-level plans have subsequently been developed for the waterside improvements, this IS has determined that a Subsequent EIR is required for the Dana Point Harbor Marina Improvement Project.

Project implementation will require discretionary and administrative (ministerial) approvals from the County and Responsible and Trustee Agencies, including but not limited to the City of Dana Point, the California Coastal Commission, California Water Resources Control Board Region 9, the United States Department of the Interior, the United States Fish and Wildlife Service, the United States Army Corps of Engineers, the California Department of Fish and Game, National Marine Fisheries Service (NMFS), California Department of Boating and Waterways, and the California State Lands Commission. Project components are further listed in Section 2.0, No. 9.

## 1.5 CONTACT PERSONS

Any questions regarding the preparation of this IS, its assumptions, or conclusions should be referred to:

County of Orange  
Brad Gross, Director  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629  
Phone: (949) 923-2236

## 2.0 ENVIRONMENTAL ANALYSIS CHECKLIST INITIAL STUDY

1. Project Title: Dana Point Harbor Marina Improvement Project
2. Lead Agency: County of Orange, Dana Point Harbor Department (DPHD)
3. Contact Person and Phone Number: Brad Gross, Director, Dana Point Harbor Department  
949-923-2236
4. Decision Makers: SEIR Certification: Orange County Board of Supervisors; Project  
Approval: County of Orange; Implementation, DPHD, and California Coastal  
Commission (CCC); Coastal Development Permit: CCC
4. Project Location: Dana Point Harbor, Dana Point, Orange County, California
5. Project Applicant's Name and Address: County of Orange, Dana Point Harbor Department  
24650 Dana Point Harbor Drive, Dana Point, California 92629
6. General Plan Designation: Harbor Marine Water (City of Dana Point)
7. Zoning: Dana Point Harbor Planned Community (City of Dana Point)
8. Sources of Information: The following sources of information were used in preparation of this checklist and IS:  
County of Orange General Plan (2000); County of Orange Dana Point Harbor Revitalization  
Project Program FEIR No.591 (Certified 2006); Dana Point Harbor Revitalization Plan and  
District Regulations (LCPA 06-03); City of Dana Point General Plan (1991)
9. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheet(s) if necessary).  
The Dana Point Harbor Marina Improvement Project addressed in this IS includes the West and East Marinas in Dana Point Harbor, the quay wall and bulkheads within those basins, and gangways and security gates to both marina areas. Additionally, new dry stack storage staging docks and renovations to the Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed marina Project. In order to accommodate boaters during the renovations, the Project also includes temporary docks to be located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach. Marina renovations would include removal of all floating docks and piles; reconstruction of portions of the degraded quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. Other marina Project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. In addition, the reconfiguration of the Youth and Group docks may require dredging in the basin area on the

northwest side of the facility.

The West and East Marinas currently contain 2,409 slips with an average length of 29.85 feet. Due to changes in the boating needs of the public and in response to the market trend of increased demand for larger slips, the proposed marina improvements include adjustments to the number and location of slips throughout the marinas. Currently, the marina operators allow for boats to be up to 3 ft. longer than their dock length; approximately 400 boats presently exceed this policy and should be placed in the next larger size slip category. Most of these are in the 30 ft. and under slip category. In consideration of all factors related to slip size (including oversized boats in smaller slips, boater feedback, waitlists, market demand, slip mixes at other marinas located throughout the state, design criteria, and CCC recommendations, DBW, and ADA design requirements), the DPHD has concluded that a plan with a modified slip mix with a slightly larger average slip size is appropriate.

At Project completion, the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips. However, the average slip length would increase from 30 (29.85) ft. to 34 (33.96) ft. While the total number of boat slips would decrease, the surface area of water currently occupied by floating docks would increase due to the proposed reconfiguration of the docks, which includes up to a 20 ft. encroachment (from each side) into both the East and West Marina channels and a 52.5 ft. encroachment (from each side) into both channels near the island bridge. One-third of the slips 30 ft. and under are also going to be constructed as double wide slips in an effort to limit the loss of slips. In addition, to maximize the number of boat slips, the West Marina would be realigned from a north-south orientation to an east-west orientation, consistent with the existing dock orientation in the East Marina. Implementation of the Project is anticipated to be accomplished in approximately 16 phases over approximately 8 years.

10. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings.)

Land uses surrounding the Marina Project include marine service businesses, commercial retail, restaurants, parking, public waterways, sports fishing docks, yacht clubs, harbor patrol and sheriff facilities, hotels, launch ramp, harbor-related public recreational areas, and public parks. Residential and commercial uses are located to the north and west along the coastal bluffs, outside of the Harbor boundaries.

11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

California Coastal Commission (LCPA and Coastal Development Permit approvals for waterside areas); California Water Resources Control Board Region 9; United States Department of the Interior; United States Fish and Wildlife Service; United States Army Corps of Engineers; California Department of Fish and Game; National Marine Fisheries Service (NMFS); California Department of Boating and Waterways; the California State Lands Commission; City of Dana Point; and several County of Orange agencies or departments.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

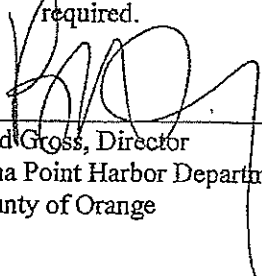
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

X	Aesthetics		Agriculture Resources	X	Air Quality
X	Biological Resources		Cultural Resources	X	Geology/Soils
X	Hazards & Hazardous Materials	X	Hydrology/Water Quality		Land Use/Planning
	Mineral Resources	X	Noise		Population/Housing
	Public Services	X	Recreation	X	Transportation/Traffic
X	Utilities/Service Systems	X	Mandatory Findings of Significance		

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant or "potentially significant unless mitigated" impact on the environment, but at least one effect has been (1) adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) addressed by mitigation measures based on the earlier analysis as described on the attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects have been (a) analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
\_\_\_\_\_  
Brad Gross, Director  
Dana Point Harbor Department  
County of Orange

21 Nov 2007  
Date



## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers adequately supported by the information sources cited by a lead agency in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that indicates that an effect is significant. If one or more “Potentially Significant Impact” entries exist when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, Program FEIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c) (3) (D). In this case, a brief discussion should identify the following:
  - a) Earlier Analyses Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.

- 9) The explanation of each issue should identify:
- a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significant.



ENVIRONMENTAL ANALYSIS CHECKLIST

Dana Point Harbor Marina Improvement Project  
Initial Study

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>1. LAND USE &amp; PLANNING. Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>2. AGRICULTURE. Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>3. POPULATION &amp; HOUSING. Would the project:</b>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
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**4. GEOLOGY AND SOILS. Would the project:**

- |  |                                     |                          |                                     |                                     |
|--|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:   |                                     |                          |                                     |                                     |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| ii) Strong seismic ground shaking?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| iii) Seismic-related ground failure, including liquefaction?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| iv) Landslides?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| b) Result in substantial soil erosion or the loss of topsoil?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| d) Be located on expansive soils, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**5. HYDROLOGY & WATER QUALITY. Would the project:**

- |   |                                     |                          |                          |                                     |
|---|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Have a significant adverse impact on groundwater quality or otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6. TRANSPORTATION/CIRCULATION. Would the project:</b>				
a) Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plan or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>7. AIR QUALITY. Would the project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>8. NOISE. Would the project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a private or public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>9. BIOLOGICAL RESOURCES. Would the project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>10. AESTHETICS. Would the project:</b>				
a) Have a substantial adverse effect a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>11. CULTURAL/SCIENTIFIC RESOURCES. Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse changed in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>12. RECREATION. Would the project:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>13. MINERAL RESOURCES. Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>14. HAZARDS. Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>15. PUBLIC SERVICES. Would the project:</b>				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>16. UTILITIES &amp; SERVICE SYSTEMS. Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES & SUPPORTING DATA SOURCES:	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**MANDATORY FINDINGS**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have possible environmental effects, which are individually limited but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**DETERMINATION:**

Based upon the evidence in light of the whole record documented in the attached environmental checklist explanation, cited incorporations and attachments, I find that the proposed project:

**COULD NOT** have a significant effect on the environment, and a negative declaration (ND) will be prepared pursuant to CEQA Guidelines Article 6, 15070 through 15075.

**COULD** have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures have been added to the project. A negative declaration (ND) will be prepared pursuant to CEQA Guidelines Article 6, 15070 through 15075.

**MAY** have a significant effect on the environment, which has not been analyzed previously. Therefore, an environmental impact report (EIR) is required.

Signature: \_\_\_\_\_

Director: Brad Cross

County of Orange, Dana Point Harbor Department

Telephone: (949) 923-2236

**NOTE:** All referenced and/or incorporated documents may be reviewed by appointment only, at the County of Orange Dana Point Harbor Department, 24650 Dana Point Harbor Drive, Dana Point, California, unless otherwise specified. An appointment can be made by contacting the Person identified above.

### 3.0 ENVIRONMENTAL ANALYSIS CHECKLIST RESPONSES

This section provides detailed analysis of each environmental topic identified in the Environmental Analysis Checklist. The analyses and preliminary assessments of the proposed project use available sources and documents. For many of the environmental topics, the conclusions indicate that there potentially could be or will be significant impacts from the project that should be analyzed further in a Subsequent EIR in light of the facts and analyses provided in the Program FEIR. An overview section for each environmental topic summarizes the impacts, applicable mitigation, and level of significance for the potential impacts included in the County of Orange Dana Point Harbor Revitalization Project Program FEIR No. 591 ("Program FEIR").

The analysis included in this IS tiers off of the previously certified Program FEIR. This IS concludes that the waterside improvements may have different effects than were analyzed in the Program FEIR and that substantial new information and analysis are needed to assess the impacts on the environment. Therefore, in accordance with CEQA Guidelines Section 15162, preparation of a Subsequent EIR is recommended for the current Marina Improvement Project. In accordance with CEQA Guidelines Section 15168, the Subsequent EIR will focus on significant effects not discussed in the previous Program FEIR.

The analysis contained in this IS incorporates by reference the documentation contained in the Program FEIR. In addition, as stated in the Program FEIR, feasible mitigation measures and alternatives developed in the Program FEIR shall be incorporated into subsequent actions in the program. Therefore, each topic discussed in this IS contains a summary of Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM) that are applicable to the Marina Improvement Project and are being carried forward and incorporated into the current Marina Improvement Project to reduce potential impacts.

The Environmental Analysis Checklist identifies four categories of project impact: "potentially significant impact," "less than significant with mitigation incorporated," "less than significant impact," and "no impact." A response of "potentially significant impact" applies if there is substantial evidence that an effect is significant. A response of "less than significant with mitigation incorporated" applies where the mitigation measures are available to reduce an effect from "potentially significant impact" to a "less than significant impact." A response of "less than significant impact" applies if there is evidence that potential project impacts are not significant. A response of "no impact" indicates that the project will have no effect on the environment.

#### References Used in Completing the Environmental Analysis Checklist

The following documents were used in completing the Environmental Analysis Checklist/Initial Study and the discussion provided herein. These documents are available for review at the County of Orange (County), Dana Point Harbor Department, 24650 Dana Point Harbor Drive, Dana Point, California, 92629. Where appropriate, the documents have also been cited in the Environmental Analysis Checklist.

- County of Orange General Plan (2000)
- County of Orange Dana Point Harbor Revitalization Project Program FEIR No.591 (Certified 2006)
- Dana Point Harbor Revitalization Plan and District Regulations (September 2006)
- City of Dana Point Local Coastal Program (LCP)
- California Coastal Act

### 3.1 LAND USE AND PLANNING

#### Program FEIR Overview

**Impacts.** Implementation of the Revitalization Project does not include any permanent land use changes other than renovated, and/or replaced, marina docks and related infrastructure to better serve visitors, boaters, and existing Harbor uses. The Revitalization Project required that a Local Coastal Plan Amendment (LCPA) be prepared and locally adopted by the City of Dana Point with input from the County, and then certified by the CCC. The Program FEIR concluded that because the project required an LCPA, it was by definition “inconsistent” with the current LCP. This was, however, not considered a significant impact because the future LCPA will improve overall Coastal Act compliance. All waterside improvements must be reviewed and approved by the CCC prior to project construction. An application for a Coastal Development Permit (CDP) will be submitted for consideration by the CCC after certification of the SEIR and approval of the Marina Improvement Project by the County.

Due to temporary construction activities and/or long-term maintenance or operations, the Revitalization Project, including the Marina Improvement Project, may result in conflicts with Harbor facilities or land uses. In addition, the proposed Revitalization Project, combined with other future development, could increase the intensity of land uses in the area. However, the Program FEIR concluded that with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures, no significant impacts are anticipated. Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

#### Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)

- PDF 4.1-1** Construction Phasing for the Harbor Revitalization Plan has been designed to minimize the disruption of vehicular and pedestrian access routes and parking availability throughout the Harbor. In the event of temporary closures, alternate routes and clear directional signage will be provided.
- MM 4.1-1a** The Project will require a Local Coastal Plan Amendment and subsequent Coastal Development Permits to ensure consistency with the California Coastal Act and Local Coastal Plan.
- MM 4.1-3a** Access to the Marine Service areas shall be maintained during all construction phases. A Construction Management Plan shall be prepared identifying the

configuration of construction staging areas temporary access routes, and parking areas and will be submitted in conjunction with review of Coastal and/or Site Development Permits for each phase of development.

- MM 4.1-3b** A comprehensive signage program for public access shall be implemented in conjunction with the construction of the Commercial Core Area and subsequent planning areas within the Harbor to inform the public of the availability of, and provide direction to, public parking areas, coastal access and on-site recreational amenities.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Land Use and Planning were identified in the Program FEIR.

### Marina Improvement Project Checklist Responses

**Would the project:**

- a) **Physically divide an established community?**

**No Impact.** The proposed project is renovation of the existing marinas, Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, sport fishing docks, and new dry stack storage staging docks within Dana Point Harbor. The project also includes dredging in the basin area on the northwest side of the Youth and Group docks and temporary docks to be located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach. The Dana Point Harbor is County property located within the City of Dana Point and will remain as is without dividing or altering any community or political boundary. As stated in the Program FEIR, the existing Marinas serve recreational boating activities and are compatible with the other existing uses in the Harbor. The proposed project would reconfigure and upgrade the slips and docks to better serve and meet the needs of boaters and would include new boarding float docks that will be accessible in accordance with ADA guidelines for recreational facilities. The proposed project is contained within the existing Harbor and will not divide an established community; therefore, further analysis in the Subsequent EIR (SEIR) is not required.

- b) **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less Than Significant Impact.** Dana Point Harbor is owned by the County of Orange and located entirely in the City of Dana Point. The County has the primary authority for development, maintenance, and operation of uses and activities within the Harbor. Development within the Harbor has been historically regulated and land uses defined by the County under the Dana Point Harbor Planned Community District Development Plan, adopted by the County Board of Supervisors in 1969. The Harbor is shown as a Regional Recreation area in the County General Plan. The proposed project is a continuation of existing land uses and is consistent with the County's General Plan designation:

Dana Point Harbor is located entirely within the Coastal Zone (CZ) as defined by the California Coastal Act of 1976. Under provisions of the Coastal Act, each local government along the coast must develop an LCP. In accordance with the California Coastal Act, the County prepared an LCP that was certified by the CCC in 1981. The County's LCP is referred to as the South Coast Planning Unit Local Coastal Program.

Subsequent to the City's incorporation in 1989, the County prepared and adopted an LCPA that was certified by the CCC that transferred land use regulatory authority to the City of Dana Point and serves as the applicable Coastal Act regulatory document for Dana Point Harbor. All waterside improvements must be reviewed and approved by the CCC and require a CDP from the CCC. An LCPA has been prepared for the Dana Point Harbor Revitalization Project and is currently under review by the CCC.

The land use and development regulations for the Harbor are contained in the Dana Point Harbor Revitalization Plan and District Regulations (pending CCC certification). The proposed project is consistent with the District Regulations land use designations and the project analyzed in the Program FEIR certified by the County Board of Supervisors on January 31, 2006.

The SEIR will further address the land use impacts of the proposed project based primarily on the project's consistency with the CCC, the City LCP, and the Dana Point Harbor Revitalization Plan and District Regulations.

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

**No Impact.** The project site is not located within a habitat conservation or natural community plan area. Therefore, no further analysis in the SEIR is required.

## **3.2 AGRICULTURAL RESOURCES**

### **Program FEIR Overview**

In the course of preparing the Program FEIR certain impacts were found to be less than significant due to the inability of the Revitalization Project to create such impacts, or the absence of project characteristics producing such effects. Effects determined not to be significant were not addressed further in the Program FEIR. The Program FEIR determined that no farmland would be converted to nonagricultural uses and that no agricultural zoning or Williamson Act contracts existed within or adjacent to the project site. Impacts related to agricultural resources were therefore determined to be less than significant and were not discussed further in the Program FEIR.

### **Marina Improvement Project Checklist Responses**

**Would the project:**

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**



- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

The following response applies to questions a, b, and c, above.

**No Impact.** The project site is located in Dana Point Harbor in an urbanized area surrounded by commercial and residential development as well as existing infrastructure (Dana Point Harbor Drive, the Street of the Golden Lantern, and Pacific Coast Highway). The project site is located entirely in salt water where there is no historic agricultural use. Based on the City's and County's General Plan, no farmland, agricultural zoning, or Williamson Act contracts exist within or adjacent to the project site. Therefore, as stated in the Program FEIR, implementation of the proposed project would not convert Farmland to nonagricultural use. No impact to farmland or agriculture would occur, and further analysis in the SEIR is not required.

### 3.3 POPULATION AND HOUSING

#### Program FEIR Overview

In the course of preparing the Program FEIR certain impacts were found to be less than significant due to the inability of the Revitalization Project to create such impacts or the absence of project characteristics producing such effects. Effects determined not to be significant were not addressed further in the Program FEIR. The Program FEIR determined that there would be no displacement or loss of residential units as a result of the Revitalization Project, and no replacement housing would be necessary. Impacts related to population and housing were therefore determined to be less than significant and were not discussed further in the Program FEIR.

#### Marina Improvement Project Checklist Responses

Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?

**No Impact.** The proposed project is intended to renovate the existing boating facilities throughout the Harbor and does not propose the construction of any new homes or businesses. The proposed project will not impact or affect the location, distribution, density, or growth rate of populations within the immediate vicinity of the project site. In addition, the proposed Marina Improvement Project does not create additional employment that could increase the City's population. Therefore, no impacts related to population growth are anticipated, and further analysis in the SEIR is not required.

**b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** No existing housing will be displaced by the proposed project, and no replacement housing would be necessary. Therefore, no impacts related to loss of housing are anticipated, and further analysis in the SEIR is not required.

**c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**Less Than Significant Impact.** There would be no displacement or loss of residential units as a result of the project, and no replacement housing would be necessary. However, it is possible that people living on their boats (“live-aboards”) may claim them as their primary home. Because the reconstruction of the marina anticipates a loss of boat slips, the proposed project may result in temporary displacement or relocation of these individuals. However, because the number of live-aboards is relatively small (56 persons, or less than 2.5 percent of slips), and because any displacement of people is expected to be temporary, impacts are considered less than significant, and further analysis in the SEIR is not required.

### 3.4 GEOLOGY AND SOILS

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that soil conditions such as collapsible and expansive soils, soil erosion, and subsidence would have some effect on implementation of the Revitalization Project. Because the Revitalization Project is located in a region that experiences seismic activity, the Program FEIR concluded that development would expose people and structures to effects associated with seismic activity. However, analysis concluded that with compliance with the County Zoning Code, the Uniform Building Code, Standard Conditions of Approval, Project Design Features, and Mitigation Measures, the impacts would be less than significant. Measures identified in the Program FEIR and applicable to the Marina Improvement Project are listed below.

#### Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)

- MM 4.3-4** Site safety requirements shall address specifications of the Occupational Safety and Health Administration (OSHA). Applicable specifications prepared by OSHA related to earth resources consist of Section 29 CFR Part 1926, which are focused on worker safety in excavations.
- MM 4.3-6** If cranes and pile-driving equipment are required, adequate setbacks shall be observed from bulkhead areas to prevent failures due to increased lateral loads.
- MM 4.3-9** Conformance with the latest Uniform Building Code and County Ordinances can be expected to satisfactorily mitigate the effect of seismic groundshaking. Conformance with applicable codes and ordinances shall occur in conjunction with the issuance of building permits in order to insure that over excavation of soft, broken rock and clayey soils within sheared zones will be required where development is planned.

**MM 4.3-14** Engineering design for all structures shall be based on the probability that the Project area will be subjected to strong ground motion during the lifetime of development. Construction plans shall be subject to the County review and shall include applicable standards, which address seismic design parameters.

**MM 4.3-15** Mitigation of earthquake ground shaking shall be incorporated into design and construction in accordance with Uniform Building Code requirements and site-specific design.

**MM 4.3-19** Further investigation and detailed characterization of the existing fill conditions is required to identify the extent of the potential for liquefaction. Mitigation Measures shall include:

- Recommended new building setback distances from the quay wall ranging from 2 to 3 times the height of the bulkhead wall for localized liquefaction and lateral spreading failure to several times the height of the revetment slope and bulkhead system for global seismic instability, to be considered during the master planning and conceptual design phase of the Project;
- Supporting proposed structures on deep foundations extending into bedrock;
- Stiffened floor slab designs;
- Total or partial removal of the potentially liquefiable soils and replacement with compacted fill;
- Soil remediation and site improvement.

**MM 4.3-20** Further evaluation of lateral spreading potential is required. If it is found that the lateral spreading potential is high, then Mitigation Measures shall include:

- New building setback distances from the quay wall ranging from 2 to 3 times the height of the bulkhead wall;
- Repair or replacement of existing seawall for site containment;
- Total/partial removal of the potentially liquefiable soils and replacement with compacted fill; and/or
- Soil remediation and site improvement.

**Level of Significance after Mitigation.** No significant impacts related to Geology, Soils, or Seismicity were identified following implementation of Mitigation Measures and/or compliance with applicable standards and policies of the County Grading Code and Manual.

#### Marina Improvement Project Checklist Responses

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidences of known fault? Refer to Division of Mines and Geological Special Publication 42.
  - ii) Strong seismic ground shaking?
  - iii) Seismic-related ground failure, including liquefaction?
  - iv) Landslides?

The following response applies to question a(i), (ii), (iii), and (iv), above.

**Potentially Significant Impact.** Dana Point Harbor, like the rest of the Southern California, is located in a seismically active area that has historically experienced earthquake activity. However, as stated in the Program FEIR, no known or active faults are mapped through the project area, and the project area is not located within a currently designated Alquist-Priolo Earthquake Zone. The nearest significant active fault to the project site is the Newport-Inglewood Fault, located approximately four miles to the southwest. One of the project's primary objectives is to renovate the deteriorating docks and slips, taking into account current codes and seismic requirements. All structures will comply with the seismic requirements of the Uniform Building Code and Standard Conditions of Approval, which would limit hazards from seismic ground shaking to less than significant levels. Due to the nature of the project being floating docks and slips, impacts to the dock facilities due to earthquakes are expected to be minimal. However, there is a potential for seismic-related liquefaction in the Island portions of the Harbor, within the Marina Improvement Project area. The potential for liquefaction in the Cove side areas is considered small due to the presence of underlying bedrock.

Soil liquefaction along the Island areas of the Harbor could potentially cause structural failure of the soil and migration of earthen materials along the land/water interface into the harbor, possibly affecting dock gangways, railings, and landside Harbor improvements. Therefore, due to the potential for liquefaction impacts, geological conditions will be further evaluated in the SEIR. A Geotechnical Investigation will be prepared to address geology and soil conditions, and the results of the study will be incorporated into the SEIR.

- b) Result in substantial soil erosion or the loss of topsoil?

**Less Than Significant Impact.** Construction of the proposed project would not result in grading of landside soils. However, limited soil disturbance could occur for the following purposes:

- Lighting improvements
- Utility connections
- Gangway/landside connections
- Possible seawall renovations where needed

The nature of the project is a redesign/reconstruction of the Marinas. No soil erosion or loss of topsoil is anticipated. Therefore, the impacts are considered less than significant, and further analysis in the SEIR is not required.

- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse?**
- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

**The following response applies to questions c and d, above.**

**Potentially Significant Impact.** The renovation and replacement of the marina dock facilities will largely be undertaken in their present location, where they have been in operation for more than 35 years. As stated above, no significant landside grading will occur, and impacts related to unstable soil conditions are not anticipated. Although there are no geologic units or soils that would become unstable as a result of the proposed project, additional information is required regarding lateral spreading and liquefaction impacts related to the installation of new pilings in the Harbor. A Geotechnical Investigation will be prepared to address geology and soil conditions related to the marina seawalls and the replacement of guide piles (or alternate anchoring methods). The results of the study will be incorporated into the SEIR.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** The proposed project includes the replacement and relocation of pumpout facilities on the docks. No septic tanks or alternate wastewater systems will be located in ground. Therefore, no impacts related to soil capabilities to support such systems will occur with project implementation. No further analysis is required in the SEIR.

### 3.5 HYDROLOGY AND WATER QUALITY

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that grading, excavation, and construction activities associated with the proposed Revitalization Project could impact water quality due to erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. It was determined that the operation of the Revitalization Project could alter drainage patterns and increase erosion and runoff amounts, thereby causing long-term impacts on the quality of stormwater and urban runoff. Additionally, the Program FEIR stated that the project site could be subject to flood hazards from San Juan Creek. Cumulatively, the Revitalization Project, along with other future development, could increase hydrology and drainage impacts in the area. However, the Program FEIR analysis concluded that drainage and water quality impacts would be reduced to a less than significant level with incorporation of the Best Management Practices (BMPs), Project Design Features, Standard Conditions of Approval, and Mitigation Measures. It should be noted that additional information related to water quality and hydrology may develop during the analysis

conducted in the course of preparing the SEIR for the Marina Improvement Project. Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

**Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

- SCA 4.4-4** The County of Orange Dana Point Harbor Department shall obtain coverage under the NPDES Statewide Stormwater Permit for General Construction Activities from the State Water Resources Control Board. Evidence of receipt of permit approval must be presented to the Manager, RDMD/Subdivision and Grading prior to the issuance of a Grading Permit.
- SCA 4.4-5** Prior to the issuance of any grading or building permits, the County of Orange Dana Point Harbor Department shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Manager, RDMD/Building Permit Services. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the Project site and be available for County review on request.
- SCA 4.4-8** Prior to the issuance of any grading or building permit (whichever comes first), and Coastal Development Permit, the County of Orange Dana Point Harbor Department shall submit for review and approval by the Manager RDMD/Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. The WQMP shall follow the model WQMP as outlined in Exhibit 7.11 of the 2003 *Drainage Area Master Plan*, prepared by the County Flood Control District, July 1, 2003. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:
- Discuss regional water quality and/or watershed programs (if available for the Project);
  - Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas;
  - Include the applicable Routine Source Control BMPs as defined in the DAMP;
  - Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary.
- SCA 4.4-9** Prior to the issuance of any grading or building permit (whichever comes first) and Coastal Development Permit, the County of Orange Dana Point Harbor Department

shall include in the WQMP the following additional Priority Project information in a manner meeting the approval of the Manager, Inspection Services Division:

- Include post-construction Structural Treatment Control BMP(s) as defined in the DAMP;
- Include a conceptual Operation and Maintenance (O&M) Plan that (1) describes the long-term operation and maintenance requirements for the post-construction Treatment Control BMP(s); (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced Treatment Control BMP(s); and (3) describes the proposed mechanism for funding the long-term operation and maintenance of the referenced Treatment Control BMP(s).

**SCA 4.4-10** Prior to the issuance of a certificate of use and occupancy, the County of Orange Dana Point Harbor Department shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Manager, RDMD/Inspection Services Division, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the Project's WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;
- Demonstrate that the County of Orange Dana Point Harbor Department has complied with all non-structural BMPs described in the Project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP; and
- Demonstrate that copies of the Project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants

**MM 4.4-1** During the design phase, the Project shall assess the potential impacts of inundation from a tsunami on the existing and proposed building structures along the seawall, and submit the assessment to the County RDMD, for verification.

**MM 4.4-2** During the design phase, the Project shall assess the potential of wave run-up from a seiche or tsunami near the Harbor during a major seismic event, and submit the assessment to the County RDMD, for verification.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Hydrology and Water Quality were identified in the Program FEIR.

## Marina Improvement Project Checklist Responses

### Would the project:

#### a) Violate any water quality standards or waste discharge requirements?

**Potentially Significant Impact.** The proposed project is located within the Dana Point Coastal Streams Watershed. It is subject to the requirements of the State General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit issued by the State Water Resources Control Board (SWRCB), San Diego Region 9, as well as the Orange County Municipal Stormwater Permit, and a Coastal Development Permit (CDP) from the CCC. In addition, a discharge permit from the United States Army Corps of Engineers (Corps) may be required for potential discharges into navigable waters. Permits would also be required for any dredging activities necessary to accommodate the new docks for the Youth and Group Facility.

The Marina Improvement Project will not change the land use of the site and is not expected to increase capacity or add any significant amount of impervious surface to the project area. Long-term operations will not be significantly different than the current uses and are not expected to increase or introduce additional water quality pollutants. However, construction activities associated with the removal of docks and pilings and installation of the new facilities have the potential to produce pollutants of concern. Demolition of dock facilities and installation of the new guide piles (or alternate anchoring methods), docks, and gangways may result in disturbance of Harbor sediments and generation of debris. Due to the phasing and length of construction, temporary docks will be placed in the Harbor to house displaced boats. The installation of these temporary docks could also disturb sediments and introduce water pollutants in previously undisturbed areas of the Harbor. In addition, construction equipment being stored at various construction staging areas has the potential to affect the water quality of runoff.

Implementation of the proposed project would require the County to obtain an NPDES permit, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement BMPs detailed in the SWPPP during construction activities. Implementation of these BMPs would help reduce the temporary impacts of construction activities. In addition, in accordance with the Orange County municipal NPDES permit, the County must prepare a Water Quality Management Plan (WQMP) that includes site design and source control BMPs. The proposed project will also be implemented in compliance with objectives contained in the California Ocean Plan, as adopted by the State Water Resources Control Board (2001). Impacts to Hydrology and Water Quality resources will be analyzed further in the SEIR.

#### b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

**No Impact.** The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge because the project does not add impervious surfaces nor create new demand for water resources. Therefore, no impacts to groundwater supply are anticipated. Further analysis is not required in the SEIR.



- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site?**
- d) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?**

**The following response applies to questions: c and d, above.**

**Less Than Significant Impact.** There are no streams or rivers located on site. The drainage pattern within the Marina Improvement Project area would not be substantially altered, and operation of the project would not substantially increase erosion, siltation, or storm water flows. Stormwater runoff on the docks will continue to discharge into the Harbor, similar to existing conditions. Because the site drainage and surface runoff will not be significantly altered, no further analysis is required in the SEIR.

It should be noted that the proposed project does not include improvements to the storm drain system since no facilities will be impacted by the Marina Improvement Project. Runoff on the landside areas adjacent to the dock facilities is collected by a series of grate inlets, catch basins, and roof drainage pipes, all of which discharge directly into the Harbor through a series of local outfall pipes, County-owned storm drains, and/or direct sheet flow from sloped sidewalks and hardscape areas. The drainage on the landside portions of the Harbor will not be affected by the Marina Improvements Project and therefore will not be addressed in the SEIR.

- e) **Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**
- f) **Have a significant adverse impact on groundwater quality or otherwise substantially degrade water quality?**

**The following response applies to questions e and f, above.**

**Potentially Significant Impact.** The drainage pattern on site would not be substantially altered, and the project would not substantially increase storm water flows because replacement of the existing dock facilities will not increase capacity. No impacts to groundwater quality are anticipated. As stated above, construction of the proposed project must comply with all construction and operational BMPs stipulated in the NPDES construction permit and WQMP required as part of the project. The WQMP will evaluate and implement BMPs to target anticipated pollutants in project runoff to reduce pollution in runoff to the maximum extent practicable. In addition, construction BMPs would be incorporated into the SWPPP required by the State permit. Impacts related to sources of polluted runoff and water quality will be further addressed in the SEIR.

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?
- i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The following response applies to questions g, h and i, above.

**No Impact.** The project site in Dana Point Harbor is within the 100-year floodplain, as indicated in the Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM, No 06059C0504H, February 18, 2004). However, no housing or structures that would impede flood flows are proposed as part of the Marina Improvement Project; therefore, no flood-related impacts are anticipated. In addition, there are no dams located within the project site or adjacent to the project site whose failure would pose potential hazards to people or structures. Therefore, there are no impacts related to this issue, and no further analysis is required in the SEIR.

- j) Inundation by seiche, tsunami, or mudflow?

**Less Than Significant Impact.** The project site is not located in the vicinity of an upstream body of water that could inundate the site during a storm or seismic event; therefore, inundation by seiche is not anticipated. Because the site is not located in a hilly area, it is not considered to be at a high risk for inundation by mudflow. The project site is located in the Harbor adjacent to the Pacific Ocean and could potentially be affected by a storm surge associated with a tsunami. However, as stated above, the proposed project renovations do not include housing or habitable structures that would be affected by a tsunami. Due to the water-oriented nature and purpose of the project, the proposed improvements will be constructed to withstand inundation. Therefore, impacts related to the potential inundation of the facilities are considered less than significant, and no further analysis is required in the SEIR.

### 3.6 TRANSPORTATION/CIRCULATION

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that construction activities associated with the proposed Revitalization Project would generate additional vehicle trips on adjacent roadways and impact existing parking facilities, thus affecting the level of service at intersections and roadways and parking capacities. Operation of the Revitalization Project could generate additional trips on the adjacent roadways, thus affecting the level of service at intersections and roadways identified in the Program FEIR. The Program FEIR further concluded that operation of the Revitalization Project would also generate additional parking demand. However, the Program FEIR analysis determined that traffic and parking impacts would be reduced to a less than significant level with incorporation of the Project Design Features, Standard Conditions of Approval, and Mitigation Measures. Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

**Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

- PDF 4.5-1** The construction phasing plan for the Commercial Core includes early construction of the parking deck and ramp, augmenting parking for Harbor visitors and boaters.
- PDF 4.5-2** A seasonal water taxi service may be incorporated throughout the Harbor to reduce average daily trips (ADTs) during peak Harbor usage periods.
- PDF 4.5-4** Dedicated boater drop-off areas and parking are provided in the Commercial Core.
- SCA 4.5-1** Prior to the approval of any grading permit, the County of Orange Dana Point Harbor Department shall prepare a Parking Management Plan (PMP) that ensures public access will be retained and to reduce construction congestion/conflicts with access.
- MM 4.5-2** The County of Orange Dana Point Harbor Department shall provide a construction sign program to direct Harbor visitors and boaters to available parking.
- MM 4.5-3** The County of Orange Dana Point Harbor Department shall prepare a Construction Management Plan that includes the locations for shuttle drop-off areas, and the locations of boater parking, if existing spaces are impacted by construction. The Construction Management Plan shall also establish access locations for construction equipment, separate from those used by the general public.
- MM 4.5-7** The County of Orange Dana Point Harbor Department shall prepare a Traffic Management Plan (TMP) to include a provision for use of offsite locations for parking for peak Harbor use periods.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Traffic and Circulation impacts were identified in the Program FEIR.

**Marina Improvement Project Checklist Responses**

**Would the project:**

- a) **Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?**
- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

**The following response applies to questions a and b, above.**

**Potentially Significant Impact.** The Harbor Revitalization master planning process integrated circulation and parking improvements to benefit the Commercial Core/general Harbor recreation areas as well as the marina areas. The Program FEIR addressed the integrated plan for both the Commercial Core (landside) and the waterside areas. The previously approved Dana Point Harbor

Revitalization Project includes improvements to the circulation system in the commercial areas of the Harbor and limited changes to the parking and access to marina areas; the construction of a two-level parking deck for commercial, restaurant, and boating-related uses is planned as part of the Commercial Core project. Unlike the Revitalization project, the proposed Marina Improvement Project is limited to the replacement of the Marina docks and slip facilities and does not include any improvements or changes related to the traffic or circulation patterns in the project area. In addition, the proposed Marina Improvement Project does not increase the capacity of the Marinas and would therefore not result in a substantial increase in long-term traffic levels. Therefore, because the project does not increase capacity or include improvements to existing landside parking and circulation patterns, traffic impacts related to long-term operations will not be included in the SEIR.

However, the construction activities would involve use of the construction vehicles and construction equipment that may temporarily affect the existing traffic and parking in the project area. The location of the construction staging areas, although not determined at this time, may impact parking and circulation. In addition, cumulative effects of the project, combined with the landside or Commercial Core Revitalization Project, may significantly impact available parking throughout the Harbor during construction. The Marina Improvement Project's construction-related impacts to traffic and circulation will therefore be evaluated further in the SEIR. However, no analysis will be included in the SEIR regarding post-construction traffic because traffic impacts related to long-term operations of the Harbor were addressed in the Program FEIR.

- c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**
- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

The following response applies to questions c and d, above.

**No Impact.** As stated in the Program FEIR, Dana Point Harbor, including the proposed Marina Improvement Project, is not located in the immediate vicinity of any airport and thus would not result in a permanent change to air traffic patterns. In addition, the replacement of the dock and slip facilities does not include any improvements to circulation or transportation facilities and would not create hazardous conditions related to transportation design features. Transportation and circulation design related to the Harbor Revitalization Project was addressed in the Program FEIR. No further analysis is required in the SEIR.

- e) **Result in inadequate emergency access?**
- f) **Result in inadequate parking capacity?**

The following response applies to questions e and f, above.

**Potentially Significant Impact.** Although the proposed replacement of docks and slip facilities would not result in a permanent change to emergency access or parking capacity, the use of construction vehicles and equipment and the locations of temporary docks or boater service facilities could temporarily impact parking capacity and emergency access during demolition and construction activities. However, the proposed improvements will bring the Marina docks and gangways into ADA

compliance and will improve emergency access to the waterside facilities. Short-term construction and project implementation impacts related to emergency access and parking during construction will be evaluated further in the SEIR. In addition, the SEIR Land Use discussion will include a consistency analysis to Coastal Act access policies.

**g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

**No Impact.** The project is not anticipated to conflict with any policies, plans, or programs supporting alternative transportation. In addition, no alternative transportation facilities such as bus turnouts or bicycle racks will be impacted with implementation of the proposed project. The renovated Marina slips will be constructed in compliance with current standards (including DBW design requirements) and ADA guidelines and will not increase capacity or require additional alternative transportation facilities. Therefore, no further analysis is required in the SEIR. However, construction staging and disruption of normal operations during construction may affect possible future seasonal water taxi service, ADA compliance, and alternative transportation/access services. These issues will be addressed in the SEIR.

### 3.7 AIR QUALITY

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that temporary construction-related dust and vehicle emissions will occur during site preparation and Revitalization Project construction. The Program FEIR concluded that despite implementation of Mitigation Measures (MM) and Project Design Features (PDFs), such as limitations on construction hours and adherence to South Coast Air Quality Management District (SCAQMD) Rules 402 and 403 (which require watering of inactive and perimeter areas, track-out requirements, etc.), impacts, although minimized, will not be at less than significant levels. As illustrated within the Program FEIR analysis, mitigation measures will reduce PM<sub>10</sub> emissions, but NO<sub>x</sub> emissions will not be reduced to less than significant levels. Construction emissions were predicted to exceed SCAQMD thresholds for NO<sub>x</sub>, resulting in a significant and unavoidable impact.

The Program FEIR concluded that the Revitalization Project will be consistent with the Air Quality Management Plan (AQMP). Operation of the Revitalization Project would add an overall increase in the local and regional pollutant load. However, the Program FEIR concluded that the increase in operational air emissions as a result of the Revitalization Project will not exceed SCAQMD thresholds. Although operational impacts are not anticipated to exceed SCAQMD thresholds, Mitigation Measures (MM) and Project Design Features (PDFs) are included in the Revitalization Project to support the reduction of any long-term operational impacts. Therefore, operational impacts were anticipated to be less than significant.

Cumulatively, the Revitalization Project along with other future development could increase air emissions within the surrounding areas, thereby decreasing ambient air quality. However, the Program FEIR analysis concluded that the Revitalization Project will contribute to less than 25 percent of the anticipated emissions from projects proposed within the area, and additional Mitigation Measures are not necessary.

Project Design Features, Standard Conditions of Approval, and Mitigation Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

**Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

- PDF 4.6-3** Reduction of vehicle trips is achieved by implementing the Transportation Management Plan, including:
- Seasonal water taxi service;
  - Visitor boat slips and dingy docks located near restaurants and retail areas; and
  - Phased construction of the Revitalization Plan Improvements will minimize the size of areas subject to disruption from construction activities.
- MM 4.6-1** Prior to the start of construction, the Chief Engineer or Director, DPHD, or his designee, in consultation with the Manager, RDMD/Environmental Planning, shall confirm that the plans and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures, as specified in the South Coast Air Quality Management Districts Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures will reduce short-term fugitive dust impacts on nearby sensitive receptors:
- On-site vehicles speed shall be limited to 15 miles per hour (mph);
  - All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized;
  - If dust is visibly generated that travels beyond the site boundaries, clearing, grading, earth moving, or excavation activities that are generating dust shall cease during periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 episodes; and
  - All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- MM 4.6-2** Prior to approval of the Project plans and specifications, the Chief Engineer or Director, DPHD, or his designee, in consultation with the Manager, RDMD/Environmental Planning, shall confirm that the plans and specifications stipulate that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the Resident Engineer. The County Inspector will be responsible for ensuring that contractors comply with this measure during construction.
- MM 4.6-6** In order to reduce operational energy usage and reduce energy production air emissions, the Project is required to comply with Title 24 of the California Code of

Regulations established by the California Energy Commission regarding energy conservations standards.

**Level of Significance after Mitigation.** Despite implementation of Project Design Features and Mitigation Measures, the Revitalization Project was found to result in significant and unavoidable impacts regarding construction emissions (nitrogen oxide [NO<sub>x</sub>] emissions).

### Marina Improvement Project Checklist Responses

Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The following response applies to questions a and b, above.

**Potentially Significant Impact.** The proposed project site is located within the South Coast Air Basin (SCAB) and is within the jurisdiction of the SCAQMD. Basinwide air pollution levels are administered by the SCAQMD through the AQMP. The AQMP provides a program for obtaining attainment status for key monitored air pollution standards, based on existing and future air pollution emissions resulting from employment and residential growth projections. The proposed marina project will not result in increased capacity or an increase in traffic. Therefore, operation of the proposed project will not create additional emissions that would result in impacts associated with implementation of the AQMP. However, the construction phase of the proposed project will involve the use of heavy duty equipment and vehicles and would result in a temporary increase in fugitive dust emissions and diesel exhaust. Therefore, the proposed project's construction emission impacts related to the AQMP and applicable air quality standards will be evaluated further in the SEIR.

- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

**Potentially Significant Impact.** Air pollution levels of criteria air pollutants are monitored by SCAQMD at various locations throughout the Basin. The entire Basin is a nonattainment area for the State one-hour O<sub>3</sub> (smog) standard, and for the federal and State PM<sub>10</sub> and federal PM<sub>2.5</sub> standards. In addition, the Basin is designated as nonattainment for carbon monoxide (CO) under the federal standard. Although the proposed project will not result in increased capacity or an increase in traffic and will not create additional long-term emissions, emissions from construction activities could exceed criteria air pollutant standards. Therefore, the cumulative impacts of criteria pollutants emissions generated by the proposed project during construction will be addressed in the SEIR.

- d) Expose sensitive receptors to substantial pollutant concentrations?
- e) Create objectionable odors affecting a substantial number of people?

The following response applies to questions d and e, above.

**Potentially Significant Impact.** Grading and construction activities on site will potentially expose on-site workers and sensitive receptors such as nearby residents to temporary increased levels of particulates and emissions from construction equipment. In addition, during construction, the various diesel-powered vehicles and equipment in use on site would create odors. Therefore, the SEIR will evaluate the significance of emissions and particulates created during demolition and construction, as well as address impacts associated with odors generated during construction of the project.

### 3.8 NOISE

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that grading and construction within the Revitalization Project area would result in temporary noise and/or vibration impacts on nearby noise-sensitive receptors. The Program FEIR concluded that although construction noise and vibration impacts would comply with Standard Conditions of Approval, and Mitigation Measures, impacts would be significant and unavoidable due to the duration of construction activities.

Operation of the Revitalization Project would increase vehicular activity along roadways within the Revitalization Project vicinity. The Program FEIR concluded that long-term mobile noise impacts would be less than significant for roadway segments under buildout traffic scenarios. The Program FEIR further concluded that operation of the Revitalization Project would generate on-site noise associated with commercial activities, which include loading and unloading activities, mechanical equipment operation, and activity in parking lots. The Program FEIR concluded that stationary source impacts would be reduced to less than significant levels with adherence to the County Zoning Code requirements relating to noise level standards.

Cumulatively, the Revitalization Project, along with other future development, could increase the ambient noise levels in the site vicinity. The Program FEIR concluded that these noise impacts would be significant and unavoidable.

Project Design Features, Standard Conditions of Approval, and Mitigation Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

- SCA 4.9-1      Prior to approval of the Project plans and specifications by the DPHD, Chief Engineer, or his designee, in consultation with the Manager, RDMD/Environmental Planning, shall confirm that the plans and specifications stipulate that construction activities shall be limited to 7:00 a.m. to 8:00 p.m. on weekdays, including Saturdays, and no construction on Sundays and holidays. The County inspector will be responsible for ensuring that contractors comply with this measure during construction.



- SCA 4.9-2** Prior to the issuance of any building or grading permits, the County of Orange Dana Point Harbor Department shall prepare or obtain an acoustical analysis report and appropriate plans which demonstrate that the noise levels generated by this Project during its operation shall be controlled in compliance with the Orange County Codified Ordinances, Division 6 (Noise Control). The report shall be prepared under the supervision of a County-certified Acoustical Consultant and shall describe the noise generation potential of the Project during its operation and the noise Mitigation Measures, if needed, which shall be included in the plans and specifications of the Project to assure compliance with Orange County Codified Ordinances, Division 6 (Noise Control).
- SCA 4.9-3** Prior to approval of the Project plans and specifications by the DPHD, Chief Engineer, or his designee, in consultation with the Manager, RDMD/Environmental Planning and County of Orange Dana Point Harbor Department, shall confirm that the plans and specifications stipulate that stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors during construction activities.
- SCA 4.9-4** The County of Orange Dana Point Harbor Department shall submit a geotechnical soils report containing a drainage plan for review and approval by the Manager, RDMD/Subdivisions and Grading. The following notes shall be included:
- a. All construction vehicles and equipment, fixed or mobile operated within 1,000 ft of a dwelling, shall be equipped with properly operating and maintained mufflers.
  - b. All operations shall comply with the County's Noise Ordinance.
  - c. Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings.
- MM 4.9-2** For projects within 1,000 ft of sensitive receptors, impact equipment (e.g., jack hammers, pile drivers, and rock drills) used for construction shall be hydraulically or electrical powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used.
- MM 4.9-3** For projects within 1,000 ft sensitive receptors, sonic or vibratory pile drivers shall be used instead of impact pile drivers (sonic pile drivers are only effective in some soils) whenever possible. If sonic or vibratory pile drivers are not feasible, acoustical enclosures shall be provided as necessary to ensure that pile-driving noise does not exceed speech interference criterion at the closest sensitive receptor. Engine and pneumatic exhaust controls on pile drivers shall be required as necessary to ensure that exhaust noise from pile driver engines is minimized to the extent feasible. Where feasible, pile holes shall be pre-drilled to reduce potential noise and vibration impacts.

**Level of Significance after Mitigation.** Despite compliance with Standard Conditions of Approval, and Mitigation Measures, the proposed project would result in significant and unavoidable impacts regarding exposure to Construction Noise and Cumulative Noise.

### **Marina Improvement Project Checklist Responses**

**Would the project result in:**

- a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Potentially Significant Impact.** Short-term noise impacts would be associated with demolition and replacement of the existing slips and docks within the Marinas. Construction-related noise levels would be higher than existing ambient noise levels in the project area but would cease upon project completion. Long-term operational noise levels are not anticipated to increase with project implementation because the project will not result in increased capacity or additional traffic. Potential construction-related noise impacts on live-aboard boaters and others will therefore be further evaluated in the SEIR.

- b) **Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Potentially Significant Impact.** Construction of the proposed project has the potential to create groundborne vibrations during piling activities associated with the replacement of guidepiles. Impacts related to groundborne noise and vibration will therefore be further evaluated in the SEIR.

- c) **A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant Impact.** Replacement of the existing dock and slip facilities will not result in increased capacity or additional operational traffic that could increase the ambient noise level in the project vicinity. Long-term permanent noise levels are therefore not anticipated to increase over existing noise levels. No additional analysis is required in the SEIR.

- d) **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Potentially Significant Impact.** As discussed in response to question 3.8.a, temporary or periodic increases in ambient noise levels would occur during construction of the proposed project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area but would cease upon the project completion. Potential increases in noise levels during construction activities will therefore be further evaluated in the SEIR for impacts to live-aboard boaters and others.

- e) **For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The following response applies to questions e and f, above.

**No Impact.** According to the Dana Point Harbor Revitalization Project Program FEIR, the proposed project is not located within an airport land use plan, in the vicinity of a private airstrip, or within two miles of a public airport. Therefore, there are no impacts related to this issue, and this issue will not be discussed further in the SEIR.

### 3.9 BIOLOGICAL RESOURCES

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that the Revitalization Project would impact species identified as special-status and marine biological resources. Program FEIR analysis concluded that these impacts would be less than significant with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures. The Program FEIR further concluded that no riparian or wetland habitat exists within the Harbor or off-site areas, and therefore, the Revitalization Project would not result in impacts to riparian or wetland habitat. Cumulatively, the Revitalization Project along with other future development would not result in significant cumulative biological impacts. Project Design Features, Standard Conditions of Approval, and Mitigation Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

#### Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)

- MM 4.7-2** The following measures shall be utilized to protect the nesting habitat of the black-crowned night herons and snowy egrets:
- If construction activities are performed during the breeding season (February 1 through August 15), a preconstruction survey within 500 ft of the site for nests shall be performed by a qualified biologist to document the presence/absence of all these species;
  - If nesting black-crowned night herons or snowy egrets are identified, Project construction activities within 500 ft of the nest site must cease for the remainder of the breeding season unless a qualified acoustician can demonstrate that with or without noise attenuation measures, construction noise levels would not exceed 60 dBA within 500 ft of the occupied nests. The qualified biologist shall monitor active nest sites on a weekly basis. If the biologist notes that all young have fledged from the nest, then the noise restriction near the nest is no longer required.
- MM 4.7-3** The following measures shall be utilized to protect nesting habitat of the raptors (red tailed hawk, Cooper's hawk, osprey, etc):
- If work is scheduled to be performed during the breeding season of any raptor (February 1 through August 15), a preconstruction survey within 500 ft of the site

for raptor nests shall be performed by a qualified biologist to document the presence/absence of all nesting raptors; and

- If active raptor nests are found, a buffer of 500 ft in diameter should be established around the nest and no construction activity shall occur within that buffer until the young have fledged.

**MM 4.7-4** In order to minimize indirect impacts on biological resources that may be related to noise and construction activity, the County of Orange Dana Point Harbor Department shall implement the following Best Management Practices (BMPs) prior to or during construction activities.

- Limit construction and all Project activities to a well-defined area; and
- Construction limits shall be fenced or flagged adjacent to preserved trees and/or sensitive habitats to avoid direct impacts.

**MM 4.7-5** Future waterside improvements to the east and west breakwaters shall be reconstructed within the seaward footprint of the existing structures except as necessary to provide for public safety or public access. Construction activities taking place below the mean higher high water (MHHW) mark shall prepare a focused marine biological survey to determine if sensitive species are present.

**MM 4.7-6** The County of Orange Dana Point Harbor Department shall require that standard BMPs be utilized in order to ensure impacts to water quality and the marine environment are minimized. Standard BMPs include:

- Erosion to be controlled by landscaping (leave existing vegetation in place where possible), paving and drainage structures;
- Berms (sand bags) around all construction sites to catch run-off;
- Roads of gravel to minimize dirt being tracked into and out of the Project site;
- During wet weather, Harbor basin inlets shall be protected by placing a wire mesh and gravel filter to intercept debris and soil runoff; and
- Appropriate housekeeping activities to minimize the potential for pollutants from material storage or construction activities.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Biological Resources were identified in the Program FEIR.

## Marina Improvement Project Checklist Responses

### Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The following response applies to questions a through d, above.

**Potentially Significant Impact.** Several species of birds, sea turtles, fish, plants, and other aquatic organisms that inhabit or occur in Dana Point Harbor are listed by the federal and State governments as endangered or threatened. All marine mammals are protected under the Marine Mammal Protection Act, bird species by the Migratory Bird Conservation Act, and endangered plants and animals by the federal and California Endangered Species Acts.

The proposed project does not increase the capacity of the marina or the operations associated with the dock facilities. Therefore, the long-term operation of the proposed project would not result in impacts to the marine wildlife and habitat that are significantly different or greater than existing conditions. However, construction activities could result in short-term habitat loss and potential impacts to a variety of marine species.

The proposed demolition and replacement of the docks, slips, and pilings, and renovations to quay walls and bulkheads in the marina would result in the direct loss of the intertidal community and other aquatic organisms (plankton, benthic organisms) that inhabit the underwater parts of the dock facilities. Construction activities such as dredging, if required, may also result in the increased turbidity of marine waters and the introduction of pollutants into the waters (residues of paints, foam from pontoons, debris, and airborne particulates). In addition, marine mammals could potentially be affected by underwater noise/vibration created during construction, especially pile driving activities. These impacts would be temporary, and upon completion of construction activities the communities of aquatic organisms are expected to inhabit the marina again.

Impacts related to marine biological resources will be analyzed further in the SEIR. The SEIR will also evaluate the proposed project's impact on migratory species of birds that use the Marinas during migration and for nesting purposes.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

The following response applies to questions e and f, above.

**Less Than Significant Impact.** As stated in the Dana Point Harbor Revitalization Project Program FEIR, the project site is not located within a designated open space/conservation area. The proposed project does not interfere with local policies, ordinances, or adopted Habitat Conservation Plans (HCPs) protecting biological resources on site. However, because the project is planned to be undertaken in the Coastal Zone, an analysis of project consistency with the Coastal Act's provisions regarding protection of coastal zone habitats will be provided in the SEIR.

### 3.10 AESTHETICS

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that grading and construction activities associated with the Revitalization Project would temporarily affect the existing visual character and quality of the project site and its surroundings. However, analysis concluded that construction impacts are considered less than significant with implementation of the recommended mitigation measures. The Program FEIR concluded that the long-term operation of the Revitalization Project would affect views of the Harbor from surrounding roadways, parks, and State beaches; may create a new source of light and glare, which will adversely affect day and/or nighttime views in the area; and may obstruct scenic resources along State or local scenic highways. The Program FEIR concluded that impacts to scenic resources along State or local scenic highways and light and glare impacts were less than significant with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures. However, the impacts to views of the Harbor from surrounding roadways, parks, and State Beaches were found to be significant and unavoidable even with implementation of Project Design Features and Standard Conditions of Approval.

Cumulatively, the Revitalization Project, along with other future development, may result in alterations to the aesthetic character and quality of the Project area. The Program FEIR concluded that cumulative aesthetic impacts would be less than significant.

Project Design Features, Standard Conditions of Approval, and Mitigation Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

#### Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)

PDF 4.2-4 All fences and walls within the Harbor area will be designed to have a minimum impact on coastal and scenic views from public areas.

- PDF 4.2-7** Ground-level mechanical equipment, storage tanks, and other similar facilities shall be screened from view with dense landscaping and/or walls of materials and finishes compatible with the adjacent areas. In addition, service, storage, maintenance, utilities, loading, and refuse collection areas would be located generally out of view of public right-of-ways and uses adjacent to the development area.
- PDF 4.2-9** The design and layout of the future developments shall be consistent with the approved Dana Point Harbor Revitalization Plan and preserve views of the bluff area.
- PDF 4.2-19** All exterior lighting will be designed and located to avoid intrusive effects on the adjacent uses atop the bluffs and Doheny State Beach. New light fixtures will be designed to direct light on-site and away from other areas.
- MM 4.2-4** Prior to the issuance of a building permit, an Exterior Lighting Plan (including outdoor recreation areas) for all proposed improvements shall be prepared. The lighting plan shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The Lighting Plan shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property. The Lighting Plan shall be subject to review and approval by the County of Orange Dana Point Harbor Department.

**Level of Significance after Mitigation.** The Program FEIR concluded that despite compliance with Standard Conditions of Approval, and Mitigation Measures, the Revitalization Project would result in significant and unavoidable impacts to views of the Harbor from surrounding roadways, parks, and State beaches.

### Marina Improvement Project Checklist Responses

Would the project:

- a) Have a substantial adverse effect on a scenic vista?
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?
- c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The following response applies to questions a through c, above:

**Potentially Significant Impact.** The project site is located within the City of Dana Point, which contains several vantage points for scenic views of the Harbor and ocean. These vantage points from the coastal terrace and from other high points along the coastline are identified as Significant Public View Resources in the City's General Plan Conservation Element/Open Space Element. In addition, Dana Point Harbor Drive, located adjacent to the Harbor facilities, is designated as a Scenic Highway in the City's General Plan.

The proposed project involves the replacement of the slips, gangways, and docks in the Marinas in generally the same location as existing conditions. The viewsheds within the Harbor area will remain the same because the project proposes to replace docks and slips with similar facilities. In addition, no additional capacity is planned and the number of slips is expected to decrease, possibly resulting in a visibly less dense facility than currently exists. Although the proposed project is anticipated to improve the visual quality and character of the site by renovating the deteriorating marina with new facilities, the SEIR will address potential impacts to the visual character of the site and surroundings.

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Potentially Significant Impact.** The existing uses within the Harbor area produce light and glare typical of a small-craft Harbor, with relatively limited high-intensity lighting. The proposed project would not substantially increase the amount of light and glare on site and would not increase the intensity of light to sensitive viewers in the surrounding area. However, because the proposed dock improvements include new lighting, the SEIR will address potential impacts associated with light spill on adjacent areas and lighting-related disturbances to wildlife.

### **3.11 CULTURAL/SCIENTIFIC RESOURCES**

#### **Program FEIR Overview**

**Impacts.** The Program FEIR concluded that implementation of the Revitalization Project would potentially impact archaeological, and/or historical resources located within the project area. The Program FEIR further concluded that the Revitalization Project may potentially impact paleontological resources that may exist on site but have not been documented and may potentially disturb unknown locations of human remains. However, the Program FEIR analysis concluded that with the incorporation of recommended Standard Conditions of Approval, impacts will be reduced to less than significant levels.

Cumulatively, the Revitalization Project along with other future development may potentially affect cultural resources in the project area. The Program FEIR concluded that cumulative cultural resources impacts would be evaluated and mitigated on a project-by-project basis and would result in a less than significant impact.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Cultural/Scientific Resources were identified in the Program FEIR.

#### **Marina Improvement Project Checklist Responses**

**Would the project:**

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?**



- b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

**The following response applies to questions a and b, above.**

**No Impact.** The Dana Point Harbor Revitalization Project Program FEIR indicated that no archaeological and/or historical resources were expected to occur within the Harbor project area. There are no historic buildings or resources located on site that would be impacted by the proposed project. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource. In addition, the presence of prehistoric cultural material is unlikely because the waterside improvements involve the marina facilities in the Harbor waters, and no landside excavation is required to replace the dock facilities. The waterside improvements are in a location that has historically been covered by water, and no cultural resources are likely to be discovered in the Harbor waters. In addition, the area was dredged to create the original harbor and has subsequently been dredged for maintenance purposes since its inception. Impacts to historical and archaeological resources are not anticipated, and no further analysis is required in the SEIR.

- c) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**No Impact.** The Dana Point Harbor Revitalization Project Program FEIR indicated that paleontologically sensitive soils do exist within the Harbor project area. However, the Marina Improvement Project would not require earthmoving or earth-disturbing activities on land and are therefore not anticipated to result in significant impacts to fossil remains. In addition, the project site does not contain any unique geologic features. Impacts to paleontological resources or unique geological features are therefore not anticipated, and no further analysis is required in the SEIR.

- d) **Disturb any human remains, including those interred outside of formal cemeteries?**

**No Impact.** The Dana Point Harbor Revitalization Project Program FEIR indicated that no Native American or other human remains were identified within the Harbor project area. In addition, it is unlikely that the proposed Marina Improvement Project would impact human remains because the project would not require earthmoving or earth-disturbing activities on land. Therefore, impacts related to the disturbance of human remains are not anticipated, and no further analysis is required in the SEIR.

### 3.12 RECREATION

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that the Revitalization Project will improve the recreational facilities within the project area, thereby reducing impacts on surrounding recreational facilities. However, the Program FEIR found that implementation of the Revitalization Project may increase the use of existing neighborhood and regional parks and other recreational facilities, thereby creating the potential for the physical deterioration of each facility. The Program FEIR determined the Revitalization Project to be consistent with applicable plans and policies within the County of Orange Master Plan of Regional Recreation Facilities (Master Plan). The Program FEIR analysis concluded

that impacts to recreational resources would be less than significant with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures.

Cumulatively, the Revitalization Project, along with other future development, may potentially increase the use of existing recreational areas and facilities, thereby creating the potential for physical deterioration. Additionally, cumulative development may include recreational facilities (e.g., marina) that could have physical impacts on the environment. The Program FEIR concluded that cumulative recreation impacts would be less than significant with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures.

Project Design Features, Standard Conditions of Approval, and Mitigation Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

#### **Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

**PDF 4.12-3** Various amenities will be provided to the marina areas, including improved boater drop-off areas, dedicated boater parking, upgraded boater service buildings and restrooms, and convenient seasonal water taxi drop-off and pick-up areas throughout the Harbor.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Recreation were identified in the Program FEIR.

#### **Marina Improvement Project Checklist Responses**

**Would the project:**

- a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**
- b) **Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

**The following response applies to questions a and b, above.**

**Potentially Significant Impact.** The project site is a public recreational marina facility. The proposed project is the renovation and replacement of the docks, slips, and gangways that have deteriorated since they were originally constructed. The improvements to the existing marina are for the direct benefit of the public and would create ADA-compliant docks and gangways, add to the overall safety of the facility to better serve boaters, and would further the LCP policies to facilitate public use within the coastal zone. However, construction of the proposed project would temporarily obstruct access to the existing marina, which is used for recreational purposes. Therefore, impacts related to the phasing of the project and the potential impacts to access to recreational facilities will be analyzed further in the SEIR.

### 3.13 MINERAL RESOURCES

#### Program FEIR Overview

**Impacts.** In the course of preparing the Program FEIR, certain impacts were found to be less than significant due to the inability of the Revitalization Project to create such impacts or the absence of project characteristics producing such effects. Effects determined not to be significant were not addressed further in the Program FEIR. The Program FEIR determined that there were no mineral resources within or adjacent to the project site. Impacts related to mineral resources were therefore determined to be less than significant and were not discussed further in the Program FEIR.

#### Marina Improvement Project Checklist Responses

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

This response applies to questions a and b, above.

**No Impact.** As stated in the Dana Point Harbor Revitalization Project Program FEIR, there are no known mineral resources within the Dana Point Harbor. The project does not involve the extraction of minerals and would not impact any known mineral resource recovery sites. Therefore, no impacts are anticipated, and no further analysis is required in the SEIR.

### 3.14 HAZARDS AND HAZARDOUS MATERIALS

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that the Revitalization Project implementation would have the potential to create a significant hazard to the public or the environment related to hazardous materials and would potentially create odors or foster disease vectors associated with the implementation of BMPs. Additionally, the Program FEIR stated that the Revitalization Project has the potential to create a significant hazard to the public or the environment through the release of asbestos-containing materials (ACMs) into the environment, primarily during the construction of the project, and would have the potential to create a significant hazard to the public or the environment through the release of lead-based paint (LBP) into the environment. The Program FEIR further found that the Revitalization Project could physically interfere with an adopted emergency response plan or emergency evacuation plan. However, the Program FEIR analysis concluded that with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures, no significant impacts are anticipated.

Cumulatively, the Revitalization Project along with other future development could increase exposure of the public to hazardous substances. However, the Program FEIR determined that compliance with federal, State, and local requirements on a project-by-project basis will reduce cumulative impacts to a less than significant level.

Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

**Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

- PDF 4.8-1** If asbestos-containing materials (ACMs) are located, abatement of asbestos shall be completed prior to any demolition activities that will disturb ACMs or create an airborne asbestos hazard.
- SCA 4.8-2** Prior to issuance of certificates of use and occupancy, the County of Orange Dana Point Harbor Department shall provide plans or identify measures to comply with standard County procedures for implementing the Uniform Fire Code in the use of any combustible and flammable liquids, aboveground or underground storage of such materials, welding and potential spark production, and building occupancy rating in a manner meeting the approval of the Fire Chief. Further, a copy of the approved "UFC Implementation Plan" shall be furnished to the Manager, RDMD/Building Inspection, prior to the issuance of any certificates of use and occupancy.
- MM 4.8-4** Any transformers to be relocated during site construction/demolition should be conducted under the purview of the local utility purveyor to identify property handling procedures regarding potential PCBs.
- MM 4.8-9** If unknown wastes or suspect materials are discovered during construction that the contractor believes may be or contain hazardous waste or materials, the contractor shall:
- Immediately stop work in the vicinity of the suspected contaminant, and remove workers and the public from the area;
  - Notify the Project Engineer of the implementing agency;
  - Secure the area as directed by the Project Engineer; and
  - Notify the implementing agency's hazardous waste/materials coordinator.
- MM 4.8-10** The County of Orange Dana Point Harbor Department or its designee shall store, manifest, transport, and dispose of all on-site generated waste that meets hazardous waste criteria in accordance with California Code of Regulations Title 22 and in a manner to the satisfaction of the Manager, HCA/Hazardous Materials Program. The County shall keep storage, transportation, and disposal records on site and open for inspection to any government agency upon request.

- MM 4.8-12** The National Emissions Standards for Hazardous Air Pollutants (NESHAP) mandates that building owners conduct an asbestos survey to determine the presence of asbestos containing materials (ACMs) prior to the commencement of any remedial work, including demolition. Prior to demolition or renovation work, it is recommended that areas be sampled as part of an asbestos survey. Any demolition of the existing buildings must comply with State law, which requires a contractor, where there is asbestos-related work involving 100 square ft or more of ACMs, to be certified and that certain procedures regarding the removal of asbestos be followed.
- MM 4.8-16** Lead-based paint removal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.
- MM 4.8-17** Contractors performing lead-based paint removal shall provide evidence of certified training for lead-related construction work.
- MM 4.8-18** All finishing products used on site shall meet applicable SCAQMD regulations for solvent content, as required by SCAQMD Rules 1102 and 1171.
- MM 4.8-19** All uses of solvents shall be conducted in adherence to California OSHA regulations for exposure of workers during construction activities as required by CCR Title 8.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Hazards and Hazardous Materials were identified in the Program FEIR.

### Marina Improvement Project Checklist Responses

Would the project:

- a) Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

This response applies to questions a and b, above.

**Potentially Significant Impact.** Development and operation of the proposed project may involve the routine use and transport of chemical agents, solvents, paints, and other hazardous materials. Project implementation will include the removal and replacement of the existing docks, gangways, piles, and boat slips. The construction activities may include the temporary use of some hazardous agents such as paints, oils, solvents, and cleansers as well as temporary storage of these materials and fuel on site. Although the amount of chemical agents typically used during construction would be limited and temporary, impacts related to the routine use and disposal of hazardous materials and fuel used in the

regular maintenance and operation of boats will be evaluated further in the SEIR. In addition, disposal of any dredged soils or docks or piles that have been treated with paints or chemicals shall be addressed in the SEIR.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**No Impact.** As stated in the Dana Point Harbor Revitalization Project Program FEIR, there are no existing or proposed schools within 0.25 mile of the proposed project. Therefore, the operation and construction of the proposed project is not anticipated to emit hazardous emissions or handle hazardous substances within 0.25 mile of an existing or proposed school. No impacts related to this issue are anticipated, and no further analysis is required in the SEIR.

- d) **Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and as a result, would create a significant hazard to the public or the environment?**

**Less Than Significant Impact.** As stated in the Program FEIR, records research and site reconnaissance were conducted to determine whether any sites that have been reported as contaminated or that generate hazardous materials were located within the Dana Point Harbor Revitalization Project boundaries. Although public records identified 18 listed regulatory sites within the marina boundaries, no sites were located on the dock facilities. The Marina Improvement Project site is not identified or listed as a hazardous materials site, pursuant to Government Code Section 65962.5, nor would the project create a significant hazard to the public or environment. Therefore, impacts related to this issue are considered less than significant, and no further analysis is required in the SEIR.

- e) **For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**
- f) **For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

**The following response applies to questions e and f, above.**

**No Impact.** According to the Program FEIR, the proposed project is not located within 2 miles of an airport or private airstrip or within an airport land use plan. The proposed project site is located approximately 20 miles south of John Wayne Airport in Santa Ana. Therefore, no impacts related to airport safety issues are anticipated, and no further analysis is required in the SEIR.

- g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**No Impact.** The proposed project replaces and upgrades existing marina facilities and will comply with the current standards and ADA requirements. As explained in the transportation/traffic analysis earlier in this document, no changes to the Dana Point Marina circulation system or dock access locations are proposed as part of the Marina Improvement Project. The City's Emergency Plan

designates procedures that will be followed in responding to anticipated emergencies in the City of Dana Point. In addition, the City's General Plan illustrates evacuation routes for the City, including Pacific Coast Highway, Dana Point Harbor Drive, and Street of the Golden Lantern. The Marina Project area is accessed via Dana Point Harbor Drive. However, replacement of the dock facilities will not impair or physically interfere with these emergency plans. Therefore, no impacts are anticipated, and no further analysis is required in the SEIR.

- h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires including where wildlands are adjacent to urbanized areas or where residents are intermixed with wildlands?**

**No Impact.** Based on the City's General Plan Public Safety Element, there are no major fire hazard zones within the City, and the site is not located within a high fire hazard area. The project site is the marina, located within a Harbor area, largely surrounded by an urbanized environment, and is not adjacent to any wildlands. Therefore, no impacts related to wildland fires are anticipated, and no further analysis is required in the SEIR.

- i) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?**

**No Impact.** The proposed project does not include improvements to the storm drain system. Stormwater runoff on the docks will continue to discharge into the Harbor similar to existing conditions. Although BMPs will be required during the construction phases of the project, these are temporary measures to control sediment and erosion and would not result in increased vectors or odor conditions. Therefore, no impacts related to this issue are anticipated, and no further analysis is required in the SEIR.

### 3.15 PUBLIC SERVICES

#### Program FEIR Overview

**Impacts.** The Program FEIR concluded that the Revitalization Project would require fire protection services, but would not increase the need for fire protection beyond the capabilities of the Orange County Fire Authority (OCFA). Additionally, the Program FEIR stated that the Revitalization Project would not require new police facilities due to an increased need for police services. The Revitalization Project was further found not to impact existing educational facilities and would not result in additional roadway maintenance, library service, or public transportation needs that would exceed the existing capacity and levels of service. The Program FEIR concluded that with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures, no significant impacts are anticipated. Cumulatively, the Revitalization Project along with other future development could increase the need for public services in the area. However, the Program FEIR analysis concluded that public service impacts would be reduced to a less than significant level with incorporation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures. Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

**Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

- PDF 4.10-1** The Project is not located within the very high fire hazard severity zone per the OCFA maps. Additionally, automatic sprinklers shall be provided in all applicable structures, per OCFA requirements.
- SCA 4.10-4** Prior to the issuance of any grading permits or the issuance of a building permit (whichever occurs first), the County of Orange Dana Point Harbor Department shall provide evidence of adequate fire flow. The "Orange County Fire Authority Water Availability for Fire Protection" form shall be signed by the applicable water district and submitted to the Fire Chief for approval. If sufficient water to meet fire flow requirements is not available, an automatic fire extinguishing system may be required in each structure affected.
- SCA 4.10-12** Prior to the issuance of a grading or building permit, the County of Orange Dana Point Harbor Department shall submit to the Fire Chief a list of all hazardous, flammable, and combustible liquids, solids, or gases to be stored, used, or handled on site. These materials shall be classified according to the Uniform Fire Code and a document shall be submitted to the Fire Chief with a summary sheet listing the total amounts for storage and use for each hazard class.
- SCA 4.10-15** Prior to issuance of a certificate of use and occupancy, the County of Orange Dana Point Harbor Department shall provide plans or identity measures to comply with standard County procedures for implementing the Uniform Fire Code in the use of any combustible and flammable liquids, aboveground or underground storage of such materials, welding and potential spark production, and building occupancy rating in a manner meeting the approval of the Fire Chief. Further, a copy of the approved "UFC Implementation" shall be forwarded to the Manager, RDMD/Building Inspection Services, prior to the issuance of any certificates of use and occupancy.
- MM 4.10-4** The following items shall be considered for inclusion into the Project design:
- All applicable building plans shall indicate by note that the interior fire sprinkler system is required for the structure(s). Plans for the fire sprinkler systems shall be submitted for review and approval by the Fire Chief.
  - A supervised fire alarm system with an annunciator, per the requirements of the California Fire Code, shall be installed in an accessible location.
  - Access to and around all structures shall meet the OCFA and California Fire Code requirements.
  - A water supply system to supply fire hydrants and automatic fire sprinkler systems shall be installed.
  - Emergency access shall be maintained during construction.



- MM 4.10-7** Construction shall not block the main navigational channels of Planning Areas 8 through 12.
- MM 4.10-8** The emergency alley behind the Harbor Patrol office shall not be blocked during construction activities.

**Level of Significance after Mitigation.** No unavoidable significant impacts related to Public Services were identified in the Program FEIR.

### Marina Improvement Project Checklist Responses

#### Would the Project:

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

i) **Fire protection?**

**No Impact.** Fire prevention, fire protection, and emergency medical services in the project area are provided by the OCFA, which operates two fire stations within the Dana Point city limits. Implementation of the project would not change response times and would not require new or physically altered governmental facilities. No additional marina capacity will be created with project implementation. Therefore, no impacts are anticipated, and no further analysis is required in the SEIR.

ii) **Police protection?**

**No Impact.** Law enforcement services within the City are provided by the Orange County Sheriff's Department. The Harbors and coast line of Orange County are also patrolled by the Orange County Sheriff's Department. The Harbor Patrol provides round-the-clock law enforcement, marine fire fighting, and search/rescue services within the Dana Point Harbor. The replacement of the marina's slips, docks, and gangways would not create additional demand for police staff, police services, or Harbor patrol facilities because the overall capacity of the marina will not be increased. In addition, implementation of the project would not change response times. Therefore, no impacts to police or Harbor patrol services are anticipated, and no further analysis is required in the SEIR.

iii) **Schools?**

**No Impact.** The proposed project does not include housing and would not contribute to the school-age population. The proposed Marina Improvement Project would have no impact on schools, and no further analysis is required in the SEIR.

**iv) Parks?**

**No Impact.** The proposed project is the improvement and replacement of marina docks and slips. The project would not increase the demand for additional parks and recreation services and would have no impacts on parks in the project vicinity. Therefore, no impacts related to park facilities are anticipated, and no further analysis is required in the SEIR.

**v) Other Public Facilities?**

**No Impact.** The proposed project is designed to reconfigure and replace the existing marina with new facilities in the same location and is not anticipated to impact any other public facilities. No further analysis is required in the SEIR.

### **3.16 UTILITIES AND SERVICE SYSTEMS**

#### **Program FEIR Overview**

**Impacts.** The Program FEIR concluded that the Revitalization Project would not result in any impact on reclaimed water facilities. The Program FEIR determined that the Revitalization Project would increase demand for natural gas facilities; would increase demand for water service; and would increase demand on sewer facilities. The Program FEIR concluded that with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures, no significant impacts are anticipated. Cumulatively, the Revitalization Project along with other future development could increase the need for utilities and service systems in the area. However, the Program FEIR analysis concluded that utilities and service system impacts would be reduced to a less than significant level with incorporation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures. Measures identified in the Program FEIR and applicable to the Marina Project are listed below.

Although the Revitalization Project would require installation of new electrical facilities, the Program FEIR anticipated that sufficient electrical service would be available for the project. It should be noted that impacts related to increased electrical demand for the Marina Project will be discussed further in the SEIR.

The Program FEIR did not address issues related to Greenhouse Gas Emissions (GHG). However, in compliance with Assembly Bill 32 (AB 32), passed in 2006, the SEIR will include a discussion of GHG emissions as they relate to increased energy uses.

#### **Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM)**

**PDF 4.10-2** Replacement of utilities or installation of new utilities shall be coordinated with the utility providers to ensure that service to adjoining utility customers is not interrupted.

## Marina Improvement Project Checklist Responses

Would the project:

- a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**Less Than Significant Impact.** The proposed project will renovate and reconfigure the slips and dock facilities in the Marinas and includes the replacement and relocation of pumpout facilities on the docks. However, no additional capacity will be created with implementation of the project. Although waste discharges include discharges of storm water and construction project discharges, the project does not include any storm water improvements or changes to any existing storm water facilities, and no landside excavation or disturbance would occur that would cause wastewater treatment requirements to be exceeded. Therefore, the project is not anticipated to exceed wastewater treatment requirements, and no further analysis is required in the SEIR. All construction-related impacts will be addressed in the Hydrology/Water Quality section of the SEIR.

- b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**
- c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The following response applies to questions b and c, above.

**Less Than Significant Impact.** The proposed project does not include improvements to public water, wastewater, or storm drain systems. The dock replacement program, however, will include water line replacement as well as the replacement and relocation of pumpout facilities on the docks, but will not expand water service. Storm water runoff on the docks will continue to discharge into the Harbor, similar to existing conditions. Although BMPs will be required during the construction phases of the project, these are temporary measures to control sediment and erosion and would not result in increased vectors or odor conditions. Therefore, no impacts related to this issue are anticipated, and no further analysis is required in the SEIR.

- d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**
- e) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

The following response applies to questions d and e, above.

**Less Than Significant Impact.** The proposed project includes the provision of water within the new dock systems. However, water is currently provided to the slips, and no increase in demand is anticipated because no increased capacity in the marina is proposed. In addition, although replacement and relocation of pumpout facilities is included, no additional wastewater facilities are

proposed. Therefore, the proposed project is not anticipated to result in an increase in demand for water supply or wastewater services, and no addition or expansion of entitlements is needed. No further analysis is required in the SEIR.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**
- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

**The following response applies to questions f and g, above.**

**Less Than Significant Impact.** Because capacity is not increased with project implementation, waste generated is expected to be similar to existing conditions and will not require additional landfill capacity. In addition, the proposed project, including disposal of old docks, will be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and federal solid waste disposal standards. No further analysis regarding landfill capacity and solid waste regulations is required. Construction traffic related to disposal of construction waste and potentially hazardous waste materials will be addressed in the Traffic and Hazards sections of the SEIR.

### **3.17 MANDATORY FINDINGS OF SIGNIFICANCE**

- a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

**Potentially Significant Impact.** The proposed project does not increase the capacity of the marina or change any existing land uses. Therefore, the long-term operation of the proposed project would not result in impacts to the marine wildlife and habitat that are significantly different or greater than existing conditions. However, temporary construction activities and dredging activities, if required, could result in short-term habitat loss and potential impacts to a variety of marine species. In addition, the project has the potential to impact species of birds that use the marina during migration and for nesting purposes. The SEIR will further address these potential impacts to fish and wildlife habitats and communities.

No known historical, archaeological, or paleontological resources have been identified on site. In addition, the presence of prehistoric cultural material is unlikely because the Marina Improvement Project involves the marina facilities in the Harbor waters, and no landside excavation is required for project implementation. Therefore, no impacts to important examples of California history or prehistory are anticipated with project implementation.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

**Potentially Significant Impact.** As discussed in this IS, the proposed project does not increase the capacity of the marina or change any existing land uses, and the long-term operation would not result in impacts that are significantly different or greater than existing conditions. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable projects, is not anticipated to contribute to long-term cumulative environmental effects. However, temporary cumulative impacts related to construction activities will be evaluated further in the SEIR. The proposed project's contribution to the cumulative effects of aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services and utilities, and transportation and traffic will be addressed in the SEIR. All other environmental effects of the proposed project were determined in this IS to be less than significant, or there was no impact.

- c) **Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?**

**Potentially Significant Impact.** The potential for the proposed project to have substantial environmental effects on human beings, either directly or indirectly, will be addressed in the SEIR. Relevant topics include aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services and utilities, and transportation and traffic. Mitigation measures will be incorporated where possible to reduce potential environmentally adverse impacts to humans to less than significant levels.



ARNOLD SCHWARZENEGGER  
GOVERNOR

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STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT  
DIRECTOR

Notice of Preparation

November 27, 2007

To: Reviewing Agencies

Re: Dana Point Harbor Marina Improvement Project  
SCH# 2003101142

Attached for your review and comment is the Notice of Preparation (NOP) for the Dana Point Harbor Marina Improvement Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

**Brad Gross**  
Orange County, Dana Point Harbor Dept.  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan  
Project Analyst, State Clearinghouse

Attachments  
cc: Lead Agency

11-30-07P12:12 RCVD

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2003101142  
**Project Title** Dana Point Harbor Marina Improvement Project  
**Lead Agency** Orange County

**Type** NOP Notice of Preparation

**Description** The Dana Point Harbor Marina Improvement project renovations will include removal of nearly all floating docks and piles; reconstruction of portions of the degraded quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. In addition, the reconfiguration of the Youth and Group docks may require dredging in the basin area on the northwest side of the facility. Other areas under the new slips may also require maintenance dredging not to exceed original design depths in the basin (this maintenance dredging is not a part of the Waterside project). Other marina project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. At project completion the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips. However, the average slip length would increase from 30 (29.85) ft. to 34 (33.96) ft.

**Lead Agency Contact**

**Name** Brad Gross  
**Agency** Orange County, Dana Point Harbor Dept.  
**Phone** (949) 923-2236 **Fax**  
**email**  
**Address** 24650 Dana Point Harbor Drive  
**City** Dana Point **State** CA **Zip** 92629

**Project Location**

**County** Orange  
**City** Dana Point  
**Region**  
**Cross Streets** Golden Lantern Street / Dana Point Harbor Drive  
**Parcel No.** Water Area  
**Township** **Range** **Section** **Base**

**Proximity to:**

**Highways** SR 1, I-5  
**Airports**  
**Railways** OCTA Metrolink  
**Waterways** San Juan Creek  
**Schools** Capistrano Valley Unified School District  
**Land Use** Present Land Use is recreational Marinas/Zoning: Dana Point Harbor Planned Community (City of Dana Point)/General Plan: Harbor Marine Water (City of Dana Point)

**Project Issues** Aesthetic/Visual; Air Quality; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wildlife; Landuse; Cumulative Effects; Soil Erosion/Compaction/Grading

**Reviewing Agencies** Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Conservation; Department of Parks and Recreation; Department of Fish and Game, Region 5; Department of Fish and Game, Marine Region; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Caltrans, District 12; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 9

**Date Received** 11/27/2007 **Start of Review** 11/27/2007 **End of Review** 12/26/2007

Note: Blanks in data fields result from insufficient information provided by lead agency.

# Notice of Completion & Environmental Document Transmittal

SCH# 2003101142

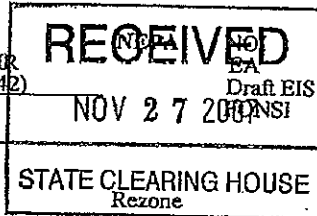
Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 916/445-0613  
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

Project Title: Dana Point Harbor Marina Improvement Project  
 Lead Agency: County of Orange -- Dana Point Harbor Department Contact Person: Brad Gross, Director  
 Street Address: 24650 Dana Point Harbor Drive Phone: (949) 923-2236  
 City: Dana Point Zip: 92629 County: Orange

Project Location:  
 County: Orange City/Nearest Community: Dana Point  
 Cross Streets: Street of the Golden Lantern / Dana Point Harbor Drive Zip Code: 92629  
 Assessor's Parcel No. Water Area Section: \_\_\_\_\_ Twp. \_\_\_\_\_ Range: \_\_\_\_\_ Base: \_\_\_\_\_  
 Within 2 Miles: State Hwy #: State Highway 1 & Interstate 5 Waterways: San Juan Creek  
 Airports: No Railways: OCTA MetroLink Schools: Capistrano Valley Unified School District

### Document Type:

CEQA: NOP \_\_\_\_\_ Draft EIR \_\_\_\_\_  
 Early Cons \_\_\_\_\_ X Supplement/Subsequent EIR \_\_\_\_\_  
 Neg Dec \_\_\_\_\_ (Prior SCH No 2003101142)  
 Mit Neg Dec \_\_\_\_\_ Other \_\_\_\_\_  
 Other: Joint Document \_\_\_\_\_  
 Final Document \_\_\_\_\_  
 Other \_\_\_\_\_



### Local Action Type:

General Plan Update \_\_\_\_\_ Specific Plan \_\_\_\_\_  
 General Plan Amendment \_\_\_\_\_ Master Plan \_\_\_\_\_  
 General Plan Element \_\_\_\_\_ Planned Unit Development \_\_\_\_\_  
 Community Plan \_\_\_\_\_ X Site Plan \_\_\_\_\_  
 X Rezone \_\_\_\_\_  
 Prezone \_\_\_\_\_  
 X Use Permit \_\_\_\_\_  
 Land Division (Subdivision, etc.) \_\_\_\_\_  
 Annexation \_\_\_\_\_  
 Redevelopment \_\_\_\_\_  
 X Coastal Permit \_\_\_\_\_  
 Other \_\_\_\_\_

### Development Type

Residential: Units \_\_\_\_\_ Acres \_\_\_\_\_  
 Office: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  
 Commercial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  
 Industrial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_  
 Educational: \_\_\_\_\_  
 X Recreational: Harbor, Marinas  
 Total Acres (approx.) 169.7  
 X Water Facilities: \_\_\_\_\_  
 Transportation: \_\_\_\_\_  
 Mining: \_\_\_\_\_  
 Power: \_\_\_\_\_  
 Waste Treatment: \_\_\_\_\_  
 Hazardous Waste: \_\_\_\_\_  
 Other \_\_\_\_\_  
 Type Marinas \_\_\_\_\_ MGD \_\_\_\_\_  
 Type \_\_\_\_\_  
 Mineral \_\_\_\_\_  
 Type \_\_\_\_\_ Watts \_\_\_\_\_  
 Type \_\_\_\_\_  
 Type \_\_\_\_\_

### Project Issues Discussed in Document:

<input checked="" type="checkbox"/> Aesthetic/Visual	<input type="checkbox"/> Fiscal	<input checked="" type="checkbox"/> Recreation/Parks	<input checked="" type="checkbox"/> Vegetation
<input checked="" type="checkbox"/> Agricultural Land	<input checked="" type="checkbox"/> Flood Plain/Flooding	<input checked="" type="checkbox"/> Schools/Universities	<input checked="" type="checkbox"/> Water Quality
<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Forest Land/Fire Hazard	<input type="checkbox"/> Septic Systems	<input type="checkbox"/> Water Supply/Groundwater
<input checked="" type="checkbox"/> Archaeological/Historical	<input checked="" type="checkbox"/> Geologic/Seismic	<input type="checkbox"/> Sewer Capacity	<input type="checkbox"/> Wetland/Riparian
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Minerals	<input checked="" type="checkbox"/> Soil Erosion/Compaction/Grading	<input checked="" type="checkbox"/> Wildlife
<input checked="" type="checkbox"/> Coastal Zone	<input checked="" type="checkbox"/> Noise	<input checked="" type="checkbox"/> Solid Waste	<input type="checkbox"/> Growth-Inducing
<input checked="" type="checkbox"/> Drainage/Absorption	<input checked="" type="checkbox"/> Population/Housing Balance	<input checked="" type="checkbox"/> Toxic/Hazardous	<input checked="" type="checkbox"/> Land Use
<input type="checkbox"/> Economic/Jobs	<input checked="" type="checkbox"/> Public Services/Facilities	<input checked="" type="checkbox"/> Traffic/Circulation	<input checked="" type="checkbox"/> Cumulative Effects
			Other _____

### Present Land Use/Zoning/General Plan Designation:

Present Land Use is recreational Marinas / Zoning: Dana Point Harbor Planned Community (City of Dana Point)/ General Plan: Harbor Marine Water (City of Dana Point)

### Project Description: (please use a separate page if necessary)

The Dana Point Harbor Marina Improvement Project renovations will include removal of nearly all floating docks and piles; reconstruction of portions of the degraded quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. In addition, the reconfiguration of the Youth and Group docks may require dredging in the basin area on the northwest side of the facility. Other areas under the new slips may also require maintenance dredging not to exceed original design depths in the basin (this maintenance dredging is not a part of the Waterside project). Other marina project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. At project completion the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips. However, the average slip length would increase from 30 (29.85) ft. to 34 (33.96) ft.



**Reviewing Agencies Checklist**

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X."  
If you have already sent your document to the agency, please denote that with an "S."

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Air Resources Board                 | <input type="checkbox"/> Office of Historic Preservation                    |
| <input checked="" type="checkbox"/> Boating & Waterways, Department of  | <input type="checkbox"/> Office of Public School Construction               |
| <input type="checkbox"/> California Highway Patrol                      | <input checked="" type="checkbox"/> Parks & Recreation                      |
| <input checked="" type="checkbox"/> Caltrans District # 12              | <input type="checkbox"/> Pesticide Regulation, Department of                |
| <input type="checkbox"/> Caltrans Division of Aeronautics               | <input type="checkbox"/> Public Utilities Commission                        |
| <input type="checkbox"/> Caltrans Planning (Headquarters)               | <input type="checkbox"/> Reclamation Board                                  |
| <input type="checkbox"/> Coachella Valley Mountains Conservancy         | <input checked="" type="checkbox"/> Regional WQCB # 9                       |
| <input checked="" type="checkbox"/> Coastal Commission                  | <input checked="" type="checkbox"/> Resources Agency                        |
| <input type="checkbox"/> Colorado River Board                           | <input type="checkbox"/> S.F. Bay Conservation & Development Commission     |
| <input checked="" type="checkbox"/> Conservation, Department of         | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns Conservancy |
| <input type="checkbox"/> Corrections, Department of                     | <input type="checkbox"/> San Joaquin River Conservancy                      |
| <input type="checkbox"/> Delta Protection Commission                    | <input type="checkbox"/> Santa Monica Mountains Conservancy                 |
| <input type="checkbox"/> Education, Department of                       | <input checked="" type="checkbox"/> State Lands Commission                  |
| <input type="checkbox"/> Energy Commission                              | <input type="checkbox"/> SWRCB: Clean Water Grants                          |
| <input checked="" type="checkbox"/> Fish & Game Region # 5              | <input checked="" type="checkbox"/> SWRCB: Water Quality                    |
| <input type="checkbox"/> Food & Agriculture, Department of              | <input type="checkbox"/> SWRCB: Water Rights                                |
| <input type="checkbox"/> Forestry & Fire Protection                     | <input type="checkbox"/> Tahoe Regional Planning Agency                     |
| <input type="checkbox"/> General Services, Department of                | <input type="checkbox"/> Toxic Substances Control, Department of            |
| <input type="checkbox"/> Health Services, Department of                 | <input checked="" type="checkbox"/> Water Resources, Department of          |
| <input type="checkbox"/> Housing & Community Development                | <input type="checkbox"/> Other _____  |
| <input type="checkbox"/> Integrated Waste Management Board              | <input type="checkbox"/> Other _____  |
| <input checked="" type="checkbox"/> Native American Heritage Commission |   |
| <input type="checkbox"/> Office of Emergency Services                   |   |

**Local Public Review Period (to be filled in by lead agency)**

Starting Date Tuesday, November 27, 2007 Ending Date Wednesday, January 2, 2008

**Lead Agency (Complete if applicable):**

Consulting Firm: LSA Associates, Inc. Applicant: County of Orange - Dana Point Harbor Department  
 Address: 20 Executive Park, Suite 200 Address: 24650 Dana Point Harbor Drive  
 City/State/Zip: Irvine, CA 92614 City/State/Zip: Dana Point, California 92629  
 Contact: Mr. Rob Balen Phone: Brad Gross, Director (949) 923-2236  
 Phone: (949) 553-0666

Signature of Lead Agency Representative:  Date: 21 NOV 2007

Resources Agency	County	SCH#	Regional Water Quality Control Board (RWQCB)
<input type="checkbox"/> Fish & Game Region 2 Jeff Dronngesen	<input type="checkbox"/> Public Utilities Commission Ken Lewis	<input type="checkbox"/> Caltrans, District 8 Dan Kopulsky	<input type="checkbox"/> RWQCB 1 Cathleen Hudson
<input type="checkbox"/> Fish & Game Region 3 Robert Floerke	<input type="checkbox"/> Santa Monica Bay Restoration Guangyu Wang	<input type="checkbox"/> Caltrans, District 9 Gayle Rosandar	<input type="checkbox"/> RWQCB 2 North Coast Region (1)
<input type="checkbox"/> Fish & Game Region 4 Julie Vance	<input checked="" type="checkbox"/> State Lands Commission Jean Satino	<input type="checkbox"/> Caltrans, District 10 Tom Dumas	<input type="checkbox"/> RWQCB 3 Environmental Document Coordinator
<input checked="" type="checkbox"/> Fish & Game Region 5 Don Chadwick	<input type="checkbox"/> Tahoe Regional Planning Agency (TRPA) Cherry Jacques	<input type="checkbox"/> Caltrans, District 11 Mario Orso	<input type="checkbox"/> RWQCB 4 San Francisco Bay Region (2)
<input type="checkbox"/> Fish & Game Region 6 Gabrina Gatchel	<u>Business, Trans &amp; Housing</u>	<input checked="" type="checkbox"/> Caltrans, District 12 Bob Joseph	<input type="checkbox"/> RWQCB 5 Central Coast Region (3)
<input type="checkbox"/> Habitat Conservation Program	<input type="checkbox"/> Caltrans - Division of Aeronautics Sandy Hesnard	<u>Cal EPA</u>	<input type="checkbox"/> RWQCB 5F Central Valley Region (5)
<input type="checkbox"/> Fish & Game Region 6 I/M Gabrina Gatchel	<input type="checkbox"/> Caltrans - Planning Terri Pencovic	<input type="checkbox"/> Air Resources Board	<input type="checkbox"/> RWQCB 5R Central Valley Region (5)
<input type="checkbox"/> Inyo/Mono, Habitat Conservation Program	<input checked="" type="checkbox"/> California Highway Patrol Shirley Kelly	<input type="checkbox"/> Airport Projects Jim Lerner	<input type="checkbox"/> RWQCB 6 Fresno Branch Office
<input checked="" type="checkbox"/> Dept. of Fish & Game M George Isaac	<input type="checkbox"/> Office of Special Projects	<input type="checkbox"/> Transportation Projects Ravi Ramalingam	<input type="checkbox"/> RWQCB 6V Lahontan Region (6)
<input type="checkbox"/> Marine Region	<input type="checkbox"/> Housing & Community Development Lisa Nichols	<input type="checkbox"/> Industrial Projects Mike Tollstrup	<input type="checkbox"/> RWQCB 7 Colorado River Basin Region (7)
<u>Other Departments</u>	<input type="checkbox"/> Housing Policy Division	<input type="checkbox"/> California Integrated Waste Management Board Sue O'Leary	<input type="checkbox"/> RWQCB 8 Santa Ana Region (8)
<input type="checkbox"/> Food & Agriculture	<u>Dept. of Transportation</u>	<input type="checkbox"/> State Water Resources Control Board Regional Programs Unit Division of Financial Assistance	<input checked="" type="checkbox"/> RWQCB 9 San Diego Region (9)
<input type="checkbox"/> Steve Shaffer	<input type="checkbox"/> Caltrans, District 1 Rex Jackman	<input type="checkbox"/> State Water Resources Control Board Student Intern, 401 Water Quality Certification Unit Division of Water Quality	<input type="checkbox"/> Other
<input type="checkbox"/> Dept. of Food and Agriculture	<input type="checkbox"/> Caltrans, District 2 Marcelino Gonzalez	<input type="checkbox"/> State Water Resources Control Board Steven Herrera	
<input type="checkbox"/> Dept. of General Services Public School Construction	<input type="checkbox"/> Caltrans, District 3 Jeff Pulverman	<input checked="" type="checkbox"/> Dept. of Toxic Substances Control CEQA Tracking Center	
<input type="checkbox"/> Dept. of General Services Environmental Services Section	<input type="checkbox"/> Caltrans, District 4 Tim Sable	<input type="checkbox"/> Department of Pesticide Regulation	
<input type="checkbox"/> Dept. of Health Services Veronica Malloy	<input type="checkbox"/> Caltrans, District 5 David Murray		
<input type="checkbox"/> Dept. of Health/Drinking Water	<input type="checkbox"/> Caltrans, District 6 Marc Birbaum		
<u>Independent Commissions/Boards</u>	<input type="checkbox"/> Caltrans, District 7 Cheryl J. Powell		
<input type="checkbox"/> Delta Protection Commission Debbie Eddy			
<input type="checkbox"/> Office of Emergency Services Dennis Castillo			
<input type="checkbox"/> Governor's Office of Planning & Research State Clearinghouse			
<input checked="" type="checkbox"/> Native American Heritage Debbie Treadway			
<input type="checkbox"/> Resources Agency Nedell Gayou	<input type="checkbox"/> Fish & Game Region 1 Donald Koch		
<input checked="" type="checkbox"/> Dept. of Boating & Waterways David Johnson	<input type="checkbox"/> Fish & Game Region 1E Laurie Hamsberger		
<input checked="" type="checkbox"/> California Coastal Commission Elizabeth A. Fuchs			
<input type="checkbox"/> Colorado River Board Gerald R. Zimmerman			
<input checked="" type="checkbox"/> Dept. of Conservation Sharon Howell			
<input type="checkbox"/> California Energy Commission Paul Richins			
<input type="checkbox"/> Cal Fire Allen Robertson			
<input type="checkbox"/> Office of Historic Preservation Wayne Donaldson			
<input checked="" type="checkbox"/> Dept. of Parks & Recreation Environmental Stewardship Section			
<input type="checkbox"/> Reclamation Board Mak Herald			
<input type="checkbox"/> S.F. Bay Conservation & Dev't. Comm. Steve McAdam			
<input type="checkbox"/> Dept. of Water Resources Resources Agency Nadell Gayou			
<input type="checkbox"/> Conservancy			
<u>Fish and Game</u>			
<input type="checkbox"/> Depart. of Fish & Game Scott Flint			
<input type="checkbox"/> Environmental Services Division			

COPY

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
e-mail: [da\\_nahc@pacbell.net](mailto:da_nahc@pacbell.net)



November 29, 2007

Mr. Brad Gross

**ORANGE COUNTY DANA POINT HARBOR DEPARTMENT**

24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Re: SCH#2003101142: CEQA Notice of Preparation (NOP); Draft Subsequent Environmental Impact Report (DSEIR) for the Dana Point Harbor Marina Improvement Project, Orange County, California

Dear Mr. Gross:

The Native American Heritage Commission is the state agency designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

- √ Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278) <http://www.ohp.parks.ca.gov/1068/files/IC%20Roster.pdf> The record search will determine:
  - If a part or the entire APE has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded in or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- √ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information center.
- √ Contact the Native American Heritage Commission (NAHC) for:
  - \* A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section.
  - The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- √ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.
  - \* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the

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NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton  
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

**Native American Contacts  
Orange County  
November 29, 2007**

Juaneno Band of Mission Indians Acjachemen Nation

**David Belardes, Chairperson**  
31742 Via Belardes Juaneno  
San Juan Capistrano , CA 92675  
**DavidBelardes@hotmail.com**  
(949) 493-0959  
(949) 493-1601 Fax

**Juaneno Band of Mission Indians**  
**Adolph "Bud" Sepulveda, Chairperson**  
P.O. Box 25828 Juaneno  
Santa Ana , CA 92799  
**bssepul@yahoo.net**  
714-838-3270  
714-914-1812 - CELL  
**bsepul@yahoo.net**

Juaneno Band of Mission Indians Acjachemen Nation

**Anthony Rivera, Chairman**  
31411-A La Matanza Street Juaneno  
San Juan Capistrano , CA 92675-2674  
**arivera@juaneno.com**  
949-488-3484  
949-488-3294 Fax

**Sonia Johnston, Tribal Vice Chairperson**  
**Juaneno Band of Mission Indians**  
P.O. Box 25628 Juaneno  
Santa Ana , CA 92799  
(714) 323-8312  
**sonia.johnston@sbcglobal.net**

Juaneno Band of Mission Indians Acjachemen Nation

**Joyce Perry , Tribal Manager & Cultural Resources**  
31742 Via Belardes Juaneno  
San Juan Capistrano , CA 92675  
**kaamalam@cox.net**  
(949) 493-0959  
(949) 293-8522 Cell  
(949) 493-1601 Fax

**Juaneno Band of Mission Indians**  
**Anita Espinoza**  
1740 Concerto Drive Juaneno  
Anaheim , CA 92807  
(714) 779-8832

Juaneno Band of Mission Indians

**Alfred Cruz, Cultural Resources Coordinator**  
P.O. Box 25628 Juaneno  
Santa Ana , CA 92799  
**alfredgcruz@sbcglobal.net**  
714-998-0721  
**sifredgcruz@sbcglobal.net**

**Juaneno Band of Mission Indians**  
**Joe Ocampo, Chairperson**  
1108 E. 4th Street  
Santa Ana , CA 92701  
(714) 547-9676  
(714) 623-0709-cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed SCH#2003101142; CEQA Notice of Preparation (NOP); draft Subsequent Environmental Impact Report (DSEIR) for Dana Point Harbor Marina Improvement Project; Orange County, California.

FILE



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

November 30, 2007

Mr. Brad Gross, Director  
County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross:

## **Notice of Preparation of a Draft Subsequent Environmental Impact Report (Draft SEIR) for the Dana Point Harbor Marina Improvement Project**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft environmental impact report (SEIR). Please send the SCAQMD a copy of the Draft SEIR upon its completion. **In addition, please send with the draft SEIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files. Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

### **Air Quality Analysis**

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: [www.urbemis.com](http://www.urbemis.com).

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM<sub>2.5</sub> emissions from construction and operational activities and processes. In connection with developing PM<sub>2.5</sub> calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM<sub>2.5</sub> emissions and compare the results to the recommended PM<sub>2.5</sub> significance thresholds. Guidance for calculating PM<sub>2.5</sub> emissions and PM<sub>2.5</sub> significance thresholds can be found at the following internet address: [http://www.aqmd.gov/ceqa/handbook/PM2\\_5/PM2\\_5.html](http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html).

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November 30, 2007

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>.

It is recommended that lead agencies for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles, perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: [http://www.aqmd.gov/ceqa/handbook/mobile\\_toxic/mobile\\_toxic.html](http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html). An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

#### **Mitigation Measures**

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: [www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html) Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: <http://www.aqmd.gov/prdas/aqguide/aqguide.html>. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: <http://www.arb.ca.gov/ch/handbook.pdf>. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

#### **Data Sources**

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (<http://www.aqmd.gov>).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Charles Blankson, Ph.D., Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,



Steve Smith, Ph.D.  
Program Supervisor, CEQA Section  
Planning, Rule Development and Area Sources

SS:CB:AK

ORC071127-06AK

Control Number



Linda S. Adams  
Secretary for  
Environmental Protection



**COPY**

## Department of Toxic Substances Control



Maureen F. Gorsen, Director  
5796 Corporate Avenue  
Cypress, California 90630

Arnold Schwarzenegger  
Governor

December 20, 2007

Mr. Brad Gross, Director  
Dana Point Harbor Department  
County of Orange  
24650 Dana Point Harbor Drive  
Dana Point, California 92629  
Marinaeir@dphd.ocgov.com

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT  
FOR THE DANA POINT HARBOR MARINA IMPROVEMENT PROJECT, GOLDEN  
LANTERN STREET AND DANA POINT HARBOR DRIVE, DANA POINT, ORANGE  
COUNTY, 92629 (SCH#2003101142)

Dear Mr. Gross:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation of a Draft Subsequent Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated in your document: "Previously certified Dana Point Harbor Revitalization Program FEIR No. 591 (SCH#2003101142) on January 31, 2006. The Dana Point Harbor Marina Improvement project renovations will include removal of nearly all floating docks and piles; reconstruction of portions of the degraded quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. In addition, the reconfiguration of the Youth and Group docks may require dredging in the basin area on the northwest side of the facility. Other areas under the new slips may also require maintenance dredging not to exceed original design depths in the basin (this maintenance dredging is not a part of the Waterside project). Other marina project components include improved lighting on the docks and public access improvement, including gangways and docks in compliance with the American with Disabilities Act (ADA) guidelines. At project completion the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips. However, the average slip length would increase from 30 ft. to 34 ft." Again, DTSC has these following comments; please address if applicable.

- 1) The EIR should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances.



Mr. Brad Gross  
December 20, 2007  
Page 2

- 2) The EIR should identify the known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:
  - National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
  - Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
  - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
  - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
  - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
  - Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
  - Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
  - The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).
- 3) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. Please see comment No. 17 below for more information.
- 4) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of

any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table.

- 5) Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports should be included in the EIR.
- 6) If any property adjacent to the project site is contaminated with hazardous chemicals, and if the proposed project is within 2,000 feet from a contaminated site, then the proposed development may fall within the "Border Zone of a Contaminated Property." Appropriate precautions should be taken prior to construction if the proposed project is within a Border Zone Property.
- 7) If buildings, other structures, or associated uses; asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies. Your document states on page 3-32: "Project Design Features (PDF), Standard Conditions (SC), and Mitigation Measures (MM) applicable to the Marina Project are listed (several listed). MM 4.8-4 Any transformers to be relocated during site construction/demolition should be conducted under the purview of the local utility purveyor to identify property handling procedures regarding potential PCBs. MM 4.8-9 If unknown wastes or suspect materials are discovered during construction that the contractor believes may be or contain hazardous waste or materials, the contractor shall notify the implementing agency's hazardous waste/materials coordinator."
- 8) The project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination. Your document states: "...impacts related to the routine use and disposal of hazardous materials and fuel used in the regular maintenance and operation of boats will be evaluated further in the SEIR. In addition, disposal of any dredged soils or docks or piles that have been treated with paints or chemicals shall be addressed in the SEIR."

- 9) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 10) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code; Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5).
- 11) If it is determined that hazardous wastes are or will be generated and the wastes are (a) stored in tanks or containers for more than ninety days, (b) treated onsite, or (c) disposed of onsite, then a permit from DTSC may be required. If so, the facility should contact DTSC at (714) 484-5423 to initiate pre-application discussions and determine the permitting process applicable to the facility.
- 12) If it is determined that hazardous wastes will be generated, the facility should obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942.
- 13) Certain hazardous waste treatment processes may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.
- 14) If the project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).
- 15) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area would cease and appropriate health and safety procedures should be implemented.
- 16) If the site was used for agricultural, cattle ranching or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.
- 17) Envirostor (formerly CalSites) is a database primarily used by the California Department of Toxic Substances Control, and is accessible through DTSC's website. DTSC can provide guidance for cleanup oversight through an

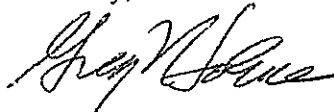
Mr. Brad Gross  
December 20, 2007  
Page 5

Environmental Oversight Agreement (EOA) for government agencies, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA please see [www.dtsc.ca.gov/SiteCleanup/Brownfields](http://www.dtsc.ca.gov/SiteCleanup/Brownfields), or contact Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489 for the VCA.

- 18) In future CEQA documents please provide contact person information, title, contact fax and e-mail address, and agency web address which contains the project information. Also, if the project title changes, please provide historical project title(s).

If you have any questions regarding this letter, please contact Ms. Teresa Hom, Project Manager, preferably at email: [thom@dtsc.ca.gov](mailto:thom@dtsc.ca.gov). Her office number is (714) 484-5477 and fax at (714) 484-5438.

Sincerely,



Greg Holmes  
Unit Chief  
Southern California Cleanup Operations Branch - Cypress Office

cc: Governor's Office of Planning and Research  
State Clearinghouse  
P.O. Box 3044  
Sacramento, California 95812-3044  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

CEQA Tracking Center  
Department of Toxic Substances Control  
Office of Environmental Planning and Analysis  
1001 I Street, 22<sup>nd</sup> Floor, M.S. 22-2  
Sacramento, California 95814  
[gmoskat@dtsc.ca.gov](mailto:gmoskat@dtsc.ca.gov)

CEQA#1968

From: <Howard L. Howell>  
To: <m.tuchman@cox.net>; <ywang@yvetzky.com>  
Sent: Monday, December 24, 2007 5:59 PM  
Subject: DPHPlan Website Contact Form

> Below is the result of your feedback form. It was submitted by  
Howard

> L. Howell () on Monday, December 24, 2007 at 20:59:19

> -----  
> -  
> -----  
>  
> subject: DPHPlan Website Contact Form  
>  
> env\_report: REMOTE\_HOST,REMOTE\_ADDR,HTTP\_USER\_AGENT  
>  
> Email: hlhowell@pacbell.net  
>  
> boat\_owner: on  
>  
> comments: EIR is in serious error. Sections 1A, 2C,3A,3B,3C, 5H, 6B,  
> 6G,  
> 9E, and 11A are all misrepresented. The net loss of slips, and the  
> resultant impact on slip fees, loss of taxes to the county, loss of  
> live-aboards due to loss of slip count who are not well represented  
> due to  
> state regulations, and are an underrepresented minority with specific  
> rights all are impacted significantly, resulting in increased housing  
> pressures, increased costs to the boating public at large, and may  
> well be  
> actionable. I strongly suggest that the report be recalled, these  
> sections reviewed as to the specific impact on liveaboards, and the  
> resultant effect on a specific cultural feature of ocean side  
> communities.  
> This is a great loss, of individuals with great capacity for adding  
> specific character and value to the community. The loss of this  
> constituentancy is irreplaceable, and a loss of a special aspect of  
> harbor  
> life.  
>  
> Regards,  
> Les H

**ORIGINAL****DEPARTMENT OF TRANSPORTATION**

District 12  
3337 Michelson Drive, Suite 380  
Irvine, CA 92612-8894  
Tel: (949) 724-2267  
Fax: (949) 724-2592



*Flex your power!  
Be energy efficient!*

**December 26, 2007**

Mr. Brad Gross  
Orange County, Dana Point Harbor Department  
24650 Golden Lantern  
Dana Point, California 92629

File: IGR/CEQA  
SCH#: 2003101142  
Log #: 1327-B  
SR #: PCH

**Subjects: Dana Point Harbor Marina Improvement Project**

Dear Mr. Gross,

Thank you for the opportunity to review and comment on the **Dana Point Harbor Marina Improvement Project**. The improvements include removal of nearly all floating docks and piles; reconstruction of portions of the dredged quay wall; gangways, security gates, and utilities. Dana Point Harbor is County owned and operated facility located in the southern portion of the City of Dana Point. The nearest State Route to the project is Pacific Coast Highway (PCH).

**Caltrans District 12 is a commenting agency** on this project and we have no comments at this time. However, in the event of any activity in Caltrans' right-of-way, an encroachment permit will be required. Applicants are required to plan for sufficient permit processing time, which may include engineering studies and environmental documentation.

Please continue to keep us informed of this project and any future developments, which could potentially impact the transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Maryam Molavi at (949) 724-2267.

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan P. Chamberlain".

Ryan Chamberlain, Branch Chief  
Local Development/Intergovernmental Review

C: Terry Roberts, Office of Planning and Research



**ORANGE COUNTY FIRE AUTHORITY**  
P.O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Rd., Irvine, CA 92602  

---

Chip Prather, Fire Chief (714) 573-6000

December 28, 2007

County of Orange  
Dana Point Harbor Dept  
Brad Gross, Director  
24650 Dana Point Harbor Dr  
Dana Point, CA 92629

Re: **Dana Point Harbor Subsequent EIR NOP**

Dear Mr. Gross,

Thank you for the opportunity to comment on the subject project. The Orange County Fire Authority does not believe this will be of any significant impact to our agency in regards to additional resources. Of concern to our agency is continued emergency access, fire lanes, and egress at the project and during the construction phases. We also wish to review the hydrant and water supply plans as early as possible.

For emergency access, we recommend the following mitigations:

- All traffic signals on public access ways that are a part of this project should include the installation of optical preemption devices.
- All electrically operated gates within the Project shall install emergency opening devices as approved by the Orange County Fire Authority. This includes the "man" gateways onto the docks.

While no additional public safety resources are needed as a result of this project, all standard conditions and guidelines will be applied to the project during the normal review process.

If you have any additional questions, please contact me at (714) 573-6199.

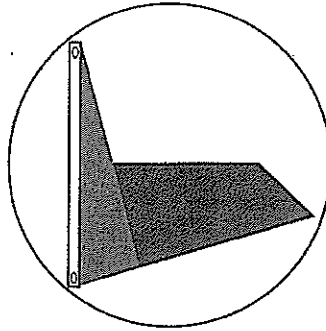
Sincerely,

A handwritten signature in black ink, appearing to read "Michele Hernandez".

Michele Hernandez  
[michelehernandez@ocfa.org](mailto:michelehernandez@ocfa.org)  
Management Analyst, Strategic Services

12-31-07A09:40 RCVD

*Dana Point  
Yacht Club*



*24399 Dana Dr. Dana Island  
Dana Point, Ca 92629  
949-496-2900  
Fax 949-496-1603  
dfyyc@dfyyc.org*

Brad Gross  
Director  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Dec. 28, 2007

Dana Point Yacht Club generally supports the intent of the Dana Point Harbor Revitalization Plan.

Having said that we feel that the latest placement of the temporary dock locations in the Proposed Layout R2 page 8/8 (see attached) "Proposed Harbor Layout Dana Point Harbor Marinas" Figure #3 Temporary Docks Labeled T-1, T-2 and T-3 present significant water and land-based issues. Until our very recent review of the above documents, the final proposed location of the temporary docks had not been revealed to Dana Point Yacht Club.

Having now reviewed these latest documents, we realize that these proposed locations will have the following significant water-based adverse impacts:

1. Decrease in safe navigable waters in an area historically impacted by shoaling; and
2. Impedance of egress and ingress of large and or deep drafted vessels combined with a reduction of the federal anchorage area.

In addition to waterway concerns, there are significant land-based considerations and impacts on parking and public facilities in that particular area of the island that are presently of concern without the additional impacts of the proposed location of these temporary docks.



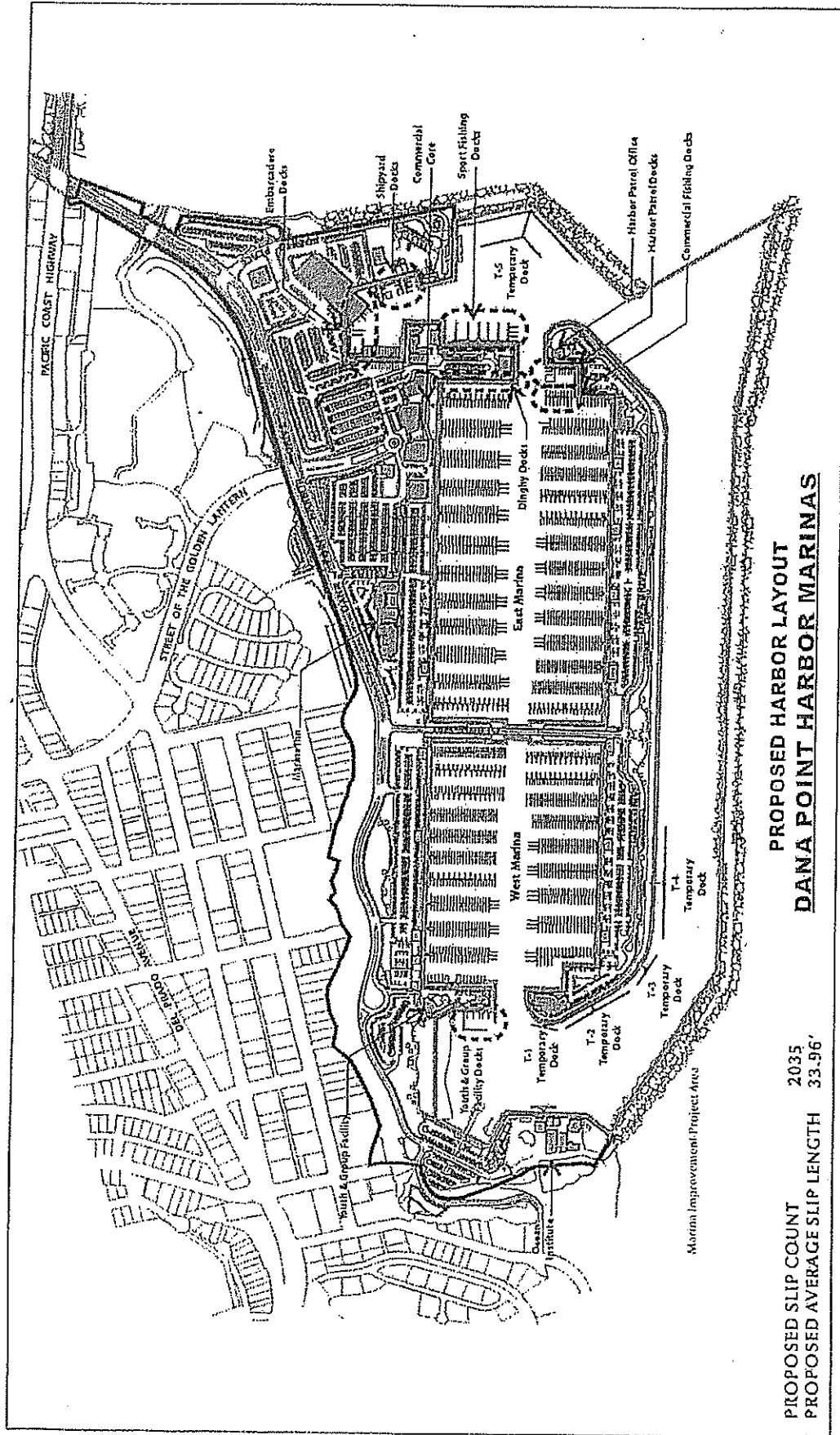
We feel that the placement of temporary docks needs further consideration, and we stand ready to work with the County to produce the most favorable plan for temporary docks in the Dana Point Harbor.”

I hope that this helps.

Sincerely,

A handwritten signature in black ink that reads "Suzanne Jones". The signature is written in a cursive style with a large, looping initial "S" and a long, sweeping tail that loops back under the name.

Suzanne Jones  
Commodore  
Dana Point Yacht Club



**PROPOSED HARBOR LAYOUT  
DANA POINT HARBOR MARINAS**

PROPOSED SLIP COUNT 2035  
PROPOSED AVERAGE SLIP LENGTH 33.96'

LSA

LEGEND  
 [Symbol] Boundary  
 [Symbol] Marina Improvement Project Area

NOTE: Landslide areas are shown in accordance with the Dana Point Harbor Revitalization Plan and District Regulations Land Use Plan.

FIGURE 3

Dana Point Harbor Marina Improvement Project  
Proposed Harbor Layout



January 2, 2008

County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Subject: City of Dana Point Comments on NOP for a Draft Subsequent EIR for the Dana Point Harbor Marina Improvement Project

Attn: Brad Gross, Dana Point Harbor Director

The City of Dana Point appreciates the opportunity to comment on the County's plans for the Dana Point Harbor Marina Improvement Project. It is understood that at the time the Program FEIR was prepared for the Dana Point Harbor Revitalization Project, specific details were not available for the proposed water-side (Marina) improvements. With more project-specific information and more detailed design and engineering plans available for that portion of the Revitalization Plan (Marina Improvement Project), it was determined that a subsequent EIR would be required to further analyze the waterside improvements.

In response to the Notice of Preparation circulated by the County of Orange, Dana Point Harbor Department, the following are the City of Dana Point's comments on the proposed scope and content of information to be included in the subsequent EIR:

1. It should be recognized as acknowledged in the subsequent EIR that the Marina Improvement Project will be in substantial conformance with the Dana Point Harbor Revitalization Plan as reviewed and approved by the City of Dana Point and submitted to the Coastal Commission.
2. Marina Lighting: The City agrees with the recommendation that final lighting improvement plans for the Marina Improvement Project should take into account the appearance of the Marina, including light and glare emanating from the Harbor, to surrounding areas of the City.
3. Water Quality: As water quality is one of the City's primary strategic goals, it looks forward to further review of proposed improvements and implementation of innovative measures designed for the purpose of improving water quality in the Harbor. A water quality management plan (WQMP) which will identify the site design, source control and treatment control best management practices (BMPs) for the project will be reviewed by the City when available.
4. The City agrees that any construction-related impacts should be further evaluated to determine mitigation measures necessary to minimize those impacts on surrounding traffic patterns and neighborhoods throughout the City.

Mr. Gross  
January 2, 2008  
Page 2

The City looks forward to continued cooperation between the City and the County Harbor Department towards the mutual goal of an improved and revitalized Harbor for years to come. Thank you for this opportunity for the City to comment on the County's plans for the Marina portion of the Dana Point Harbor.

Sincerely,



Kyle Butterwick, Director  
Community Development

c: Douglas C. Chotkevys, City Manager  
A. Patrick Munoz, City Attorney  
Brad Fowler, Director of Public Works  
Mike Tope

January 2, 2008

To all whom it may concern,

Below is a list of my questions and concerns regarding the written materials referenced as available to the general public during a presentation by Brad Gross, the Director of Dana Point Harbor Department (DPHD) on December 8, 2007. The materials referenced then, and which my feedback pertain to are the Scoping Meeting (SM), Notice of Preparation (NOP) and Initial Study Documents (IS) as well as in certain cases, various previously published DPHD staff and consultant reports including the Dana Point LCP, LCPA as well as the FEIR.

Please be advised that I am a member of the Dana Point Yacht Club (DPYC) and I am Treasurer and serve on the Board of Directors for the Dana Point Boater Association (DPBA). However, this submittal be viewed only as a public commentary from a boat owner, tenant of Dana Point Marina and regular user of the parklands surrounding the various Dana Point Harbor facilities.

Please do not hesitate to contact me at the postal address or email address provided below as may be appropriate. I also respectfully request that I be included on the distribution list for all relevant downstream documents and reports provided to the general public and other interested parties on this and related matters.

Sincerely,  
Rodger Beard

27595 Via Montoya  
San Juan Capistrano, CA 92675-5366  
[RodgerBeard@gmail.com](mailto:RodgerBeard@gmail.com)

Reference	Document	Page	Paragraph	Question/Concern
1	SM IS	9 2-2	Drawing 3	<p>Concern: Plan Layout 2C.2 w/ Channel Encroachment calls out a narrowing of the existing main channel near the island access bridge (Island Drive) from 200' to 95', creating an encroachment (a channel width reduction) of 105 feet versus the existing channel width. However there is an existing dry storage boatyard in this same area, which is occupied almost exclusively by about 30+ small 14-24' sailboats. Most all of these sailboats are exclusively sail-powered.</p> <p>Access from the dry storage boat launch area up to the main channel and out to sea will become much more difficult and perhaps not even practical during the typical light air conditions from this lea of the wind location following marina reconstruction. Further, the trek may also be hazardous, particularly during peak periods. Hazardous because the plan calls for the entire main channel width to decrease by 20% and the immediate area of the dry storage boatyard to decrease by 53%. This while at the same time the plan calls for the size of the average boat berthed in slips to increase by 14%. In other words, there will be bigger boats navigating in a much smaller space with the existing and much smaller sail powered boats. These small sailboats, already difficult to maneuver in the existing light air will typically be faced with even lighter air following harbor reconstruction due to the much smaller channel (an open area where the wind is less obstructed).</p> <p>The DPHD consultants have recommended more boater education and the elimination of all existing self-powered boat traffic during peak periods. It should be noted that this recommendation itself produces a questionable outcome, as well as most certainly accomplishing a significant reduction in existing boater access.</p> <p>But regardless, it seems apparent that the plan should be revised. Either the planned 53% reduction in channel width in the boatyard area should be rolled back and/or the existing dry storage boatyard should be moved to a more accessible location within the Harbor.<sup>1</sup></p>

<sup>1</sup> I pointed these concerns briefly during an invitation only meeting that the previous DPHD director held to introduce Moffatt & Nichol, the outside consultants engaged to perform a water traffic study. Approximately 25 selected boaters attended within the Harbor. It was stated at the time that extensive follow up interviews were to occur in the following months. While my name was listed within the final report along with these other boaters, I was not contacted subsequently and my brief remarks were misstated within the final Traffic Study Report in a way that does not reflect my point of view on this matter. Specifically, I do not believe that the lack of boater education is a root problem, nor do I believe that availability of boater education in conjunction with enforcement of a previously unknown / legally ignored statute barring self-powered boats on week ends and holidays would solve the problems I have described.

Reference	Document	Page	Paragraph	Question/Concern
2	SM	8, 9, 10	Drawings	<p>Question: There is an on-the-water area at the foot of the main channel which provides access/egress to the west basin that is shown as being utilized in the drawing on page 8 (existing prior to construction) but is being shown as unutilized on the drawings on following pages (during construction). The area I'm referring to is on the island at the point; the docks currently leased to DPYC. What is the plan if any for this area.</p>
3	SM IS	9 2-1	Drawing 9	<p>Concern: The plan calls for temporary docks to be installed along the outer channel in about 30' of relatively deep water, starting at the entrance /egress point for the west basin marina area, running across for the existing turning basin and anchorage and tall ships mooring pier and wrapping around to approximately half way to the island access bridge. There are several obvious issues with this plan:</p> <p>The slips at the point area occupy the deepest water in what is a very shallow area. So shallow that the area closest to the outer breakwater is currently an exposed, completely dry beach during low and mid tide. The amount of from at this point definitely would not provide enough room for safe navigation with the excessive traffic of mixed uses within this area. This area includes the tall ships arriving and leaving, visiting boats at anchor (as many as 50-75 during the summer week-ends and this is a favorite southern California anchorage, significant dinghy traffic associated with these anchored boats as well as access 900+ boats berthed in slips within the west basin. Last but not least, there are dozens of Capri 14 sailboats usually coming and going from the Youth and group facility and sailing within the protected turning basin area during high wind periods. Indeed, a check of available records will show numerous law suits during the past few years alone due to physical and property damages.</p> <p>Even if these facts were ignored however, the current plan would still be a no-go because there would be inadequate boater access to parking, shower, restroom and other boater accommodations within an acceptable distance of the point area.</p> <p>Fortunately there is a simple and I believe obvious solution: move the start point for the temporary docks from the point area to a respectful point before the start of the turn into the turning basin. In addition to improved safety, the just mentioned amenities would be more readily available following a shorter walk for most temporary slip tenants.</p>

Reference	Document	Page	Paragraph	Question/Concern
4	SM	8	Drawing	<p>NOP and IS documents profess to address all aspects of the Harbor Improvement Project, in other words any and all of on-the-water aspects of the Harbor Revitalization Project / Plan Program FEIR. This is appropriate because, among other things, the land-side equivalent project, known as the Commercial Core Redevelopment Project is being governed under a City of Dana Point administered Local Coastal Program which does not have jurisdiction over the water itself.</p> <p>So then, there appears to be a missing component in the scope of the NOP and IS documents: I am referring to the planned 400 boat, power boat barn or "stack". This building is planned to significantly protrude into the harbor waterway in the immediate area of the existing boat launch and existing shipyard. There are boater safety, water access, water quality questions and likely other questions (such as incremental police and fire protection requirements) that, while not necessarily an impediment to the planned construction, still must still receive California Coastal Commission review and approval. I'm guessing there may be other applicable government agencies which should have purview here as well.</p>
5				<p>Question: I did not feel from my fairly careful read of the NOP and IS that these reports demonstrated an adequate level concern for recreational boating safety so far. My previous two concerns serve to illustrate. This seems especially relevant because of legislative changes enacted since the harbor was originally constructed. Perhaps this is done at a later point but it would seem that there should be some consideration and specific written reporting prior to detailed engineering design, thereby to minimize the possibility of difficult to correct (and therefore costly mistakes being discovered later on.</p> <p>Please clarify how the process works here and /or otherwise address as appropriate.</p>



Reference	Document	Page	Paragraph	Question/Concern
6	SM	9	Drawing	<p>Concern: As is the case with legislative changes since original harbor construction that may have a potential impact upon recreational boating safety, so too have water quality status changes since the harbor was built originally. Beyond this, and as many know too well, Dana Point Harbor area has a very poor reputation for water quality, one of the worst reputations in Southern California. (Both Baby Beach and the outside anchorage area adjacent to and somewhat near the breakwater near Doheny Beach are recurring trouble spots.) DPHD and other government agencies have done commendable work in dealing with these problems so far. But claim the problems are solved. I believe has inadvertently been overlooked and should be addressed at is an opportune time.</p> <p>What I am referring to is adding a second pump out station in the harbor's East Basin. There are two out pump stations in the much smaller and less commercialized west basin today but only one today in the east basin. An important aside, the original harbor design called for two pump out stations in the East Basin (the second directly across the channel from the first) but somehow the second wasn't built for reasons which arguably would no longer apply if given appropriate consideration.</p> <p>I suggest that the project scope be amended to include a full and complete evaluation of this possibility.</p>
7				<p>Question: As a long time tenant within the harbor I have often been faced with what to do regarding storage of my auxiliary small boat or dinghy. In my case this is particular problem as I, like many others have a hard bottom dinghy which is quite bulky and heavy. There is limited storage available on racks in the parking lots near many of the boat docks but this storage is under utilized and were it utilized it would be insufficient. I believe there is an obvious reason why is true: there is no convenient means for a slip tenant to launch their dinghy, actually there is nowhere that is accessible within the harbor. So instead they store them on their docks, sometimes creating safety and access issues, or on their boats which is undesirable when a cruise is not in the offing, or worst case in the water where they typically act as a fairway obstruction.</p> <p>Won't this be an easy, relatively low or no cost problem to solve during harbor reconstruction? I believe this would also be a relatively significant revenue boating opportunity as there is clear perceived value.</p>

Reference	Document	Page	Paragraph	Question/Concern
8	IS	2-2	2 & 3	<p>Question: The IS verbiage implies that the 3' slip figure allowance is a recent accommodation due to overcrowding in the boat lengths which the plan calls to expand at the expense smaller lists. When was this "change in policy" introduced? My recollection is that it has been in place since at least the late 70's. I'm wondering whether it has been in place since the harbor was opened.</p>
9	IS	2-2	2 & 3	<p>Question: The IS discusses the planned increase in average slip size (an increase from 29.85 to 33.96' or 14%). The obvious implication is that this is good for recreational boating. Yet over 1100 boaters will be displaced (approximately ¾ of the boaters with a boat in this size category berthed within the harbor today) from their slips while the plan arranges for over 700 other boat owner to become new tenants in their place. In other words, the plan to eliminate the slips that certain boaters already in the harbor occupy today in order to make way for some slips desired by other boaters.</p> <p>Please provide a business case for why this is to be considered good for recreational boating, as well as why approximately 75% is the appropriate displacement percentage for boats under 30'. Please provide specific fact references and local California statistics supporting your conclusions.</p>
10	IS	2-6	3	<p>Question:</p> <p>The Environmental Analysis Checklist indicates under Population &amp; Housing that there is no impact or less than significant in each of three listed categories. Yet recreational boats, like their equivalent, mobile homes (on land), are considered second homes under California and federal law. Therefore, since they are second homes, the over 1100 boaters who are being displaced would definitely seem to fall into the classification "potentially significantly impacted".</p> <p>It appears that the lead agencies' position here is that not allowing new tenants for boats under 30' (new Dana Point Marina Company policy published publically 1/2/2008) will ultimately preclude eviction and thereby satisfy legal rights for homeowners in this class. Temporary use of large slips for smaller slip tenants following construction would also appear to be directed in this same direction.</p> <p>Has DPHD confirmed appropriate County and State governance supportive of this legal interpretation? If not, is there an intention to do so. If not, why not?</p>

Reference	Document	Page	Paragraph	Question/Concern
11	IS	3-30	1 & 2	<p>Question: Please describe specifically how the Program FEIR determines conclusively that the Revitalization Project (not the current project under consideration - was this a misstatement?) will improve recreational facilities standpoint when from a net service standpoint, less recreational boaters will be served.</p> <p>Please explain how the loss of 374 boater slips is considered "less than significant".</p> <p>Please specifically explain your basis for the general statement: "Cumulatively, the Revitalization Project, along with other future development, may potentially increase the use of existing areas and facilities" as well as the rest of the subject paragraph. Please also specifically clarify your level off confidence regarding your prediction.</p>

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REFER TO FILE #  
290529-0001

January 2, 2008

**VIA U. S. MAIL AND ELECTRONIC MAIL**

Brad Gross, Director  
County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

**Re: Comments on the Notice of Preparation for the Dana Point Harbor Marina Improvement Project**

Dear Mr. Gross:

We represent Anchor Marine Repair Company (“Anchor Marine”) regarding its interest in the Dana Point Harbor Marina Improvement Project (“Project”). Anchor Marine is the only shipyard in the Harbor. Anchor Marine plays a vital role in maintaining the functionality and safety of the harbor, and intends to continue that role, despite the fact that previous County plans (the Dana Point Harbor Revitalization Plan) reduced Anchor Marine’s existing 2.6 acre site to approximately 1.6 acres. This change in the parcel currently leased from the County will: reduce the boatyard area, reduce the on-site building, eliminate any opportunity to expand to service the larger boats planned for the harbor and drastically reduce parking. Anchor Marine supports the Harbor Department’s objective to improve water quality by: providing boat repair and maintenance services on land in an environmentally controlled facility, thus avoiding pollution impacts resulting from in the water repairs and travel to other harbor shipyards.

We previously submitted comments on earlier and related projects, specifically, on September 13, 2006, we submitted comments to the City of Dana Point on the Dana Point Harbor Revitalization Plan & District Regulations.<sup>1</sup> Our previous comments are incorporated herein by reference and attached for your convenience. Anchor Marine continues to be concerned about the need to consider and evaluate the relationship between water side and land side issues in the Harbor in planning and environmental documents, and the continued piecemealing and segmentation of the various functions of the Harbor as the County moves

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<sup>1</sup> Anchor Marine also submitted written comments on the Draft EIR No. 591 on November 8, 2005 and presented verbal comments at the Board of Supervisors hearing on January 31, 2006.

Brad Gross  
January 2, 2008  
Page 2

forward with implementing the Harbor Revitalization Plan. The two components, water side and land side, are integrally related, and changes in one of the components have the potential to result in secondary or indirect effects on the other component. This is especially true for boating related services, for example, normal boat maintenance and for emergency assistance.

The following are our comments on the Notice of Preparation for the Dana Point Harbor Marina Improvement Project, including comments on the scope and content of the environmental information to be included in the Subsequent Environmental Impact Report ("SEIR"):

1. The Project Description states that "the total number of boat slips ... would decrease from 2,409 to 2,035, resulting in a net loss of 374 slips." The Project Description, however, also states that the project will include a number of design measures "in an effort to limit the loss of slips." It is not clear whether the project includes a change in boat slips from 2,409 to 2,035, or if there is a different number of slips based on the efforts to limit the loss of slips. The Notice of Preparation ("NOP") does not state the number of boat slips that will be analyzed for purposes of analyzing impacts of the project and comparing those impacts to a "no project" alternative. The SEIR should be clear as to the number of boat slips analyzed as the after project condition.

2. The Project Description does not describe any change in overall Harbor operations related to the modified slip mix or other aspects of the Project. The Initial Study states that the land use of the site will not be changed, and the project "is not expected to increase capacity or add any significant amount of impervious surface to the project area. Long-term operations will not be significantly different than the current uses and are not expected to increase or introduce additional water quality pollutants." (Page 3-12).

Based on the NOP and Initial Study, it appears that the County is defining the project very narrowly, and is not planning a comprehensive analysis of the reasonably foreseeable operational consequences of the project. Changes in the slip mix, market demand and other factors, as referenced by the County on pages 3 and 4 of the NOP, would have reasonable foreseeable effects on the entire Dana Point Harbor. Foreseeable direct and indirect effects on both the landside and waterside environment, including water quality, traffic, noise and air quality effects should be evaluated.

3. In accordance with CEQA Guidelines section 15125, the SEIR must include a description of the physical environmental conditions as they exist at the time the NOP is published. While the NOP/Initial Study indicates no change in operations, it is unclear whether this is based on a factual description of current conditions. For example, the *Dana Point Harbor Boat Traffic Study* ("Boat Traffic Study"), November 2007 states that power boat usage is double sailboat usage (page 39). The Project Description references changes in the boating needs of the public, and that 400 boats presently exceed the policy allowing boats to be up to 3 ft. longer than their dock length. To the extent these trends and factors are present in the existing conditions at

Brad Gross  
January 2, 2008  
Page 3

the harbor, the SEIR must describe them as part of the existing conditions. The environmental setting “will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant.” (CEQA Guidelines § 15125, subd., (a).) *Save Our Peninsula Comm. v. County of Monterey*, (2001) 87 Cal. App. 4<sup>th</sup> 99, 125 (explaining that an EIR must adequately describe an existing land use because “the significance of a projects impacts cannot be measures unless the EIR first establish[es] the actual physical conditions on the property.”) Thus, it is important that the County identify those existing conditions and operations in order to provide a thorough assessment of any potential impacts associated with the project.

4. Although the project is framed simply as a dock replacement project, the dock replacement includes reconfiguration of the docks and also includes new dry stack storage staging docks and dinghy docks, among other changes. The new dry stack storage staging docks are presumably to service the new dry stack storage planned as part of the land side improvements. This highlights the close relationship between the land side and water side facilities and the importance of evaluating any direct, indirect or secondary effects of the Project on the rest of the Dana Point Harbor.

5. While framed as a dock replacement, it is unclear to what extent future use of the docks is expected to change based on the Dana Point Harbor Revitalization Plan or other trends. To the extent that the land side and water side changes are inconsistent and adequate support facilities are not provided, the marketplace will respond in ways that may have environmental impacts. The planned reduction in shipyard acreage may result in repair demand being met through freelance work. For example, it is reasonably foreseeable that additional freelance boat repair/painting work will be conducted in the water or from the docks, in close proximity to the water or in the water. Boat maintenance work at these locations can significantly degrade water quality. Work in the water may increase the release of potentially hazardous materials such as copper-based paints from boat hulls. Other maintenance that may occur without hauling out to a shipyard could include varnishing, topside painting, sanding and waxing. These types of maintenance might also increase the release of potentially hazardous materials into the water, including varnish, wax and paint and related debris. The water quality and other impacts of such repair work must be addressed in the SEIR.

6. The SEIR cannot evaluate water quality impacts within the Marina waterways without evaluating the critical issue of where boat maintenance and repair will occur.

The SEIR should take into account the effect the reduced Dana Point Shipyard service area will have on water quality, since a reduction of “on-land” boat service and maintenance area will potentially increase “in-water” repairs and maintenance.

7. The SEIR should evaluate the potential increase in the copper contamination of the Dana Point Harbor due to continuation of or increase in the current level of underwater

Brad Gross  
January 2, 2008  
Page 4

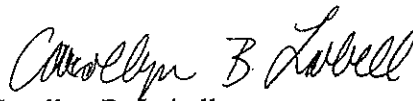
hull-cleaning (see Technical Report 483/March 2006 – “Extent and Magnitude of Copper Contamination in the Marinas of the San Diego Region.”)

8. As part of the reconfiguration of the docks, the Project also includes an increase in surface area of the floating docks and encroachments into the channels. This increase in encroachment was one of the reasons for conducting the Boat Traffic Study. While purportedly addressing existing and future boat traffic conditions, the Boat Traffic Study did not analyze such conditions in the basin between the East Basin and the easternmost basin where the dry stack storage staging docks would be located (Planning Area 11). Since the Project includes new and replacement facilities in Planning Area 11, boat traffic in Planning Area 11 should be addressed in a Boat Traffic Study and in the SEIR. Table 3-2 of the Boat Traffic Study references the Small Day-Use Vessel traffic as 44 % of the total watercraft observed, yet, the study did not evaluate conditions where such craft are launched, and did not evaluate future conditions with the new dry stack storage staging docks.

The NOP states that the Project also includes new dry stack storage staging docks. The Boat Traffic Study and the SEIR must also address existing and future conditions, including the types of boats expected to use the dry stack storage staging docks ramp and operations in the harbor based on those conditions.

If you have any questions, please feel free to call me at 949-833-7800.

Very truly yours,



Carolyn B. Lobell  
of NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

CBL/rst  
Enclosure

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September 13, 2006

REFER TO FILE NUMBER

290529-0001

**VIA E-MAIL AND HAND DELIVERY**

Kyle Butterwick  
Director of Community Development  
33282 Golden Lantern  
Dana Point, California 92629

Re: Comments on the Dana Point Harbor Revitalization Plan & District Regulations

Dear Honorable City Council Members:

We represent Anchor Marine Repair Company (“Anchor Marine”) regarding its interest in the Dana Point Harbor Revitalization Plan and District Regulations, as modified by the Boat Storage Alternative (493) graphic proposed by the County of Orange (“Revitalization Plan” or “Plan”). The Revitalization Plan is proposed by the plan Proponent as an amendment to the city of Dana Point (“City”) Local Coastal Program (“LCP”), which, if approved by the City, would be included as part of the City’s General Plan and zoning code, and would constitute: (i) the LCP for the Dana Point Harbor area of the City; and (ii) the City’s local land use designations and zoning regulations, as well as LCP implementation actions, governing development and improvement of the Harbor area. This letter provides formal comments on the Plan as currently proposed by the County of Orange (“County” or “Plan Proponent”), and offers solutions to some of the land use planning issues with the current draft of the Plan.

Please include these comments in the administrative record for this matter. On June 7, 2006, we provided comments on this matter when it was before the City Planning Commission. On September 7, 2006 we provided the harbor Revitalization Plan Consistency Analysis with Planning Commission Resolution No. 06-06-21-22 and Preliminary Comments (the “Consistency Analysis”). Those comments in relevant part supplement this letter, and are incorporated herein by this reference.



Dana Point City Council  
September 13, 2006  
Page 2

## 1. INTRODUCTION.

Anchor Marine has operated the Dana Point Shipyard (“Shipyard”) at its present location in Dana Point Harbor for approximately 30 years. Since that time, the Shipyard has been the only shipyard operation at Dana Point Harbor (“Dana Point Harbor” or “Harbor”). The Shipyard is the sole maintenance facility for boats that visit or are stored, anchored or moored at the Dana Point Harbor. The Shipyard provides necessary boat maintenance and repair operations, including, but not limited to: (a) painting and sanding of boat hulls; (b) removal and application of exterior/interior surface coating; (c) engine repair; and (d) general mechanical repairs. The Shipyard also provides secondary response emergency services at the request of emergency services authorities for boats in emergency situations, such as sinking, fuel tank rupture, and fire. Depending on circumstances such as weather, the Shipyard engages in such secondary emergency response services as many as twenty times a year.

Anchor Marine has been actively engaged with the Plan Proponent in trying to reach a design for the Harbor that not only revitalizes the Harbor in general, but also ensures that the Harbor is safe, capable of fully servicing the needs of the Harbor’s boating public, and avoids and reduces significant adverse environmental impacts, including aesthetic, land use, public health and safety, traffic and circulation, and water quality impacts.

We understand from our correspondence with the Plan Proponent, and our attendance at the August 24<sup>th</sup> Revitalization Plan Open House, that the Project Proponent has modified the Plan to remove the previously proposed second dry stack boat storage facility (“Dry Stack 2”). Anchor Marine supports that modification and replacement of Dry Stack 2 by consolidation and redesign of the first dry-stack storage unit, or relocation offsite.

Even with the proposed modification, however, the current Plan still falls short of resolving several key land use concerns and environmental issues affecting the Shipyard and the Harbor in general. Specifically, the Plan, as modified, still does not provide for an adequately sized Shipyard and still has the potential to result in significant environmental impacts not adequately analyzed or sufficiently mitigated for by Revitalization Plan project design features or mitigation measures under County of Orange Environmental Impact Report No. 591 (“EIR 591”), as required under the provisions of the California Environmental Quality Act (Pub. Resources Code §§ 21000-21178 et seq.) (“CEQA”), including CEQA provisions applicable to certified regulatory programs (CEQA § 21080.5(3)(A) and CEQA Guidelines § 15252(a) (California Code of Regulations, Title 14, Chapter 3).

Minor revisions to the Revitalization Plan as suggested in Attachment “A” to this letter would provide, at a program level, for a shipyard of adequate size, without limiting the Plan Proponent’s future site design flexibility. These revisions are derived from, and supported by the substantial evidence set forth in the Planning Report, prepared by Marina Business

Dana Point City Council

September 13, 2006

Page 3

Associates and set forth in Attachment "B" to this letter. These revisions would assure a shipyard of adequate size, and would eliminate potentially significant, and currently unanalyzed impacts associated with the reduction in shipyard size proposed by the Revitalization Plan. We request that the City exercise its land use authority to require the revisions to the Revitalization Plan requested in Attachment "A," resulting in a land use plan that provides an adequate shipyard and full service Harbor, and eliminating the potentially significant, but unanalyzed environmental impacts associated with the County's proposed reduction in the are devoted to provision of shipyard services. With the amendments suggested in Attachment "A," Anchor Marine would support the approval of the Revitalization Plan as modified.

## **2. INSUFFICIENT NOTICE AND PLANNING INFORMATION.**

During review of the Plan and discussions with the Plan Proponent it has become clear that very little formal input or advice has been sought or incorporated into the Revitalization Plan from either boaters or experts in harbor or marina planning. With respect to input from boaters, the Plan Proponent and the City have not provided adequate information and notice to the boating public, including those boaters currently owning leasehold interests in the slips within the Harbor, whose interests will be directly affected by the approval of the Plan.

At Anchor Marine's request, notice of the September 13, 2006 City Council hearing was provided to boaters. However, notice of the City Council hearing was the first notice provided to the boaters renting slips in the Harbor. Further, the notice to the public and to the boaters, when sent, did not include a revised version of the Plan, or any information other than a single graphic labeled Boat Storage Alternative (493) that would allow the public to understand the Plan Proponent's version of the Plan as recently revised. As a result, the Plan Proponent and City have not given the boaters, or the public, ample opportunity to review the revised Revitalization Plan that the County is proposing and the City is considering. Further, the Plan Proponent and the City have not assured the public a sufficient and meaningful opportunity to comment on the final Revitalization Plan, as recently revised, or to participate in the public process.

In light of the failure to provide proper notice of the Revitalization Plan and approval hearings, the Plan's potential impacts, and administrative process associated with the Plan, we request that the City (1) distribute or make available to the public a revised version of the Revitalization Plan, including revisions to Plan text and district regulations, (2) provide additional time for boaters and the public to review the Revitalization Plan as proposed; and (3) solicit additional input from boaters prior to adopting the final Plan.

With respect to planning information, it appears that the County has not yet contracted with a harbor or marina planning specialist in preparing the Plan. As a result, Anchor Marine retained a team of land use, marina and harbor planning experts to develop solutions to inadequacies in the Plan. Those solutions are summarized herein and presented in detail in the

attached materials. Many of the issues that Anchor Marine's consultants have analyzed are related to the ability of the Harbor -- in its current condition and as proposed by the Revitalization Plan -- to serve as a full service Harbor, designed appropriately to accommodate current and anticipated boating traffic, and capable of providing sufficient boat services, including maintenance, repair and secondary response emergency salvage services, to current and anticipated boaters utilizing the Harbor.

In an effort to support good land use planning for the Harbor, we not only provide comments on the substantive and procedural inadequacies associated with adoption of the current draft of the Revitalization Plan, but we also offer for the City's consideration well-designed and sustainable Harbor solutions for the Shipyard parcel as recommended by the Anchor Marine harbor planning experts. Because the Plan is not only the Plan Proponent's proposal for an LCP amendment, but also constitutes the City's local land use regulations, we submit that it is critical to the City's ability to provide for the future orderly development of its Harbor area to address land use planning issues and potential significant environmental affects associated with the proposed Plan now.

**3. THE REVITALIZATION PLAN IS INTERNALLY INCONSISTENT, AND DOES NOT PROVIDE FOR AN ADEQUATELY SIZED SHIPYARD CAPABLE OF FULLY SERVICING THE CURRENT AND ANTICIPATED BOATING NEEDS OF THE HARBOR.**

There are approximately 3,000 boats in the Dana Point Harbor. There is one Shipyard. By contrast, Newport Bay Harbor (which the Plan Proponent has cited as a model for, and as anecdotal evidence supporting the shipyard design set forth in the Revitalization Plan) serves approximately 6,400 boats, with 5 shipyards. All 5 of the Newport shipyards indicated they have a waiting period and require reservations 2-4 months in advance for most regular shipyard service.

The existing Shipyard parcel is approximately 2.6 acres and contains a boat maintenance yard, dock systems, a 5,000 square foot parts and administrative office building, a travel-life boat hoist, water quality clarifications systems, boat storage areas and associated parking spaces for the Shipyard customers and employees.<sup>1</sup>

Despite obvious discrepancies between planned shipyard capacity and current and anticipated boating services demand, the May 2006 draft of the Revitalization Plan and EIR 591

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<sup>1</sup> A small portion of the site contains the Dana Point Jet Ski rental operation. It should be understood that the current boat storage and Jet Ski rental operations are not critical to providing marine repair and maintenance services to boaters in the Harbor. Currently, these operations serve as a source of "offset" revenue to fund ongoing operations despite the cyclical nature of the Dana Point Shipyard's business. If the Shipyard is provided with adequate space under the Revitalization Plan to service larger boats currently utilizing and anticipated to use the Harbor under the Plan, the need for "offset" revenue will be reduced, and these operations can be replaced with boater services.

Dana Point City Council

September 13, 2006

Page 5

proposed the Shipyard parcel *be reduced* to approximately 1.0 acre by minimizing the boatyard area, reducing the on-site building to 2,500 square feet, eliminating boat storage and drastically reducing parking. (Revitalization Plan Statistical Table No. 17-A).

Under the Boat Storage Alternative (493), the modification to the Plan recently proposed by the County, the reduction of the Shipyard parcel *appears* to be less dramatic (*reduced to approximately 1.6 acres*). It is not entirely clear, however, absent a revised version of the Revitalization Plan, that a 1.6-acre area will be devoted to the provision of those services. Because the Plan Proponent has provided only the graphic labeled Boat Storage Alternative (493) to the public, and because that graphic conflicts with the text of the current draft of the Plan, which has not been revised, including land use statistic and zoning tables, district regulations and other critical components of the proposed local land use regulations within the Plan, the current Plan is internally inconsistent and lacks the clarity required to provide actual notice of the land use regulations proposed, and, if adopted, to be enforced by the City.

In addition, the County provides no planning information regarding the type of facilities or minimum appropriate space planning requirements for the Shipyard necessary to service the current and anticipated mix of boats using and anticipated to use the Harbor in support of the 1.6-acre shipyard services designation. As a result, the County's proposal for a single 1.6-acre area dedicated to providing shipyard services for the entire Harbor is not supported by any planning analysis or other substantial evidence that shows that the parcel will be adequate to meet the needs of the Harbor under the Revitalization Plan.

In verbal statements and presentations (but not within the Plan itself), the Plan Proponent has justified the reduction in the shipyard size based upon: (1) the size of other shipyards, particularly those in Newport Bay Harbor; and (2) the argument that the current 2.6-acre shipyard parcel is not *currently* used entirely for boat maintenance and repair activities and thus can be downsized.

Given the difference in the number of shipyards servicing Newport Harbor, comparisons to Newport Harbor shipyard sizes do not appear to present a valid basis for reducing the size of the Dana Point Shipyard. Similarly, the *current* uses of the shipyard, which are the result of economic, personal preference, and other non-land use planning factors, are not a sufficient basis for determining the appropriate size of a shipyard to service the Harbor under the Revitalization Plan. In accordance with good land use planning principles, the Plan must provide for a shipyard of sufficient size to accommodate the needs of both the current and anticipated mix of boats that will use and be stored within the Harbor.

To assist the Plan Proponent in using an appropriate land use planning approach to determining the appropriate area for shipyard uses, Anchor Marine provided the Plan Proponent with a report prepared by Marina Business Associates regarding current and

anticipated boat mix within the Harbor, and resulting shipyard minimum and appropriate requirements. See Attachment B.

As explained in detail in that Planning Report, boat sizes in general have been increasing in California harbors and marinas due to a variety of market related factors. Today, the average size of a small boat is larger than it was 10 to 15 years ago, and boat sizes are generally increasing. Today, the Harbor has a significant number of large boats that cannot be serviced because the Shipyard because, for economic rather than land use planning reasons (*e.g.*, local economic downturn, shipyard lease terms, *etc.*), the Shipyard is not outfitted with adequate equipment or space planning to accommodate these larger boats.

In addition, as discussed in the Planning Report, the Revitalization Plan increases the size and number of larger vessels in the Harbor so that approximately 200 vessels averaging 65 feet are added to the current boat population. This will create demands on the Shipyard that cannot be met by a facility operating under the space constraints proposed by the Plan. The 1.6 acre area to be designated for shipyard services under the Plan is simply insufficient to meet the service demands of the current and anticipated boat mix utilizing the Harbor. As concluded in the Planning Report, based on boat mix projections and site planning design alternatives analysis, the Plan must allow for a **2.5-acre shipyard area** to provide appropriately for full service shipyard for the entire term of the Plan. At a minimum, the plan must allow for a 2.1-acre area devoted to shipyard services to meet the current and anticipated need for boating services within the Harbor.

As demonstrated below, a truncated Shipyard will result in a number of potentially significant environmental impacts, and will conflict with the goals of the Coastal Act.

**4. THE CITY'S DISTRICT REGULATIONS AND UNDERLYING REVITALIZATION PLAN EIR ARE INADEQUATE TO SUPPORT APPROVAL OF THE PROPOSED LCP AMENDMENT.**

**A. The City Must Implement a Process Consistent with CEQA, including the CEQA Requirements for Functionally Equivalent Environmental Review, for Approval of the Proposed District Regulations and LCPA.**

As noted above, the Revitalization Plan is proposed by the Plan Proponent as an amendment to the City LCP, which, if approved by the City, would be included as part of the City's General Plan and zoning code, and would constitute: (i) the LCP for the Dana Point Harbor area of the City; and (ii) the City's local land use designations and zoning regulations, as well as LCP implementation actions, governing development and improvement of the Harbor area. Accordingly, the discretionary action to approve this proposed amendment to the LCP and local land use regulations must be analyzed under CEQA (Pub. Resources Code §§ 21000-21178 et seq.) ("CEQA"), including CEQA provisions applicable to certified regulatory programs

(CEQA § 21080.5(3)(A) and CEQA Guidelines § 15252(a) (California Code of Regulations, Title 14, Chapter 3).

With respect to functionally equivalent environmental review, CEQA provides that, in certain situations, a statutory exemption applies to “activities and approvals by any local government as necessary for the preparation and adoption of a local coastal program.” (Pub. Resources Code, § 21080.9). According to City Resolution No. 06-06-21-22, the City intends to rely on avail itself to this limited exemption in approving the Plan. Specifically, the Resolution states that “the preparation and adoption of the Local Coastal Program Amendment is statutorily exempt from the California Environmental Quality Act, pursuant to Section 21080.9”

The City’s reliance on the statutory exemption the Revitalization Plan does not allow the City to evade environmental review under CEQA. Further, because the Revitalization Plan constitutes not only an LCP amendment, but also the City’s local land use regulations governing development and improvement of the Harbor area, the City must consider the environmental consequences associated with adoption of the Plan. While ultimate approval authority for the LCP Amendment rests with the California Coastal Commission (“Commission”), the City will be bound by the Plan as its local land use regulation, and accordingly must assure that the Plan and EIR 591 sufficiently analyze potential significant adverse environmental affects associated with its implementation.

The Commission itself is subject to CEQA when it certifies or modifies the Plan under the California Coastal Act (“Coastal Act”). (Pub. Resources Code, § 21080.9). The statutory exemption upon which the City relies merely establishes that the Plan should be analyzed under CEQA as a “certified regulatory program,” requiring an environmental analysis document that is the *functional equivalent* of, in this case, an environmental impact report (EIR) under CEQA. (CEQA Guidelines, §§ 15251, subd. (g); 15252.) While functionally equivalent documents are exempt from Chapter 3 of CEQA, as well as certain other provisions of the statute related to challenging the lead agency’s determination pursuant to the document, the purpose and intent of CEQA, and, in general, the substantive requirements governing content and consideration of environmental impacts associated with a proposed LCP amendment must be satisfied. (Pub. Resources Code § 21080.5; CEQA Guidelines § 15250.)

CEQA §21080.5 does not grant qualifying agencies a blanket exception from all CEQA provisions. Instead, certified regulatory programs excuse certain aspects of CEQA mentioned above, but an agency operating pursuant to a certified regulatory program must comply with all of CEQA’s other requirements. (*Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal. 4<sup>th</sup> 105, 113-114). While a certified regulatory program may use its own plan or document in lieu of environmental document required by CEQA, it may do so only if the document includes a description of the proposed activity and its significant adverse impacts along with a discussion of alternatives and mitigation measures that will reduce those impacts. Pub. Resources Code §§ 21002; 21080.5(d)(2), (3). Thus, the environmental analysis and

documentation required of certified regulatory programs is subject to the broad policy goals and substantive standards of CEQA. See, *Sierra Club v. State Board of Forestry* (1994), 7 Cal. 4<sup>th</sup> 1215.

The California Supreme Court confirmed that CEQA's exemption for state agencies with certified regulatory programs is limited, rather than absolute. (*Sierra Club v. State Board of Forestry* (1994) 7 Cal.4<sup>th</sup> 1215). The agency must conform not only to the detailed and exhaustive provisions of the act governing it [here, the Coastal Act] but also those provisions of CEQA from which it has not been specifically exempted by the legislature. (*Id.* at p. 1228), including provisions requiring recirculation of environmental documentation and analysis for previously unanalyzed impacts associated with a proposed plan. (*Joy Road Area Forest and Watershed Association v. California Dept. of Forestry & Fire Protection*, No. A105421 (Cal. Ct. App. 1<sup>st</sup> Aug. 30, 2006)).

Moreover, the City has an important duty and interest in adopting local land use regulations to assure that environmental impacts have been adequately analyzed. Therefore, the City should adequately evaluate the adverse environmental effects of the Revitalization Plan in accordance with the substantive requirements of CEQA before the Plan is approved. Neither the Revitalization Plan nor EIR 591 have adequately analyzed potentially significant environmental effects associated with associated with reducing the Shipyard site as proposed by the Plan consistently with the purpose, intent or substantive requirements of CEQA or the Coastal Act. See Section 4.C. below.

**B. The Revitalization Plan is Inconsistent with the Coastal Act and Incapable of Supporting the Required Findings for Submittal of the Plan to the Coastal Commission.**

City Code 9.61.080 (e)(3) lists the required findings the City must make before submittal of an LCP amendment ("LCPA") to the Commission. The Plan and EIR 591 fail to provide the City with sufficient evidence to make the findings and determinations required by the City Code.

All policies, objectives and standards of an LCPA must conform to the requirements of the Coastal Act. (City Code 9.61.080(e)(3)(B)). As discussed below, the Revitalization Plan provisions do not conform to the Coastal Act with regard to the land use plan for the Shipyard parcel.

(1) **Non-Water Dependent Land Uses are Not Limited:** The Coastal Act states that increased recreational boating use of coastal waters "shall be encouraged" by, inter alia, limiting non-water dependent land uses that congest access corridors and preclude boating support facilities. (Public Resources Code, § 30224). The Revitalization Plan proposes that either dry stack storage or up to 93 surface storage spaces would occupy a portion of the current Shipyard parcel, both of which would reduce the Shipyard's size below that shown by

substantial planning evidence to be necessary to provide adequate shipyard services for the current and anticipated mix of boats utilizing the Harbor. Introduction of boat storage space in proximity to the main launch area will also congest auto and boat traffic, parking and the main boating access corridor to the Harbor. Therefore, the Revitalization Plan provisions are not consistent with the Coastal Act because they introduce non-water dependent land uses at the expense of a boating support facility.

**(2) Adverse Water Quality Effects Resulting from Wastewater and Discharges Are Not Minimized:** The Coastal Act also states that quality of coastal water shall be maintained through minimizing adverse effects of waste water discharges, controlling runoff and encouraging waste water reclamation. (Public Resources Code, § 30231). The reduction of the Shipyard site will result in the inability of the Shipyard to meet the demands of the boating community at the Harbor. Boating is inherently maintenance-intensive. If the Shipyard cannot service local demand for repair and maintenance work, there will be an increased likelihood that boaters will resort to self-help measures. Such work generally occurs in the slips, and is not subject to the environmental controls imposed by the Regional Water Quality Control Board ("RWQCB"). In contrast, the Shipyard's proposed improvements control site run-off using a water clarification systems that meet the requirements of its individual NPDES water quality control permit, thereby assuring that boat maintenance services are performed in a controlled, environmentally regulated environment protecting water quality.

**(3) The Potential for Increased Water Quality Impacts Resulting from Spillage of Crude Oil, Gas and Petroleum Products Is Not Addressed:** The Coastal Act requires that protection from spillage of crude oil, gas and petroleum products shall be provided in relation to any development. (Public Resources Code § 30232). The Shipyard regularly provides secondary response emergency services to sinking vessels under the direction of emergency authorities by removing them from the water, and mitigating environmental impacts resulting from the leakage of gas and oil into the Harbor. Under the proposed Revitalization Plan, the Shipyard's capacity will be limited, resulting in an increased likelihood of additional water quality impacts. Therefore, substantial reduction of the Shipyard site would result in conflict with the Coastal Act requirements for protection of the marine environment.

**(4) Recreational Boating Industries Must Be Protected:** The Coastal Act states that recreational boating industries "shall be protected and where feasible, upgraded." (Public Resources Code, § 30234). The Shipyard is key participant in the recreational boating industry. The Revitalization Plan reduces the Shipyard site, thereby reducing its ability to fully serve the recreational boating public. The Plan as proposed fails to provide for an adequate area to provide Shipyard services, and reduces the area designated for provision of shipyard services to the recreational boating industry. Further, Anchor Marine has proposed to upgrade its facility with private funding if the Revitalization Plan can be revised to provide for a shipyard area of adequate size to accommodate the current and anticipated mix of



boats utilizing the Harbor. Therefore, the Revitalization Plan provisions related to shipyard services are inconsistent with the Coastal Act.

**(5) Scenic and Visual Qualities Are Not Protected:** The Coastal Act states that scenic and visual qualities of the coastal areas shall be considered and protected as a resource of public importance. (Public Resources Code, § 30251). The Revitalization Plan has the potential to result in significant unavoidable impacts to beach users and views due to the construction of dry stack boat storage on or adjacent to the Shipyard parcel. The Boat Storage Alternative (493) made available to the public provides no information regarding the aesthetic or visual impacts associated with the site design proposed by that alternative, which includes the reconfiguration of the dry stack storage 1 facility, or the avoidance or mitigation of any remaining aesthetic impacts. Anchor Marine supports removal of the second dry stack as proposed by the County. However, the Revitalization Plan should be further revised to analyze the remaining visual resource impacts associated with the remaining dry stack storage building, and any available minimization and mitigation measures..

**(6) Coastal-Dependent Developments Have Priority:** The Coastal Act requires that coastal-dependent development shall have priority over other development on or near the shoreline. (Public Resources Code, § 30255). Coastal-dependent development or uses are defined as those uses that require a site on, or adjacent to the sea to be able to function at all. (*Id.* at § 30101.3). Due to the nature of Shipyard services, the facility must be located adjacent to the sea in order to access boats requiring service or emergency haul outs. The Revitalization Plan reduces the Shipyard site in favor of providing either parking or surface boat storage. Parking is not a coastal-dependent use, and several alternatives for both parking and storage have been presented to the Plan Proponent for consideration, but have not yet been analyzed. In addition, alternatives for preserving shipyard area in other locations within the Harbor currently proposed for non-coastal depended uses have been proposed to the Plan Proponent, but have not been evaluated.. Pending evaluation of alternatives that would provide a shipyard, which is a coastal-dependent land use, with adequate area to provide necessary Harbor services, the Revitalization Plan is inconsistent with the Coastal Act.

**(7) Coastal-Dependent Facilities are Assured Long-Term Growth on Existing Sites:** The Coastal Act states that coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth. (Public Resources Code, § 30260). Anchor Marine has proposed to privately fund expansion of the Shipyard services and equipment to accommodate the mix of boats in the Harbor and those anticipated under the Revitalization Plan. The Revitalization Plan reduces the size of the Shipyard from 2.6 acres to either 1.0 acre or 1.6 acres, depending on the alternative selected. This proposed reduction in shipyard services area not only precludes the Shipyard's long-term growth by reducing its site acreage, but also precludes the Shipyard from fully servicing the needs of current boats utilizing the Harbor. Therefore, the Revitalization Plan is inconsistent with the Coastal Act.

In light of the forgoing inconsistencies with the Coastal Act, we request that the City re-evaluate the size and land uses proposed for the Shipyard parcel and revise the current Revitalization Plan as suggested in Attachment A to assure that the Plan, as amended, provides for a shipyard of adequate size within the Harbor in accordance with the provisions of the Coastal Act discussed above.

**C. The City Must Consider the Unanalyzed Environmental Impacts Associated with the Revitalization Plan as Currently Proposed.**

To satisfy the requirements of CEQA, including those applicable to certified regulatory programs and the preparation of functionally equivalent environmental analysis discussed in Section 4.A. above, the City must include a discussion and analysis of any significant or potentially significant adverse effects on the environment as well as alternatives, design features and mitigation measures proposed to avoid or reduce such effects. (See, e.g., Pub. Resources Code, §§ 21002; 21080.5(d)(2), (3), CEQA Guidelines, § 15252, subd. (b)). Accordingly, the City must consider the following potential impacts, among others:

(1) **Water Quality Impacts:** The Commission produced a “California Clean Marina Toolkit” designed to help marina operators manage a “clean marina.” These practices should be implemented by the Dana Point Harbor operators. As a requirement, marina rules prohibit rebuilding, hull painting and other major repairs while the boat is moored at the marina. Rules also restrict sanding, painting and the use of chemicals on a boat moored in the marina. The Shipyard is the appropriate place to perform the aforementioned maintenance activities. The Shipyard is regulated by the RWQCB and equipped with water quality clarification systems that treat water before it is discharged from the site. If the Shipyard is reconfigured as proposed there will be substantially less space and capacity to perform such services. This will lead to an increase in the release of potentially hazardous materials to ocean waters due to in-water services. The Revitalization Plan and EIR 591 fail to address even a single potential adverse water quality impact associated with substantially reducing the service capacity of Harbor’s only Shipyard.

(2) **Public Safety and Fuel Spill Impacts:** The Revitalization Plan ignores impacts related to secondary response to boating emergencies. The Shipyard provides critical secondary response emergency services on a regular basis. The Shipyard is the only facility capable of assisting authorities in emergency response by hauling out sinking and fire-damaged boats, and providing safe harbor for malfunctioning boats that could endanger boat occupants, or result in additional water pollution from leaking fuels and other on-board toxic material releases. The Revitalization Plan and EIR 591 fail to analyze these significant and adverse public safety and water quality impacts.

(3) **Parking and Circulation Impacts:** The parking analysis supporting the Revitalization Plan contains errors, including errors relative to Shipyard parking assumptions and provisions, that render it inadequate. First, the parking analysis is required to

adequately describe existing parking. The County analysis indicates Shipyard site has only 6 existing parking spaces. There are currently 30 parking spaces on site, all of which are currently utilized during peak period by Shipyard employees and customers. Second, the parking analysis is required to forecast whether adequate parking would be provided upon build-out of the Revitalization Plan. The County analysis arrives at "required" parking spaces by assuming the Shipyard is a "motor vehicle sales & auto repair facility." The analysis further assumes that the parking demand is generated by the Shipyard building space alone, which is inaccurately calculated at 2,500 square feet. The Shipyard building is 5,000 square feet. The Shipyard site contains multiple indoor and outdoor marine repair activities and is not at all similar to a motor vehicle sales & auto repair facility. Proposed Boat Storage Alternative (493) does not offer any resolution or information regarding reduced parking for the shipyard, and parking impacts are not adequately analyzed by the Revitalization Plan or EIR 591.

**(4) Alternatives:** The Legislature has declared the policy of the state that public agencies shall not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. Pub. Resources Code, § 21002; 21080.5(d)(2), (3). Instead of using critical Shipyard space for parking or surface boat storage, several viable alternative locations for those uses have been suggested within the Harbor or in the immediate vicinity. These alternatives, discussed in the Consistency Analysis previously submitted to the Plan Proponent and the City must be evaluated prior to adopting the Revitalization Plan and reducing the area devoted to provision of shipyard services to a size that is inadequate in light of available planning information set forth in Attachment "B."

**(5) Improper Deferral and Piecemealing:** Analysis of environmental impacts and formulation of avoidance and mitigation measures may not be deferred until some future time if impacts are reasonably foreseeable now. (CEQA Guidelines, §15126.4 et. seq.). Reconfiguration of the Shipyard site would occur during Phase II of the project, which is subject to additional environmental review. However, adoption of the Revitalization Plan substantially reduces the area available for provision of shipyard services and eliminates the capacity shown by substantial planning evidence to be necessary for provision of such services for the current and anticipated mix of boats utilizing the Harbor. This reduction will result in foreseeable environmental impacts, which alternative Harbor designs and/or additional mitigation measures would reduce and mitigate as described above. Therefore, the potentially significant environmental impacts that would result from a reconfiguration must be analyzed now, mitigation must be proposed and considered to address them. CEQA §21080.5(d)(2), (3); CEQA Guidelines §15126.4 et. seq. Further, the public must have the opportunity to review these previously unanalyzed impacts and available alternatives and mitigation measures to reduce those impacts. *Joy Road Area Forest and Watershed Association v. California Department of Forestry & Fire Protection*, No. A105421 (Cal. Ct. App. 1<sup>st</sup> Aug. 30, 2006)). The Revitalization Plan environmental documentation does not provide any analysis of the environmental impacts associated with the reduction of the shipyard services area pursuant to the Revitalization Plan,

Dana Point City Council  
September 13, 2006  
Page 13

nor does it propose or consider any alternatives, project design features or mitigation measures to avoid or reduce the potentially significant environmental impacts associated therewith. Thus, improper deferral of impact analysis and improper failure to identify and consider mitigation measures has occurred.

(6) **Harbor Functionality:** “Maintaining a full-service harbor” is stated as a key objective of the EIR and a priority of the Revitalization Plan. The reduced Shipyard configuration proposed by the Plan is incapable of supporting continued Shipyard operations, and specifically does not provide enough space to service the mix of large and small boats in the Harbor or envisioned under that Plan.

(7) **Aesthetics:** The County determined in EIR 591 that aesthetic impacts associated with the Revitalization Plan were significant and unavoidable due to the development of the dry stacked boat storage, which would obstruct views from surrounding roadways, parks and State Beaches. Along the same line, the City Planning Commission’s comment letter on EIR 591 and Resolution 06-06-021-022 request and recommend analysis of alternative designs for the dry stack boat buildings because the proposed location, size, massing and design of the proposed storage would conflict with Coastal Act § 30251 and result in unavoidable significant adverse affects. Anchor Marine supports deletion of the second dry stack, and the evaluation of visual and aesthetic impacts associated with the revised site design and available mitigation measures to reduce those impacts.

**D. The City Must Provide Adequate Notice of Hearings and LCPA Documents to Slip Owners and All Other Parties Affected by the Harbor Revitalization Plan.**

City Code 9.61.050(a)(3) provides in part that notice of hearings shall be mailed to property owners within 500 feet of the exterior boundary of the subject property. Rented boat slips in a marina can be considered real property. (*Smith v. Municipal Court* (1998) Cal.App.3d 685).

Minimal CEQA statutory notice requirements may sometimes be insufficient to satisfy constitutional mandates. Due process requires that notice must be reasonably calculated to afford affected persons the realistic opportunity to protect their interests. Whether merely posted notices or notices circulated in newspapers satisfy these requirements depends on the extent to which a particular landowner’s interests may be affected. (*Horn v. County of Ventura* (1979) 24. Cal.3d 605, 617-618). The boat slip owners in the Harbor will be clearly affected as the Revitalization Plan calls for reconfiguration and displacement of slips in the Harbor.

Moreover, there are special noticing requirements for hearings and documentation related to Local Coastal Plan (“LCP”) documents. City Code 9.61.080(e)(4) provides in part that notice of availability of public review drafts of LCPC materials and transmittal of said

documents shall be made as soon as public drafts are available, but at a minimum at least six weeks prior to any final action on the documents by the City.

The City is required to make a finding that adequate notice of interested persons was made prior to submittal of the LCPA to the Commission. (City Code, § 9.61.080, subd. (e)(3)(E). Proposed City Resolution No. 06-06-21-22 concludes that “a procedure has been established to ensure adequate notice of interested persons and agencies of impending development proposed after certification of the LCPA in that proper notice in accordance with the LCP Amendment procedures has been followed.” However, notice of the Revitalization Plan has not satisfied City Code requirements.

Upon Anchor Marine’s recent request, the City did generally not notify slip owners in the Harbor regarding the September 13, 2006, City Council hearing on this matter. However, neither the Plan Proponent nor the City adequately notified this obviously affected group of people during the environmental review process for EIR 591, prior to Planning Commission hearings, or six weeks in advance of the City Council hearing or any other hearings associated with this matter.

Further, the public must be given ample opportunity to participate in the LCPA process and have adequate time to review the proposed LCPAs in their final form, or in some form that provides adequate information as to the content of the proposed amendment. (City Code, § 9.61.080, subd. (e)(3)(A). Thus, any substantial changes to the Revitalization Plan, such as those that may be effectuated by removing the second dry stack building, must be incorporated into the document and provided to the public for meaningful review and comment. Provision of a single graphic does not provide adequate information and notice as to the content of the Revitalization Plan as revised, and instead provides only a land use graphic that is inconsistent with land use designations, statistics, district regulations and other crucial text of the Plan. Failure to provide adequate notice of the Plan and an ample opportunity for boaters to participate violates the notice provisions of the City’s Code and CEQA, and the requirements of due process.

Anchor Marine therefore requests that: (1) all boat slip owners in the Harbor continue to be notified by personal mail of any and all hearing dates regarding this matter; (2) a revised Revitalization Plan be prepared made available for public review and comments in accordance with the functional equivalence requirements of CEQA and in compliance with LCPA provisions of the City Code; and (3) pursuant to City Code section 9.61.080 subdivision (e)(4) the City not take any final action on the District Regulations until at least six weeks after the final draft -- incorporating all design alternatives -- of the District Regulations is properly noticed and recirculated.

**5. INCLUDING AN ADEQUATELY SIZED SHIPYARD RESOLVES KEY LEGAL AND PLANNING ISSUES ASSOCIATED WITH THE REVITALIZATION PLAN AND DISTRICT REGULATIONS.**

**A. Factual Justification for Retention of Adequate Shipyard Site.**

Marina Business Associates (“MBA”) and Planning Research Network (“PRN”) prepared the Planning Report, which is an in-depth analysis of the site planning requirements for a Shipyard capable of fully servicing the Harbor. See Attachment B.

The assessment was prepared based on analysis of Harbor and Shipyard operations, existing and projected marine market conditions, and the proposed Revitalization Plan and District Regulations. Given current market conditions and projected increases in the demand for Shipyard services in the future, it is evident that, at a minimum, the Plan must provide for a Shipyard of approximately 2.1 acres in size, equipped with appropriate facilities. The Report further concludes that a 2.6 acre area must be retained for shipyard services to provide sufficient space to fully service the demand for boat service and maintenance in Harbor now and as anticipated under the Revitalization Plan.

Justifications for a 2.1-acre Shipyard include, but are not limited to:

- (1) Very limited current capability to service the number of vessels in the Harbor over 41 feet in length;
- (2) Revitalization Plan will introduce a substantial number of larger boats that will be incapable of obtaining service in the Harbor;
- (3) The Shipyard is the only full service operation within a 15-plus mile radius; and
- (4) Environmental regulations and clean marina best management practices require most major vessel maintenance be performed in the Shipyard.

Accordingly, even putting aside the Coastal Act and CEQA compliance issues, implementation of the Revitalization Plan will create substantial operational constraints that will negatively impact the Harbor’s ability to attract, retain, and safely service the boating public. In short, adoption of the Revitalization Plan will not provide an adequate land use plan, unless and until the Plan is amended as set forth in Attachment A

**B. Resolution of Legal and Planning Issues Associated with Shipyard Site.**

If the Revitalization Plan is revised to include a Shipyard of adequate size the CEQA and Coastal Act compliance issues discussed herein are eliminated.

First, retaining an adequately sized Shipyard would resolve inconsistency with the Coastal Act because: (1) provision of a parcel of adequate size for shipyard services assures the Shipyard's ability to provide adequate boating support services; (2) water quality would be improved by minimizing contaminated discharges related to unregulated in-water maintenance services; (3) protection from additional spillage of oil, gas and petroleum from damaged boats would be enhanced due to Shipyard capacity for secondary response emergency haul outs of boats in the Harbor; (4) the Shipyard as a recreational boating industry would be protected and upgraded; and (5) existence and expansion of a coastal-dependent land use the Shipyard would be protected.

Second, retaining an adequately sized Shipyard would resolve CEQA compliance issues because: (1) water quality impacts would decrease as more boats obtain service at the strictly regulated Shipyard site; (2) public safety would be enhanced based on the Shipyard's ability to continue providing critical assistance to emergency response plans and personnel; (3) onsite parking would be sufficient; (4) additional analysis of alternatives and mitigation measures would be unnecessary because land use would remain intact; and (5) the Revitalization Plan would be far more consistent with its own primary objectives.

Third, retaining a Shipyard of adequate size also improves the long-term sustainability of the Harbor and facilitates obtaining final approval of the LCPA by the Commission.

Hence, we request the District Regulations be revised in accordance with the site planning requirements and performance standards provide herein, and as reflected in Attachment "A" to this letter.

**6. PROPOSED PERFORMANCE STANDARDS TO ASSURE ADEQUATE SHIPYARD SIZE AND RETAIN FLEXIBILITY FOR FUTURE PROJECT-LEVEL PLANNING.**

Anchor Marine understands additional project-level environmental review will be necessary before any modifications can be made to the Shipyard parcel under the Revitalization Plan. At this time we believe it is appropriate to incorporate a land use design in the District Regulations that is capable of supporting an adequately sized Shipyard facility.

Therefore, language has been developed to accomplish the concurrent goals of retaining an appropriate and adequate Shipyard site, while also providing the City and County with enough planning flexibility to accommodate future site planning and configuration of Harbor land uses consistently with the Plan and the Coastal Act.

Among other conforming changes (set forth in full in Attachment A), we request the following rather minor, but important change to Section 4.5, at Page II-4.5, of the

Revitalization Plan resulting in the inclusion of minimum land use standards for a Harbor shipyard:

Page II-4.5, end of Section 4.5 Development Standards and Requirements

Add item p), as follows:

*p) Shipyard Performance Standards. Adequate land and water area shall be maintained to ensure a full-service boat repair facility that accomplishes the following objectives:*

- ❖ Support Harbor's "full service" objective by providing a comprehensive range of boat repair and maintenance services for all types and sizes of sail and engine-powered boats stored and/or moored at Dana Point Harbor*
- ❖ Support Harbor's objective to improve water quality by providing boat repair and maintenance services on land, in an environmentally controlled facility, to avoid pollution impacts resulting from in-water repairs and travel to other harbor ship yards*
- ❖ Provide boat lift(s) to pull distressed (on fire, sinking, inoperable) vessels out of the water and onto safe land area*

*Any substantial modifications to the shipyard shall ensure that the following performance standards are satisfied:*

- a) Provide at least a 2.1 acre-land area within Planning Area 1 to be designated for shipyard uses, and sufficient water area in close proximity to the shipyard area to retrieve/return, store and perform maintenance and repair on a mix of boat types and sizes representative of the overall mix of boat types and sizes in the harbor during peak season.*
- b) Provide sufficient on-site parking for shipyard employees, regular vendors and customers.*
- c) Provide a surface drainage control system that incorporates structural, non-structural, mechanical, biological, good housekeeping and/or other Best Management Practices to contain water pollutants from all sources in the shipyard within a drainage and filtration system that treats runoff and removes solid and liquid waste materials to current RWQCB standards, prior to discharge to the sanitary sewer system. The drainage system shall be designed and maintained in accordance with any applicable shipyard NPDES*



Dana Point City Council

September 13, 2006

Page 18

*Permit, and the Conceptual Water Quality Management Plan for the Harbor, which shall be prepared in accordance with County of Orange Drainage Area Master Plan (DAMP).*

- d) *Restrict public pedestrian and vehicular access to outdoor repair and maintenance areas and related storage and mechanical repair facilities through fencing, electronically-controlled gates, and/or other access controls.*
- e) *Permit use of cranes, boat lifts and other commercially reasonable shipyard equipment within the area designated for shipyard and marine services uses.*

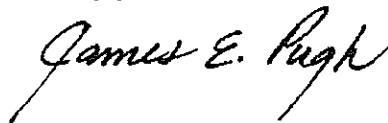
Page II-17.3, Dana Point Harbor Revitalization Plan Statistical Table, under Marine services:

- *Delete Dry-Stack Boat Storage Facility -2*
- *Boat Yard Building(s)--change estimated square footage to 6,000 and Maximum square footage to 6,000*
- *Shipyard services—shall be provided on a minimum of 2.1 acres within Planning Area 1.*

In consideration of all the issues raised herein and the need to substantially revise and recirculate the Revitalization Plan, we are requesting that the City either exercise its land use authority to require the changes recommended in Attachment A, or continue this matter and require and provide for the necessary analysis of impacts, alternatives and mitigation measures, and public review and comment thereon. Anchor Marine offers the full support of its planning and legal team to assist in the resolution of the remaining land use and legal issues associated with the Shipyard parcel.

If you have any questions regarding this matter, please do not hesitate to contact us.

Very truly yours,



James E. Pugh  
for NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

JEP1

Attachments

NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

Dana Point City Council  
September 13, 2006  
Page 19

cc: Douglas C. Chotkevys, City Manager  
Bobbi Ogan, Planning Secretary  
Laura Anderson, Mayor  
Russ Chilton, Mayor Pro Term  
Wayne Rayfield, Council Member  
James V. Lacy, Council Member  
Diane L. Harkey, Council Member  
J. Scott Schoeffel, Chairman  
Steven Weinberg, Vice-Chairman  
April O'Connor, Commissioner  
Norman Denton, III, Commissioner  
Liz Fitzgerald, Commissioner  
Lisa Smith, County of Orange  
George Caravahlo, Director, Dana Point Harbor Dept.  
Carolyn McInerny, County of Orange  
Tom Wilson, County of Orange

NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

Dana Point City Council

September 13, 2006

Page 20

**Attachment A**  
Proposed Revisions to the Revitalization Plan

NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

Dana Point City Council

September 13, 2006

Page 21

**Attachment B**  
Marina Business Associates  
Harbor Planning Report

**Jon Conk**

**From:** April Salem [notetoapril@cox.net]  
**Sent:** Wednesday, January 02, 2008 4:23 PM  
**To:** MarinaEIR  
**Cc:** bruceheyman@cox.net  
**Subject:** Comments regarding the SEIR

Date: January 2, 2008  
Subject: SEIR

Attention: Brad Gross, Director  
(949) 923-2236  
[Marinaeir@dphd.ocgov.com](mailto:Marinaeir@dphd.ocgov.com)

Dear Mr. Gross,

I have read the Initial Study Dana Point Harbor Marina Improvement Project and the Dana Point Harbor Water Project. There are several factors that I believe were not considered or covered in the study. I ask that you examine these factors and then weigh the study.

My name is April Salem and I am active at the Marina as a boat owner, member of a yacht club and as a volunteer worker for a large youth program. All 4 of my daughters have been involved in the youth programs in our Marina for boating education and leadership. I greatly value the gifts of our harbor and all those who work together to make it the charming small harbor we see today.

I believe the water study was a good initial study, however I do not believe it can be statistically significant for a variety of reasons. One day in the summer cannot give one significant data when comparing all days of the year and last summer threw some great variables. My daughter Chelsea (former Quartermaster in the Sea Scout program) came home from New Zealand on July 9th, she was ill and it was so cold there she could not get better... we joked that she brought the horrible weather back to California. She returned to New Zealand for her year of study abroad without a "California Tan"

Indeed July 14, was a dreary day. I contacted NOAA and it stated that we had a high of 67 and low of 65 with drizzle but worst of all...NO WIND. Let me present an outline of the issues with regard to the Water Study done on July 14, 2007.

1. The Water Traffic date July 14, was not statistically significant with regard to several factors:

- a. We had an unusually cold July.
  - i. July 14, from NOAA states that there was no wind, temperatures were 67 for the high and 65 for the low
  - ii. In fact I know that it drizzled
- b. July 14<sup>th</sup> was the day that DWYC held its annual Boater's Swap Meet (Daily usage levels were lower than historical trends)
  - i. Boaters were involved in this activity from two yacht clubs and it was open to the public
  - ii. The typical boating community on the water was not represented
- c. The fact that the water study showed that less than 1% of sailing vessels were on the water (stated low usage levels of sail boats)
  - i. Probably due to the fact that there was NO WIND
  - ii. Also many not only manned booths at the swap meet but also were looking for "sailor's deals"
- d. The week long youth programs hold back on sending out small sailing craft on weekends—(small day vessels 44% of total watercraft observed)
  - i. There is usually more traffic on weekends and the youth can sail during the week.
  - ii. There is no point to sending a child out in a small sailing craft with no wind as they are not as maneuverable and one must chase them in a chase boat!
2. The Evaluation of the of the over-all statistical traffic and potential congestion issues relative the proposed new slip count and configuration cannot be assessed without a larger amount of data due to the nature of the study.
  - a. The weather plays a great part in the use of the harbor.
  - b. Youth are a large part of the small craft day use as well as the boaters who also kayak from their boats in their slips... both groups were under represented on water.
  - c. Harbor Events such as the DWYC Boaters Swap Meet are used to enhance relationships among boaters they encourage participation both off the water and then on the water:
    - i. While the consultants used a weekend cold dreary day during a boater participation land event:
      1. They did not consider the three days of races for ONLY sail boats during the week
        1. Wednesdays: afternoon races
        2. Thursdays: often two races beginning at 12 pm
        3. Fridays: Aventura sponsored races

Mr. Gross, I would like to comment on several areas with regard to potentially affected environmental areas:

- i. Using this probably flawed traffic data several conclusions were made with regard to mitigation of traffic caused by small craft.
  - a. It was stated that the original LUP and LCPA has an existing statute that is NOT ENFORCED which prohibits using the Inner channels for recreational activities.
    - a. There is conflict here.
      - i. In other areas of Initial Study it is stated that more use will be encouraged: ie: small docks and dinghy docs for small craft at or near restaurants are planned to decrease traffic
        1. Not only boaters with small craft available but the general public will also jump in to access these docks (a great idea by the way!)

2. Since we currently DO use the waterways and openly disregard the “statute” Shouldn’t that statute be removed?
3. With regard to response that we will not need increased services ie Harbor Patrol, Emergency Crew etc...
  - a. How can one know, The greatest mitigating factor for small craft traffic is use of these very people
    - i. To enforce statutes that we do not enforce now
    - ii. To educate the public
    - iii. To educate boaters re: rules of the road
    - iv. Monitor flow of traffic
  1. To enforce STOPPING??? Prior to entrance of the channel?
  2. To enforce NO STOPPING in the Channel
- b. It would appear that there would be an impact with regard to our current use of service groups.
  - i. We will have more youth in the basin in rowing vessels as made public by the Ocean Institute
  - ii. There will be less space in the basin as there will be increased growth of the pier
  - iii. If the only way to access kayaks is at baby beach, then the basin will be very full as currently the use is dispersed
  - iv. There will be more small craft using the facilities that the Renovation plan has for them at shopping and restaurants
  - v. There will be more “water taxis” on the water to assist in the traffic while construction is underway

On a general level I have issue with certain points made in the Initial Study, there is stated no impact upon the Revitalization Plan with regard to noise:

The plan calls for a change in the layout of the slips with an additional number of gates. From what I can see there will be 44+ metal gates in the Harbor rather than the current 16 or so... the noise of those gates cannot be ignored!  
The noise in the harbor vibrates due to the cliffs acting as a bowl. Noise may be GREATER!

Pollution due to less small vessels and more larger vessels may be an issue. Larger vessels require larger engines, sometimes more engines, bow thrusters etc... this is something to consider.

Scenic impacts may be huge: Replacing current ocean going vessels in lieu of a concrete parking garage surely must be considered.

With regard to impact upon recreation if this initial study uses its various forms of mitigation there will be less recreational use as stated above. It may not be consistent with regard to the previous Recreational Facility Master Plan. Is there a protection of youth services in this new plan, as there were in the old plan?

I also inquire about the potential significant impact to public use of the facilities. The Sea Scouts have been a part of the Harbor for 30 years. They rely upon membership to maintain their vessels. If they do not have access to facilities they will greatly suffer and membership will be affected. Will we decrease the access of the harbor for children to allow for larger boats? I would like to see the youth programs be protected under the new plan. We have a unique harbor, it serves a large variety of citizens, I would hate to see it provide less for youth and families and more for large vessels and the "professional crew" that they will require.

Thank you for this opportunity to voice my concerns, I ask that you please review and consider some of these concerns.

Sincerely,

April Salem



34300 Lantern Bay #4  
Dana Point, CA 92629



**Lantern Bay Ltd.**  
**Charters**

U.S. Coast Guard Licenses #801016 / 801019  
e-mail [daysailor@earthlink.net](mailto:daysailor@earthlink.net)

01-02-08P12:04 RCVD

Phone (949) 240-8682  
Fax (949) 240-8688

January 2, 2008

County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Please allow me to comment on the Initial Study for the proposed Marina Changes in the Dana Point Harbor. It is my opinion that the entire Revitalization plan has not been to benefit the harbor, or the boating community. Below is a list of a few things that are not beneficial to boaters.

From the IS figures, it is virtually impossible to determine what changes are being proposed in the Youth and Group – Dana Wharf Sportfishing – Harbor Patrol Docks – Commercial Docks – Dingy Docks – Guest Docks – and Dry Stack Docks! Those areas just seem to be circled, not re-drawn. How can we comment on these?

Guest Docks – do we need them on both ends of the harbor, thus taking more docks away from slip renters?

One of the improvements is listed as dock boxes. The ones that we have now are pathetically small – particularly in the East Basin. Boaters have a great need for storage and most harbors provide larger boxes, along with lockers at the head of the docks, especially for live-aboards.

The dredging plan isn't addressed in this IS – but is mentioned in the NOP. With your insistence on attracting larger boats, why aren't you going to dredge to accommodate them? The new 38-40' sailboats now have keels that reach 9'. My keel is 10' and I am aground in my slip at low tide, with the keel down to its maximum depth. Fortunately, I can retract it to a depth of 6' but most boats aren't built that way. Dredging plans are inadequate. The entire harbor needs to be dredged back to its design depths.

The scariest part of this whole plan is the encroachment into the inner channel. Although the DBW (Cal Boating) letter states that it defers to your engineering firm, Moffat and Nichol, and the Harbor Department letter states that they will go along

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Fax (949) 240-8688

with your plan, as long as Section 7 and the Mitigation section are enforced, I seriously disagree. We have a harbor with designs and channel widths that could be compared to a Cadillac, and your proposal is changing it to a Chevrolet. Why would you want to lose the benefit of this wider channel?

Your traffic study is seriously flawed, as was the auto traffic study done for the original EIR! Observations on only one day? Then models drawn upon that? The study was done on current conditions. It plainly states that there will be fewer boats, so that crowding won't be quite as prevalent. There will not be fewer boats - because of the boat barn. The boats in the slips will be larger, thus creating a different problem than what has been analyzed.

In short, this analysis seems to have been done by someone who has not driven a boat in the harbor. . . . even on a non-crowded day.

Please alter your plan to narrow the channels, and leave them the width that they are.

Cordially,



Barbara Merriman

949-240-8682

## Initial Study – Public Comments

Thank you for the opportunity to submit the following comments to the NOP, IS and the proposed Subsequent Environmental Impact Report:

### Procedural

1. The Dana Point Harbor Department should not be the Lead Agency for the Subsequent Environmental Impact Report.
  - a. Discussion
    - i. The California Environmental Quality Act is a “self-executing statute”
    - ii. Which is enforced, as necessary, by the public through litigation and the threat thereof
    - iii. As the Dana Point Harbor Department has declared itself the “Lead Agency”
    - iv. In this case the Dana Point Harbor Department is also the “Applicant”.
    - v. While there is significant precedent where the “Lead Agency” and the “Applicant” are the same governmental organization there is an expectation that there will be the required safeguards to insure the “Applicant” is doing a thorough job
    - vi. Furthermore the “Lead Agency” is required to perform such duties that are required to insure the validity of the “Applicant’s” submittal
    - vii. In this case the “Lead Agency”, Dana Point Harbor Department has shown a clear desire to politicize the process while also demonstrating a serious lack of reverence for the Subsequent Environmental Impact Report process at the Scoping Meeting
    - viii. Many of the participants and speakers were there at the behest of the Dana Point Harbor Department to state, for the record, their desire to see the “Revitalization of the Harbor” to move forward as already planned. Most made these comments with no discussion of environmental issues.
    - ix. The Dana Point Boaters Association was asked by the Dana Point Harbor Department to minimize speakers so as to allow others time to talk
    - x. The Dana Point Boaters Association was also asked by the Dana Point Harbor Department to help keep boaters focused on environmental issues as opposed to slip design issues
    - xi. The Dana Point Harbor Department encouraged proponents of the plan; brokers, restaurant owners/operators, harbor merchants and marina operators (agents of the Dana Point Harbor Department) to provide as many speakers as possible and did not encourage them to speak to environmental issues

- xii. Public involvement in the process was envisioned to be a vital element of the California Environmental Quality Act
  - xiii. Statements made by the Dana Point Harbor Department at the beginning of the Scoping Meeting implied that public comments and participation in the process will result in unnecessary delays, and increased costs.
- b. Recommendation
- i. The County of Orange should appoint a new “Lead Agency” to provide proper oversight of the Dana Point Harbor Department, “Applicant”.
    - 1. This will help to insure the validity of the Subsequent Environmental Impact Report
    - 2. Reduce the possibility of avoidable delays due to litigation or the threat there of
    - 3. Insure the optimal use of funds and resources
2. Work on the Subsequent Environmental Impact Report should be place on hold until the Waterside Design has been completed.
- a. Discussion
- i. Design must be completed enough to insure all environmental impacts are studied
  - ii. The Final Environmental Impact Report approved by the County Board of Supervisors on 1/31/06 was Programmatic with respect to the Waterside Project because the design was not yet complete
  - iii. The Waterside design is still not complete
  - iv. It is likely that the final design will have a different number of slips/boats from the County’s currently stated favored plan
  - v. It is very possible that these changes will not accommodate a “Negative Declaration” in effect negating the bulk of the work required to complete the Subsequent Environmental Impact Report
  - vi. County stated at the Scoping Meeting that the design can still be changed but failed to articulate a process or procedure for these possible changes
- b. Recommendation
- i. Suspend all work (time and money) on the Subsequent Environmental Impact Report and
  - ii. Establish a process to collaboratively conclude the design phase

### Initial Study Comments

3. The Subsequent Environmental Impact Report must deal with the offsite as well onsite locations affected by this project.
- a. Discussion
- i. {IS Page 2-4 item 2} “all answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- ii. As a result of the Waterside Project there will be Displace Boats (approximately 1100 boats displaced to accommodate approximately 750 to move in) [some of this displacement is already happening as a result of policies implemented by the Dana Point Harbor Department and their agents].
  - iii. The approximately 1100 boats will have to go somewhere,
    - 1. Some will be allowed to stay as a result of “right sizing” provided the families can afford this choice long term
    - 2. Given that there are already over 600 dry storage boats in the “Commercial Core” being forced into the dry stack (400) and mast up storage (93) there will not be enough space available for this boats within the already approved Commercial Core Final Environmental Impact Report
    - 3. The South Coast Water District is on record stating that they will not sell their property on Stone Hill Rd.
    - 4. Use of the South Coast Water District property as mitigation for displacing boat storage in the Harbor must be considered speculative at this point given the current state of boater acceptance and where South Coast Water District is in the process of the proposed site build out
    - 5. Dry storage, under the management of Vintage Marina Partners has been allowed to implement massive storage fee increases (10% for each of the last three years). This is distorting true demand for in harbor storage.
  - iv. {IS Page 3-12 item a} new offsite boat storage areas will/may likely have “impervious surfaces” whose impacts must be studied
  - v. {Page 2-7 #4 and page 3-8} Geology and Soils
  - b. Recommendation
    - i. The Dana Point Harbor Department must identify all locations where the displaced boats will likely be stored
    - ii. The Dana Point Harbor Department must study the environmental impacts of these storage areas as part of this Subsequent Environmental Impact Report
    - iii. The Dana Point Harbor Department must study geology and soil conditions of all areas where displaced boats are going
4. Consultation – The Dana Point Boaters Association is requesting Consultation
- a. Discussion
    - i. Article 7. EIR Process Section 15086. Consultation Concerning Draft EIR
    - ii. The Lead agency may consult directly with:
    - iii. 2) any member of the public who has filed a written request for notice with the lead agency or the clerk of the governing body.
  - b. Recommendation

- i. Dana Point Harbor Department will consult directly with Dana Point Boaters Association on the Subsequent Environmental Impact Report
  5. The Final Environmental Impact Report needs to be refreshed as a part of this Subsequent Environmental Impact Report.
    - a. Discussion
      - i. {IS Page 2-6 1 b)} Applicable Land Use Plan
      - ii. Final Environmental Impact Report approved 1/31/2006
      - iii. Dana Point City Council approve the Commercial Core Local Coastal Plan Amendment on 10/06
      - iv. Material differences (dry stack, # and size of restaurant/store expansion) that affect boaters that now need to be re-studied.
      - v. 53% increase in commercial core and significant reduction in every element of recreational boating (dedicated boater parking, trailer/tow vehicle parking, ship yard, rest room access, mast up storage, and number of locations for storing boats.)
      - vi. {IS page 3-3 item b} County of Orange should not be allowed to category this area as a "Regional Recreation Area" given the displacement of recreational boating activities in favor of expanded commercial interests
    - b. Recommendation
      - i. Re-examine all relevant issues within the Final Environmental Impact Report that were affected by changes made since 1/31/06 approval:
        1. Due to Dana Point City's LCPA process
        2. Impacts due to the waterside development that were not adequately covered
6. Channel Narrowing will required proper study
  - a. Discussion
    - i. {IS Page 2-9 d} Increased Hazards
    - ii. Channel Narrowing will present a Potentially Significant Impact
  - b. Recommendations
    - i. Initial Study Item 6 d) must be coded as Potentially Significant Impact and handled/studied appropriately
7. The statement is made, without explanation, that the "...future LCPA will improve overall Coastal Act compliance" {IS Page 3-2}
  - a. Discussion
    - i. Changes to the plan should be considered from a base line of the existing Local Coastal Programs and not from the current situation
    - ii. Many changes have occurred without the benefit of Environmental Impact Reports or California Coastal Commission oversight.

- iii. Why is base line for this SEIR not the official LCP vs what the County and City has allowed to be taken away from boaters without formal process
  - iv. Why has compliance to existing LCP not been managed by County and City?
    - 1. East Cove (small slips eliminated for larger)
    - 2. Several areas in West (small eliminated for larger)
    - 3. Significant non compliance with dedicated boater parking requirements
    - 4. Significant takeaways from Trailer/Tow Vehicle parking
    - 5. Elimination of 100's of smaller slips in favor of larger (right sizing implemented by marina companies)
    - 6. Increase in broker slips
    - 7. Increase commercial activity out side of Sports Fishing area.
  - v. Why has the LCP not audited as required by law?
  - b. Recommendation
    - i. Reset baseline for all Environmental impacts to existing Local Coastal Programs
8. The Final Environmental Impact Report under stated the potential impact from slip and dry storage loss on local transportation
- a. Discussion
    - i. {IS Page 3-14} Transportation Final Environmental Impact Report
    - ii. By only examining the "Macro" delta numbers the true impact of the change is lost
      - 1. Approximately 620 dry storage boats competing for 493 storage locations in the new plan
      - 2. Approximately 1400 boats competing for approximately 261 slips in the 29' and under category
      - 3. Expectation that these displaced boaters, approximately 1100 will be come trailer boaters
    - iii. Trailer boaters place a heavier load on local roads.
  - b. Recommendation
    - i. Examine traffic loading along roads in and adjacent to Harbor based on new estimate of trailer boaters.
9. Mischaracterization of Design Implication due to change in slip configuration
- a. Discussion
    - i. {IS Page 2.1 Section 9} County states that average slip size will be "Slightly Larger"
    - ii. 13.77% is not a slight increase
    - iii. This issue is further confused by the County's use of "finger" size of slip vs. the size of boat that will be allowed in the slip
    - iv. Issue c. above understates the average slip size by at least 3'

- v. Use of the word “Slightly Larger” does not set the right frame of reference for agency and public evaluation
    - b. Recommendations
      - i. Restate numbers in a non-distorting manner
        - 1. Do not limit published numbers to the Dana Point Harbor Departments 4 size categories
        - 2. Use at least 9 size categories
        - 3. Articulate all slip configuration changes from original Harbor Design, not current or estimated actual
      - ii. Using restated numbers re-evaluate impacts identified and studied in the Final Environmental Impact Report
      - iii. Using restated numbers re-evaluate impacts identified for study in the Subsequent Environmental Impact Report
- 10. Local and County Public Services may be affected by this plan
  - a. Discussion
    - i. {IS page 2-13 # 15} Public Services
    - ii. Pushing 1100+ boats out of the Harbor and into the community may adversely affect the provision of services (police, fire, EMT, water, sewer, maintenance....)
  - b. Recommendation
    - i. Evaluate Public Services impact as a result of this waterside project
- 11. Population & Housing will be affected by this project
  - a. Discussion
    - i. {IS Page 2-6 #3. B & C Also Page 3-5 b and c} Live-A-Boards
    - ii. Boats are considered second homes
    - iii. Over 1100 boats in the water will be displaced
    - iv. Over 100 boats on the land are being displaced
    - v. Live aboard policy in the Harbor has become more restrictive since the Dana Point Harbor Department took the leases back
    - vi. The target 3% live-a-boards are not being achieved due to the restrictive policies
    - vii. Harbor safety is less than it could be with a more robust live-a-board program
  - b. Recommendations
    - i. Evaluate Environmental Impact of
      - 1. Achieving 3% Live-A-Board
      - 2. Achieving 10% Live-A-Board
    - ii. Evaluate Environmental Impact of over 1100 water side and over 100 potential second homes being eliminated
- 12. Introduction of new purposes for Revitalization Design
  - a. Discussion



- i. {IS Page 1-3} Dana Point Harbor Department is introducing new language for goals
    - ii. Task Force was formed to identify 12 Goals of Project
    - iii. This Initial Study adds new goals "...and expand existing landside Harbor facilities to meet current and projected needs of the merchants and Harbor visitors..."
    - iv. Final Environmental Impact Report was approved by County Board of Supervisors on 1.31.06
    - v. Local Coastal Program Amendment was approved by Dana Point City Council in October of 2006
  - b. Recommendation
    - i. Drop, unapproved, new purposes.
- 13. Inundation by seiche, tsunami or mudflow
  - a. Discussion
    - i. {A – IS Page 2-8 J} Inundation by seiche, tsunami, or mudflow?
    - ii. Recent modest rain has shown that water run off in Harbor can be significant
    - iii. City and County have identified tsunami escape routs that will be affected by:
      - 1. construction within the harbor
      - 2. increase commercial traffic due to commercial expansion
      - 3. increased trailer/tow vehicle traffic due to increased numbers of trailer boaters
  - b. Recommendation
    - i. Acknowledge possible impacts and include in study for Subsequent Environmental Impact Report
- 14. Communities will be Physically Divided
  - a. Discussion
    - i. {A – IS Page 2-6 1 a)} Physically divide an established community
    - ii. West marina will be layout out in a similar format to the east marina.
    - iii. Many Boaters feel their community or "neighborhood" will be disrupted
  - b. Recommendation
    - i. Potential impact level should be increased and studied as part of the Subsequent Environmental Impact Report
- 15. Land Use Mischaracterization
  - a. Discussion
    - i. {IS Page 3-2} Land Use Changes Mischaracterization of Facts
    - ii. Significant land use changes and allocations are occurring on the land as a result of this project.
      - 1. Boat storage
      - 2. Boater Parking

3. Access to bathroom facilities
    4. Trailer/tow vehicle parking
    5. Ship yard size
  - b. Recommendation
    - i. Provide detailed land use, in terms of acres or square feet, of planning areas one and two.
    - ii. Re-examine Final Environmental Impact Report and examine Subsequent Environmental Impact Report implications of these significant Land Use Plan Changes.
16. Boat Slip License Agreement
  - a. Discussion
    - i. The Dana Point Harbor Department has implemented an overly restrictive Boat Slip License Agreement
    - ii. This Agreement significantly reduces tenant access to their boats
    - iii. This policy will hopefully be remediated in the future
  - b. Recommendation
    - i. Prepare the Subsequent Environmental Impact Report based on a roll back to a less constrained tenant usage of their boats.



DEPARTMENT OF PARKS AND RECREATION  
Orange Coast District  
3030 Avenida del Presidente  
San Clemente CA 92672  
(949) 492-0802

Ruth G. Coleman, Director

January 7, 2007

Brad Gross  
Orange County, Dana Point Harbor Dept.  
24650 Dana Point Harbor Drive  
Dana Point CA 92629

Subject: Dana Point Harbor Marina Improvement Project  
SCH# 2003101142

Dear Mr. Gross:

Thank you for the opportunity to review the Notice of Preparation for the Dana Point Harbor Marina Improvement Project. California State Parks owns and manages Doheny State Beach for the benefit of the citizens of California. Because Dana Point Harbor shares a common boundary with Doheny State Beach and its waters, California State Parks recognizes that the general environment and visitorship are closely aligned. California State Parks has reviewed the Initial Study (IS) for the proposed waterside Marina Improvement Project, and has determined that a Subsequent Environmental Impact Report (SEIR) is required.

Renovation of the marinas and other facilities in the Dana Point Harbor includes removal of nearly all floating docks and piles, reconstruction of quay walls, and installation of new docks, guide piles (or other anchoring method), gangways, gates, dock boxes, and supporting utilities. California State Parks is most concerned with any potential environmental degradation that could affect the health of its approximate 1 million annual visitors. Of greatest concern is the potential for waterborne bacteria, turbidity, or demolition debris to come in contact with our water recreation enthusiasts. In particular, we see no analysis in the IS for the potential of bacteria in sediments to become suspended and distributed with tides and currents. The potential for sediment disruption comes with demolition and installation of piles and docks, and with dredge operations.

California State Parks has previously commented on impacts to viewshed and aesthetics from Doheny State Beach by dry stack storage facilities. And, while new dry stack storage staging docks and dinghy docks are planned, there remains no detailed description of their placement within this project. These storage facilities, as well as

Mr. Gross  
January 7, 2007  
Page 2

temporary docks along the inner jetty adjacent to Doheny State Beach are of concern within this category. The construction of these nearby docks is a concern for noise.

The proposal for dredging in the basin adjacent to the Youth and Group facility, and in other areas under the new slips makes no mention of sediment quality, testing, disposal destination, or potential for contamination. This clearly needs further analysis in the SEIR.

We appreciate this opportunity to respond to this significant project, and if there are questions that arise from these comments, please contact David Pryor, District Environmental Scientist at (949) 497-1421.

Sincerely,



Richard Rozzelle  
District Superintendent

BRAD

**In response to your invitation for comments concerning the SEIR at the December Harbor Redevelopment Meeting, mine are as follows:**

The plan will cause an increase in fossil fuel usage and impact the environment at the waterside and landside components:

- Increased landside parking and traffic from vehicles entering a large mall type structure. The waterside should be dedicated to boating access for tenants, their guests and maintenance activities, including dry storage. Move the Shopping Mall, (give it a Maritime Theme), up to the area proposed for increased dry storage. This will improve freeway access while reducing congestion at the harbor proper. Tie the two together with a small electric trolley or the like, what fun!

- The change of mix in slip sizes to favor larger vessels will bring more fuel into the harbor, more emissions and related pollution. The length to volume ratio is NOT linear, a 25 foot vessel holds 1/10th the tankage of a 40 foot vessel.

- This, by the Coastal Commission definition, is a SMALL BOAT HARBOR. The State of California is imposing strict emission standards of the Automotive Industry, smaller is better!!! Let's all get with the program.

- Thank you Brad Gross for the temporary docks. Now please drop the New Marina Slip Assignment Guidelines (Attrition Policy) and let the small boater back into the Small Boat Harbor.

Thank you for your attention, Tom Kulp, 949.586.9661

**Above contents of email sent and response below, another example of my frustration dealing with this issue.**

**In an attempt to mail a hard copy I could not locate an address in the AT&T phonebook, or the City of Dana Point website for the Dana Point Harbor Department. Why not?**

**From:** MAILER-DAEMON@banquo.ocgov.com  
**Subject:** failure notice  
**Date:** December 30, 2007 8:24:36 PM PST  
**To:** tomkulp@cox.net

Hi. This is the qmail-send program at banquo.ocgov.com.  
I'm afraid I wasn't able to deliver your message to the following addresses.  
This is a permanent error; I've given up. Sorry it didn't work out.

<bradgross@dphd.ocgov.com>:  
172.26.3.1 does not like recipient.  
Remote host said: 550 Mailbox unavailable or access denied -  
<bradgross@dphd.ocgov.com>  
Giving up on 172.26.3.1.

**Brad Gross**

---

**From:** Brad Gross  
**Sent:** Wednesday, January 02, 2008 12:59 PM  
**To:** 'tomkulp@cox.net'  
**Cc:** Brad Gross; Lisa Smith; Paul Lawrence; Mariene Mrozek  
**Subject:** Your SEIR letter

Dear Mr. Kulp,

Thank you for your letter received in our office today. I just wanted to drop you a line so you have the correct email for me and SEIR comments. You do not need to email comments also as your letter will suffice. Just for information sake, that email address is, [marinaeir@dphd.ocgov.com](mailto:marinaeir@dphd.ocgov.com), and my email address is [brad.gross@dphd.ocgov.com](mailto:brad.gross@dphd.ocgov.com) (you missed the . between my first and last name in your attempt). Finally, the reason you could not find us via the City's website, may be because we are County of Orange, Dana Point Harbor Department. We are linked on the City's webpage, <http://www.danapoint.org/>, at the bottom right of the home page, the link takes you right to our home page at, <http://www.dphplan.com/>.

I am not sure why we are not listed in the AT&T phone book but we will make all attempts to see that we are in their next edition.

Thank you for your comments.

Brad Gross, Director  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629  
949-923-3798  
949-923-3791 Fax  
[www.dphplan.com](http://www.dphplan.com)



COMMENT SHEET

PROPOSED DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

Please use the space below to provide comments to help the County of Orange identify the environmental effects that should be analyzed in the draft Subsequent Environmental Impact Report. This form should be completed and returned to the address on the back. All comments must be postmarked no later than Wednesday, January 2, 2008.

PLEASE PRINT

Regarding the environmental effects of the proposed Dana Point Harbor Marina Improvement Project,

WHEN CONSTRUCTION BEGINS IN THE COMMERCIAL CORE  
PLEASE GIVE AMPLE NOTICE TO CUSTOMERS, VISITORS AND  
MERCHANTS TO THE NOISE AND CONSTRUCTION THAT  
WILL BE IN PROGRESS. ALSO NOTE TIME LINE OF  
EXPECTED DISRUPTIONS -

Please provide your mailing address below:

JIM MILLER  
34531 GOLDEN LARK  
DANA PT. CA 92629

Sincerely,

Jim Miller

Please print your name clearly above

EMAIL: MOKANOW@COX.NET

Check the box if you wish to be added to the project mailing list.

Check all that apply:

- Boater
- Merchant
- Agency
- Dana Point Resident
- Other \_\_\_\_\_



### COMMENT SHEET

## PROPOSED DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

Please use the space below to provide comments to help the County of Orange identify the environmental effects that should be analyzed in the draft Subsequent Environmental Impact Report. This form should be completed and returned to the address on the back. All comments must be postmarked no later than Wednesday, January 2, 2008.

### PLEASE PRINT

Regarding the environmental effects of the proposed Dana Point Harbor Marina Improvement Project,

THE RECONFIGURATION FAVORING LARGER BOATS MEANS MORE FUEL CONSUMPTION, FUEL SPILLAGE, MORE TRASH GENERATED BY LARGER CREW/MORE GUESTS. THE LARGER HULLS MEAN MORE TOXIC ANTI-FOWLING PAINT IN CONTACT WITH THE WATER, LARGER TOP SIDES REQUIRING MORE CLEANING PRODUCTS, WHICH WILL GET RINSED OFF INTO THE HARBOR. ALL THE ABOVE, SAVE FUEL CONSUMPTION IS FIXED REGARDLESS OF HOW OFTEN THE BOAT OPERATES. JUST SITTING IN THE WATER, THESE LARGER BOATS ARE GOING TO NEGATIVELY IMPACT WATER QUALITY MORE THAN SMALLER BOATS, ESPECIALLY SAILBOATS WHICH ARE MUCH "GREENER" THAN POWERBOATS, AND WHICH WILL DROP IN NUMBER AS LARGER POWERBOATS TAKE THEIR PLACE.

Please provide your mailing address below:

27758 SANTA MARGARITA PIKE,  
PMB #230  
MISSION VIEJO, CA 92691

Sincerely,

MITCH KRONOWIT

Please print your name clearly above

EMAIL: MITCH@KRONOWIT.COM

Check the box if you wish to be added to the project mailing list.

Check all that apply:

- Boater     Merchant     Agency     Dana Point Resident     Other \_\_\_\_\_



Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: Bob Kroke k-noke  
Street: 21573 Campine Dr  
City/State/Zip: San Juan Capistrano, CA 92675  
Phone: 949 713 1249 Cell: 949 713 1249  
Organization: San Juan Capistrano Citizens for a Better Harbor  
Topic: Water Quality

Date: 12/20/07

Purpose of the Card:

- For minutes taking - Proper spelling of speaker's name.
- For speaker contact information to follow up if necessary.
- Efficient meeting decision.

Speaking Rules:

- Speaker will have 3 minutes to address the subject.
- An additional 3 minutes may be requested if speaking on behalf of an organization.
- Speaker will be called upon by the Director.

Card received at: [www.CPHMPlan.com](http://www.CPHMPlan.com)

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: Diana Fuchs (Parker)  
Street: 3382 Sea Point Dr  
City/State/Zip: Dana Point, CA 92629  
Phone: 949 243 1891 Cell: 949 243 1891  
Organization: San Juan Capistrano Citizens for a Better Harbor  
Topic: Support of Harbor Rejuvenation

Date: 12/20/07

Purpose of the Card:

- For minutes taking - Proper spelling of speaker's name.
- For speaker contact information to follow up if necessary.
- Efficient meeting decision.

Speaking Rules:

- Speaker will have 3 minutes to address the subject.
- An additional 3 minutes may be requested if speaking on behalf of an organization.
- Speaker will be called upon by the Director.

Card received at: [www.CPHMPlan.com](http://www.CPHMPlan.com)

San Francisco Harbor Marine Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: BRYAN DUNN  
Street: 30013 DEL GADO ROAD 5152 EMBASSY BLVD  
City/State/Zip: REDWOOD TOWN FOUNTAIN VALLEY 92729  
Phone: (949) 797-2118 E-mail: BRYAN.DUNN@SUNBELT.COM  
Organization you are representing, if other than self: VINTAGE MARINE INDUSTRIES LP  
Subject: WE ARE NOT ON THIS PROJECT AND WE WOULD NOT WANT TO BE INVOLVED

Date: 12/11/11

Purpose of the Card

- For identification - Proper spelling of speaker's name
- Provide basic contact information for follow-up, if necessary
- Efficient meeting session

Speaking Rules

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be requested if speaking on behalf of an organization
- Speakers will be called upon by the Director

Please refer to all items as 12/11/11

San Francisco Harbor Marine Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: E. L. Abbott  
Street: 29493 Golden Gate  
City/State/Zip: DAVA CA 92629  
Phone: 949 297 7228 E-mail: ELABBOTT@COMcast  
Organization you are representing, if other than self: None  
Subject: Marine Resource Center

Date: 12/11/11

Purpose of the Card

- For identification - Proper spelling of speaker's name
- Provide basic contact information for follow-up, if necessary
- Efficient meeting session

Speaking Rules

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be requested if speaking on behalf of an organization
- Speakers will be called upon by the Director

Please refer to all items as 12/11/11

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: John Hicks  
Street: 312 N Boca Raton M  
City/State: Laguna Hills, CA 92653  
Phone: 949 249 6629 E-mail: GHICKS@CER.NET  
Organization you are representing: Anchor Grill Restaurant  
Subject: I would urge the Department to make the process smooth without delay

DATE: 10/11/07

Purpose of the Card:

- For minutes taking - Preceding agenda items
- Provides contact information for follow-up discussion
- Efficient meeting document

Speaking Rules:

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be extended if speaking on behalf of an organization
- Speakers will be called upon by the Director

Revised 10/11/07

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: Monette Williams  
Street: 20827 Camino  
City/State: Mission Viejo CA 92691  
Phone: 949 515 5157 E-mail: monette@cox.net

Organization you are representing: Anchor Grill Restaurant

Subject:

DATE: 10/11/07

Purpose of the Card:

- For minutes taking - Preceding agenda items
- Provides contact information for follow-up discussion
- Efficient meeting document

Speaking Rules:

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be extended if speaking on behalf of an organization
- Speakers will be called upon by the Director

Revised 10/11/07

Delta Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: Wendy Sherman  
Street: 5167 E. Goodwin, Loveland, CO  
City, State, Zip: Loveland, CO 80531  
Phone No. (Home) 970-441-1450 Cell: 970-441-1401  
Organization you are representing (if other than self): Golden Gate Leon, Washburn State  
Title: Member, Washburn State Board of Administration

Date: 1/20/07

Purpose of the Card:

- Formally identify speaker's name
- Provide contact information for follow-up (if necessary)
- Efficient meeting session

Speaking Rules:

- Speakers will have 3 minutes to address the subject.
- An additional 3 minutes may be advanced, if speaking on behalf of an organization.
- Speakers will be called upon by the Director.

and hereby certify that I am:

Delta Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: Wendy Sherman Title: Member, Washburn State Board of Administration  
Street: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone No. (Home) \_\_\_\_\_ Cell: \_\_\_\_\_  
Organization you are representing (if other than self): \_\_\_\_\_  
Title: Supporter, The Plaza

Date: 1/20/07

Purpose of the Card:

- Formally identify speaker's name
- Provide contact information for follow-up (if necessary)
- Efficient meeting session

Speaking Rules:

- Speakers will have 3 minutes to address the subject.
- An additional 3 minutes may be advanced, if speaking on behalf of an organization.
- Speakers will be called upon by the Director.

and hereby certify that I am:

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name

R. DIETMEIER (Richard)

Street

30130 CAMBRIDGE

City/State/Zip

DANA POINT

Phone No.

949 253

in electronic format

Organization you are representing (include full name)

MANAGEMENT AND WATER  
MANAGEMENT

Date: 2/11/01

Purpose of the Card

- For initial scoping - For providing information only
- For additional information to be considered (if speaking on behalf of an organization)
- Efficient meeting session

Speaking Rules

- Speakers will have 3 minutes to address the subject
- An additional 3 minutes may be extended (if speaking on behalf of an organization)
- Speakers will be called upon by the Director

Form provided by www.DP-Plan.com

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name: Fred Bevilacqua

Street: 418 Laguna

City/State/Zip: Dana Point, CA 92629

Phone No.: 949 253-8311

in electronic format

Organization you are representing (include full name)

State: I would like to see the construction of the public  
harbor at DPHM a place where we could have a harbor  
for fishing, where it has a small amount of water

Purpose of the Card

- For initial scoping - For providing information only
- For additional information to be considered (if necessary)
- Efficient meeting session

Speaking Rules

- Speakers will have 3 minutes to address the subject
- An additional 3 minutes may be extended (if speaking on behalf of an organization)
- Speakers will be called upon by the Director

Form provided by www.DP-Plan.com

Dana Point Harbor Marine Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name Ricardo Bermudez

Street 3902 Serrano St

City/State/Zip Costa Mesa CA 92626

Phone No. (714) 458-7878 E-Mail Ricardo3851@gmail.com

Organization you are representing, if other than self

Subject Environment

Date 1/20/11

Purpose of the Card:

- For a meeting agenda - Under heading of speaker's name
- For a desk card with information on table, if necessary
- Efficient meeting document

Speaking Rules

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be requested if speaking on behalf of an organization
- Speakers will be called upon by the Director

Return information to: [www.DPHPR.com](http://www.DPHPR.com)

Dana Point Harbor Marine Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name R. Gonzalez

Street

City/State/Zip Costa Mesa

Phone No. (714) E-Mail

Organization you are representing, if other than self

Subject

Date 1/20/11

Purpose of the Card:

- For a meeting agenda - Under heading of speaker's name
- For a desk card with information on table, if necessary
- Efficient meeting document

Speaking Rules

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be requested if speaking on behalf of an organization
- Speakers will be called upon by the Director

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name Kelly Rindermann  
Street 39308 Vanover Bay Dr #94  
City/State DP CA 92629  
Phone 949 456 1111 Fax 949 456 1111  
Organization and Address of the Contact West Coast  
Title Plan Support

DPH 12837

Purpose of the Card:

- For reference during interpretation of speaker's name
- Provides contact information for follow-up if necessary
- Efficient meeting document

Speaking Rules:

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be extended if speaking on behalf of an organization
- Speakers will be called upon by the Director

Card returned to www.DPH-trial.com

Dana Point Harbor Marina Improvement Project  
Subsequent EIR Scoping Meeting  
SPEAKER'S CARD (Please Print)

Name Jim Young  
Street 34321 GREENYARD LANE  
City/State LEBANON, CA 92425  
Phone 916 452 1773 Fax 916 452 1773  
Organization and Address of the Contact Dana Point Harbor Marina  
Title Manager, Marina

DPH 12837

Purpose of the Card:

- For reference during interpretation of speaker's name
- Provides contact information for follow-up if necessary
- Efficient meeting document

Speaking Rules:

- Speaker will have 3 minutes to address the subject
- An additional 3 minutes may be extended if speaking on behalf of an organization
- Speakers will be called upon by the Director

Card returned to www.DPH-trial.com



COMMENT SHEET

PROPOSED DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

Please use the space below to provide comments to help the County of Orange identify the environmental effects that should be analyzed in the draft Subsequent Environmental Impact Report. This form should be completed and returned to the address on the back. All comments must be postmarked no later than Wednesday, January 2, 2008.

PLEASE PRINT

Regarding the environmental effects of the proposed Dana Point Harbor Marina Improvement Project,

WHEN CONSTRUCTION BEGINS IN THE COMMERCIAL CORE  
PLACES GIVE AMPLE NOTICE TO CUSTOMERS, VISITORS AND  
MERCHANTS TO THE NOISE AND CONSTRUCTION THAT  
WILL BE IN PROGRESS. ALSO NOTE TIME LINE OF  
EXPECTED DISRUPTION -

Please provide your mailing address below:

JIM MILLER  
34531 GOLDEN CANYON  
DANA PT. CA 92629

Sincerely,

Jim Miller

Please print your name clearly above

EMAIL: MOKANW1@COX.NET

Check the box if you wish to be added to the project mailing list.

Check all that apply:

- Boater
- Merchant
- Agency
- Dana Point Resident
- Other \_\_\_\_\_





### COMMENT SHEET

## PROPOSED DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

Please use the space below to provide comments to help the County of Orange identify the environmental effects that should be analyzed in the draft Subsequent Environmental Impact Report. This form should be completed and returned to the address on the back. All comments must be postmarked no later than Wednesday, January 2, 2008.

### PLEASE PRINT

Regarding the environmental effects of the proposed Dana Point Harbor Marina Improvement Project,

THE RECONFIGURATION FAVORING LARGER BOATS MEANS MORE FUEL CONSUMPTION, FUEL SPILLAGE, MORE TRASH GENERATED BY LARGER CREWS/MORE GUESTS. THE LARGER HULLS MEAN MORE TOXIC ANTI-FOULING PAINT IN CONTACT WITH THE WATER, LARGER TOP SIDES REQUIRING MORE CLEANING PRODUCTS, WHICH WILL GET RINSED OFF INTO THE HARBOR. ALL THE ABOVE, SAVE FUEL CONSUMPTION IS FIXED REGARDLESS OF HOW OFTEN THE BOAT OPERATES. JUST SITTING IN THE WATER, THESE LARGER BOATS ARE GOING TO NEGATIVELY IMPACT WATER QUALITY MORE THAN SMALLER BOATS, ESPECIALLY SAILBOATS WHICH ARE MUCH "GROOVEN" THAN POWERBOATS, AND WHICH WILL DROP IN NUMBER AS LARGER POWERBOATS TAKE THEIR PLACE.

Please provide your mailing address below:

27758 SANTA MARGARITA PIKE  
PMB #230  
MISSION VIEJO, CA 92691

Sincerely,

MITCH KRONOWIT

Please print your name clearly above

EMAIL: MITCH@KRONOWIT.COM

Check the box if you wish to be added to the project mailing list.

Check all that apply:

- Boater     Merchant     Agency     Dana Point Resident     Other \_\_\_\_\_



**TOM DALY**  
Clerk-Recorder

ORANGE COUNTY  
HALL OF RECORDS AND FINANCE  
12 CIVIC CENTER PLAZA, ROOM 101 P.O. BOX 238  
SANTA ANA, CALIFORNIA 92702-0238  
Web: [www.ocrecorder.com](http://www.ocrecorder.com)  
PHONE (714) 834-2248 FAX (714) 834-2675

COUNTY OF ORANGE  
24650 DANA POINT HARBOR DRIVE  
DANA POINT, CA 92629

**SUBJECT: NOTICE OF INTENT**

**NOV 26 2007**

The attached notice was received, filed and a copy was posted on \_\_\_\_\_

It remained posted for 30 (THIRTY) days.

Tom Daly  
County Clerk-Recorder  
In and for the County of Orange

By: \_\_\_\_\_ Deputy

Public Resource Code 21092.3

The notices required pursuant to Sections 21080.4 and 21092 for an environmental impact report shall be posted in the office of the County Clerk of each county in which the project will be located and shall remain for a period of 30 days. The notice required pursuant to Section 21092 for a negative declaration shall be so posted for a period of 20 days, unless otherwise required by law to be posted for 30 days. The County Clerk shall post notices within 24 hours of receipt.

**Public Resources Code 21152**

All notices filed pursuant to this section shall be available for public inspection, and shall be posted within 24 hours of receipt in the office of the County clerk. Each notice shall remain posted for a period of 30 days. Thereafter, the clerk shall return the notice to the local agency with a notation of the period it was posted. The local agency shall retain the notice for not less than nine months.

12-31-07A11:16 RCVD

## Jon Conk

---

**From:** Lisa Smith [Lisa.Smith@dphd.ocgov.com]  
**Sent:** Monday, December 31, 2007 8:36 AM  
**To:** Jon Conk; rhm@cashassociates.com; Ashley Davis  
**Subject:** FW: Dana Point Harbor Department, Subsequent Environmental Impact Report

**From:** Thomas Kulp [mailto:tomkulp@cox.net]  
**Sent:** Sunday, December 30, 2007 8:24 PM  
**To:** BradGross@dphd.ocgov.com  
**Cc:** Bates, Pat [CEO]; Lisa Smith; Vincent Gin; bruceheyman@cox.net  
**Subject:** Dana Point Harbor Department, Subsequent Environmental Impact Report

In response to your invitation for comments concerning the SEIR at the December Harbor Redevelopment Meeting, mine are as follows:

The plan will cause an increase in fossil fuel usage, "carbon footprint", and impact the environment at the waterside and landside components:

- Increased landside parking and traffic from vehicles entering a large mall type structure. The waterside should be dedicated to boating access for tenants, their guests and maintenance activities, including dry storage. Move the Shopping Mall, (give it a Maritime Theme), up to the area proposed for increased dry storage. This will improve freeway access while reducing congestion at the harbor proper. Tie the two together with a small electric trolley or the like, what fun!!

- The change of mix in slip sizes to favor larger vessels will bring more fuel into the harbor, more emissions and related pollution. The length to volume ratio is NOT linear, a 25 foot vessel holds 1/10th the tankage of a 40 foot vessel.

- This, by the Coastal Commission definition, is a SMALL BOAT HARBOR. The State of California is imposing strict emission standards of the Automotive Industry, smaller is better!!! Let's all get with the program.

- Thank you Brad Gross for the temporary docks. Now please drop the New Marina Slip Assignment Guidelines (Attrition Policy) and let the small boater back into the Small Boat Harbor.

Thank you for your attention, Tom Kulp

## Jon Conk

---

**From:** Bob Terpening  
[bobterpening@roadrunner.com]  
**Sent:** Wednesday, January 02, 2008 5:30 PM  
**To:** MarinaEIR  
**Subject:** Dana Point Harbor Plan

The state is facing a deficit of  
\$14,000,000,000.00. Please consider other places to  
spend our tax dollars. Bob terpening

## Jon Conk

---

**From:** Doug Heim [snoopdoug@cox.net]  
**Sent:** Wednesday, January 02, 2008 1:47 PM  
**To:** MarinaEIR  
**Subject:** FW: eir comment

---

**From:** Doug Heim [mailto:snoopdoug@cox.net]  
**Sent:** Wednesday, January 02, 2008 1:06 PM  
**To:** 'marinaeir@dphd.ocgov.org'  
**Subject:** FW: eir comment

---

**From:** Doug Heim [mailto:snoopdoug@cox.net]  
**Sent:** Wednesday, January 02, 2008 12:38 PM  
**To:** 'marinaeir@dphd.oogov.com'  
**Subject:** FW: eir comment

---

**From:** Doug Heim [mailto:snoopdoug@cox.net]  
**Sent:** Wednesday, January 02, 2008 11:24 AM  
**To:** 'marinaeir@dphdocgov.com'  
**Subject:** eir comment

Dear People,

The Harbor in Dana Point was designed and should continue to be a small boat Harbor. Reconfiguration of the West Basin to add larger boats will provide fewer

small slips than it does in its current layout. When the Harbor opened the West Basin boating traffic did not have to contend with the added usage by the Marine Institute, Youth and Group sailing programs, the Outrigger club, Dolphin Dave's safaris, and Dana Point Yacht / Dana West Yacht Club race traffic with two junior sailing programs that race year round in the West Basin and outer channel. Also the kayak revolution that launches hundreds of boats from Baby Beach did not exist. All of these "Groups" represent thousands of people enjoying a small boat Harbor in Dana Point along with the current mix of small boats docked in the Harbor.

To replace small boats with larger boats will result in the displacement of the above "Groups" as safety becomes an issue. The County is currently involved in litigation involving on the water collisions and the frequency of these collisions will increase with the replacement of small boats with larger vessels.

I have sailed in this Harbor and lived in Dana Point since 1977 and ask you to keep the Harbor a small boat Harbor for all citizens of the County of Orange.

Thank you,  
Doug Heim  
25331 Yacht Dr.  
Dana Point, Ca

## Jon Conk

---

**From:** Steve Carpenter  
[scsystems@flash.net]  
**Sent:** Wednesday, January 02, 2008 4:54 PM  
**To:** MarinaEIR  
**Cc:** scsystems@flash.net  
**Subject:** Comments for Proposed Dana Point Harbor Marina Improvement Project  
**Importance:** High  
**Attachments:** January 2, 2008 Final IS Study Comments.doc

Dear Brad Gross,

Please find attached my comment for the above mentioned subject. I have attached a MS Word document with two pages of comments. I have also listed these comment in the body of this email incase the attached MS Word document become detached. I thank you in advance for your time and help with this comment period, I also wish you and your staff a Very Happy New Year!

January 1, 2008

Steve Carpenter  
26716 Calle Los Alamos  
Capistrano Beach, Ca 92624

County of Orange  
Dana Point Harbor Department  
24650 Dan Point Harbor Drive  
Dana Point, Ca 92629

1/3/2008

January 1, 2008

Steve Carpenter  
26716 Calle Los Alamos  
Capistrano Beach, Ca 92624

County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, Ca 92629  
Phone (949) 923-2236

Attn: Brad Gross, Director

Subject: Comments, Proposed Dana Point Harbor Marina Improvement Project.

Dear Mr. Gross,

Please find listed below my comments regarding the IS Dana Point Harbor Marina Improvement Project of the SEIR. I have listed my comments in order, stating page number of report and section numbers. As a citizen of Dana Point, I am very concerned that my comments are incorporated and included into the Draft EIR report for the completed SEIR.

1. Page 2-3, Environmental Factors Potentially Affected:
  - a. There is a **significant impact**; why were Public Services excluded for the IS report? There will be impacts to boating services and public tourist service with the proposed waterside plan.
2. Page 2-4, Section 2) Evaluation of Environmental Impacts:
  - a. There is a **significant impact**; any and all, prior or existing traffic, air quality, travel, and road studies did not take into account the elimination of boats and people from the previous approved Landside LCPA.
3. Page 2-6, Section 1b) Land Uses & Planning:
  - a. There is a **significant impact**; conflict with existing Landside LCPA, also takes into account Page 2-4, Section 2, All answers must take account of the whole action involved, including off-site as well as on-site cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
4. Page 2-6, Section 3b&c), Population & Housing:
  - a. There will be a **significant impact**; of housing, according to the IRS, a boat is considered a second home. There will be a loss of housing for 374 boats from slip loss and 100+ boat storage spaces from existing hard storage.
  - b. There will be a **significant impact**; to people during and after the marine improvement project. There will be a permanent displacement to more than 474 people and their families.



5. Page 2-8, Section 5g&h):
  - a. There will be a **significant impact**; the possible relocation of 474 plus boats (second homes) to a location that is stated in these two sections.
  
6. Page 2-9, Section 6d&g):
  - a. There will be a **significant impact**; the location of the new dry storage building launching areas and temporary dry storage building day use docking. This area of the Boat Traffic Study does not address the immense traffic congestion that will be occurring within the existing launch ramp and new dry storage building docks. This is for both sections.
  
7. Page 2-13, Section 15v):
  - a. There will be a **significant impact**; there is no guaranteed off-site boat storage (guaranteed by the County of Orange, Dana Point Harbor Department) for the loss of 474 plus displaced boaters. In all Boaters' Meeting Workshops, the Dana Point Harbor Department stated, there will be a guaranteed minimum 500 boater's off-site storage.
  
8. Page 3-3&4, Section 3.1b):
  - a. There is a **significant impact**; there is no mention of any updating to the existing LCP held by the City of Dana Point. It is my understanding that the California Coastal Commission requires that the LCP be recertified every 5 years; I have not found any recertification for the City of Dana Point LCP.
  
9. Page 3-6, Section 3.3b&C):
  - a. There is a **significant impact**; in both sections there will be a significant impact. First, the answers within the IS report are incorrect; answer to b) is in section c), the answer to c) is in b). There will be a significant impact for the loss of 474 plus boats from the water and landside storage. These losses are permanent not temporary; it is a loss of housing and for people and their families.
  
10. Page 3-17, Section 3.7):
  - a. There is a **significant impact**; there is nothing stated or listed, for the permanent air quality impact by removing the 474 plus boats from Dana Point Harbor. This will be a significant impact to air quality, since these boats will now have to travel form an off-site parking storage facilities, to the launch ramps and having to find parking for the boater's vehicle and trailer.

I thank you in advance for your time and help with the proposed IS report, Dana Point Harbor Marina Improvement Project. I may be contacted at the following email address listed below.

Sincerely,  
Steve Carpenter  
[scsystems@flash.net](mailto:scsystems@flash.net)

## Jon Conk

---

**From:** Mollie Bennell-Lazarus [lazarus4@cox.net]  
**Sent:** Wednesday, January 02, 2008 11:22 AM  
**To:** MarinaEIR  
**Cc:** President@dpba.org  
**Subject:** RE: Dana Point Harbor Renovation

Dear Mr. Brad Gross,

We are writing to you regarding our concerns about the harbor renovation project as a current slip renter in Dana West Marina. While we understand the aging factor of the existing docks and a need to refresh the complex with the next 50 years in mind, we think this project is being driven by a desire to squeeze more money out of the harbor setting for the county.

**Dana Point has been a lovely, historical and family friendly setting, where real people, not just CEO's can engage in recreational boating with their friends and families.**

Right now the parking situation is okay except on very busy holiday weekends and during the hottest part of the summer.

**We do not need more shops and restaurants. This is a place for boaters not the Mission Viejo Mall!**

**Why turn this into another ugly Mega Marina for the very rich and ruin a wonderful place that all can enjoy at a more humane level!**

We are concerned about the plan to reduce 26-30ft boat slips, which is where we find ourself currently moored. We are not a particular fan of double wide slips which make you side tie to the dock, but would of course prefer that the number of slips not be reduced in any category. If it takes double wide slips to accomplish that, then so be it.

And no, we don't want to keep our boat in dry dock and have to launch it every time we want ot use it!

**Let's keep this a family friendly marina!**

**We'd like the Dana Point Harbor & Marina to remain a small boating and fishing village atmosphere that respects it's historical setting.**

Dr. Stephen & Mrs. Mollie Lazarus,  
San Clemente California

## Jon Conk

---

**From:** eric.gritzmacher@worldvestcm.com  
**Sent:** Saturday, December 15, 2007 2:05 PM  
**To:** MarinaEIR  
**Cc:** TRUMP SECURITIES  
**Subject:** Dana Point Harbor Plans

I have been unable to access the NOP, IS or the Boat Study Traffic websites. It comes back to me as not found. I used the links in Pate Bates 5<sup>th</sup> district newsletter and then entered them directly to no avail. Could you help me get to those sites? Thank you.

Eric Gritzmacher  
Managing Director  
WorldVest Capital Markets  
(949) 273-6462 (office)  
(949) 632-2378 (mobile)  
[eric.gritzmacher@worldvestcm.com](mailto:eric.gritzmacher@worldvestcm.com)

*Forward Looking Statements - Cautionary Language: Certain statements made in these documents may contain information that includes or is based upon forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements give expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. They use words such as "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," and other words and terms of similar meaning in connection with a discussion of future operating or financial performance. In particular, these include statements relating to future actions, prospective services or products, future performance or results of current and anticipated services or products, sales efforts, expenses, the outcome of contingencies such as legal proceedings, trends in operations and financial results. Any or all forward-looking statements may turn out to be wrong. They can be affected by inaccurate assumptions or by known or unknown risks and uncertainties. Many such factors will be important in determining our actual future results. These statements are based on current expectations and the current economic environment. They involve a number of risks and uncertainties that are difficult to predict. These statements are not guarantees of future performance.*

1/3/2008

*Actual results could differ materially from those expressed or implied in the forward-looking statements. We disclaim any current intention to update any forward-looking statements to reflect events or circumstances that occur after the date of these documents.* CONFIDENTIALITY NOTICE: THIS EMAIL TRANSMISSION AND ANY ATTACHMENTS INCLUDED WITH THIS E-MAIL TRANSMISSION ARE THE PROPERTY OF WORLDVEST LLC AND CONTAINS INFORMATION THAT IS CONFIDENTIAL AND/OR LEGALLY PRIVILEGED. THE INFORMATION IN THIS E-MAIL TRANSMISSION AND IN ANY SUCH ATTACHMENTS IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHOM IT IS ADDRESSED. IF YOU ARE NOT THE INTENDED RECIPIENT (REGARDLESS OF WHETHER THE E-MAIL ADDRESS IS CORRECTLY STATED OR NOT), YOU ARE HEREBY NOTIFIED THAT ANY DISCLOSURE, COPYING, DISTRIBUTION OR USE OF ANY OF THE INFORMATION CONTAINED IN THIS TRANSMISSION OR IN ANY ATTACHMENT IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS E-MAIL TRANSMISSION IN ERROR, PLEASE IMMEDIATELY NOTIFY THE SENDER BY RETURN E-MAIL OR BY TELEPHONE (212-897-1688) AND DELETE. THANK YOU.



**HOFFMAN**  
CALIFORNIA - INTERNATIONAL  
**FABRICS**  
ESTABLISHED 1924

December 14, 2007

County of Orange  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, Ca. 92629

Attention Brad Gross, Director:

Regarding: The narrowing of the Main Channel - CC-071-07


As we are all very well aware, Dana Point Harbor was designed to be a small boat harbor and this harbor is still in better shape in comparison to all the other harbors in Southern California.

- 1) In my opinion I feel that nothing should be changed!
- 2) It is a money making harbor.
- 3) You do not need to incur more debt.
- 4) Put the money to better use.

The existing traffic in the main inside channel is already very busy. It gets a lot of inflatable dinghies, kayak paddling, kayak fishing, single outrigger paddling, stand-up paddling (big trend) prone paddling and fishing from inflatable inner-tubes. I know of two separate incidents where people have been run over because the boaters have been unable to detect them low down in the water. One is in the process of suing the boat owner and the county!

I have duly read the report from the Harbor Department and what they have not addressed is the traffic problem in the main inside channel. For safety reasons alone, I feel that the narrowing of the inside channel will be more of a liability and the removal of all the docks will no doubt incur a huge expense. One can only predict that the overall return on such and investment will be miniscule.

Regards,



Philip Hoffman  
Slip # A133

Rube P. Hoffman Co.

25792 OBRERO DRIVE • P.O. BOX 2009 • MISSION VIEJO, CA 92691-3140 • 949-770-2922 • 800-547-0100 • FAX 949-770-4022

E-mail: HoffmanFab@AOL.com • Website: <http://www.HoffmanFabrics.com>

## Jon Conk

---

**From:** pfnangle@aol.com  
**Sent:** Wednesday, January 02, 2008 4:03 PM  
**To:** MarinaEIR  
**Cc:** notetoapril@cox.net; pfnangle@aol.com  
**Subject:** Traffic study input

Pete Nangle  
Orange County Resident- Dana Point Boater  
[pfnangle@aol.com](mailto:pfnangle@aol.com) 949-322-8814

To: Brad Gross Director

Overview- Upon review of the recently submitted “Dana Point Boat Traffic Study” Nov 2007, I was called to write this critique to bring up some serious anomalies in the study. While the study is professionally presented, and looks to have been submitted by a competent consulting firm, there are some serious omissions and misleading findings and conclusions. I submit that a study done by locals and serious Dana Point boaters instead of Paid consultants would have come to different conclusions.

### Findings-

a. Page 1- Executive Summary- This page refers to the fact that only one single day (July 14, 2007) data points were used for this study. Any statistical analysis of this importance should have more data points. This is unacceptable evidence that any of this data is properly representative of the true utilization. The day in question was a gloomy Saturday that is fresh in my mind because the annual Marine Swap Meet was held in the parking lot. A lot of boaters showed up, and spent the day selling and shopping, instead of boating. I also remember that there was absolutely no wind that day, that would have had the effect of eliminating most sailboaters from

venturing out. This has a major effect on the accuracy of the data. The opposite effect would occur if data had been collected on the next Thursday, when the weekly “beer can race” is held and a group of 30+ sailboats would leave and return twice.

Issue- There needs to be a statistically significant number of days and times studied.

b. Page 6- Footnotes- This data is so outdated it is unusable. Fuel costs alone have altered the “use” of the average boater. Kayaks, and human powered boats are now outnumbering the gas and diesel powered boats.

c. Page 37- “ The design intent never included using the inner channels for recreational areas....” This needs to be seriously looked at from today's needs and uses. Rarely are the kayakers and stand-up paddlers even a factor in navigation in the channels and the popularity of this activity should necessitate a change in policy. To exclude these folks by suddenly enforcing a ridiculous law would be really bad. The Heart and Soul of Dana Point is the boating that is done on this level and not the Giant Powerboaters that the consultants seem to want. Outlaw Kayaks?? Absurd !! We'll tell our sons fighting for freedom in Iraq that I just threw out their kayaks because the Dana Point Harbor Department deemed them a menace.

d. Small Day Use Boats are generally used by kids that utilize the channels as well as the basins. These assets are priceless, and narrowing the channels will significantly impact the availability of free water to sail on. I don't see any reference to this group or the huge impact that this project will have. Our Children are the future, and need open water to carry on the traditions. Programs such as Mariners, Westwind, and Yacht club youth groups regularly use these passages, and need our protection.

Summary This study needs to be re-written with community input.

Pete

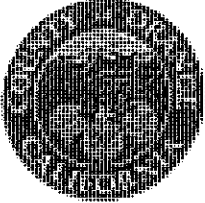
1/3/2008

Cell 949-322-8814

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**COPY**

**NOTICE OF PREPARATION  
NOTICE OF SCOPING MEETING  
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT**

Date: November 27, 2007  
Subject: Notice of Intent to Prepare a Draft Subsequent Environmental Impact Report  
Project Title: Dana Point Harbor Marina Improvement Project  
Applicant: County of Orange – Dana Point Harbor Department

The Orange County Dana Point Harbor Department (County) has prepared an Initial Study (IS) for the proposed waterside Marina Improvement Project in the City of Dana Point (City) and has determined that a Subsequent Environmental Impact Report (SEIR) is required. The County is the lead agency for the project and will prepare the SEIR in accordance with the requirements of the California Environmental Quality Act (CEQA) and the CEQA implementing guidelines (Guidelines).

The project proposes renovation of the marinas and other facilities in the Dana Point Harbor. The Marina Improvement Project (Project) renovations include removal of nearly all floating docks and piles in the West and East Marinas; reconstruction of portions of the quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and supporting utilities within both marina areas. Additionally, new dry stack storage staging docks and dinghy docks, along with renovations to the Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. Other Project components include improved lighting on the docks and public access improvements, including gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. In order to accommodate boaters during the renovations, the Project also includes the construction of temporary docks to be located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach.

This Notice of Preparation (NOP) is being circulated pursuant to California Public Resources Code Section 21153(a) and CEQA Guidelines Section 15082. Public agencies and the public are invited to comment on the proposed scope and content of the environmental information to be included in the SEIR. Potential Responsible Agencies, federal agencies involved in funding or approving the project, and Trustee Agencies responsible for natural resources affected by the project areas are invited to comment regarding the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project. The project location map is included with this NOP. Based on the analysis contained in the IS, the probable environmental effects of the project to be analyzed in the DSEIR, include but are not necessarily limited to the following: aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, recreation, transportation and traffic, and utilities. Responses received to this NOP may modify or add to the preliminary assessment of potential issues addressed in the SEIR.

A public SEIR scoping meeting will be held on Saturday, December 8, 2007, at 11:00 a.m. to 1:00 p.m. at the Dana Point Youth and Group Facility, Dana Point, California 92629. A complete copy of the Orange County Dana Point Harbor Department's Initial Study is available for review at the County of Orange Planning Department or online at [www.dphplan.com](http://www.dphplan.com). Because of the earliest possible date but not later than 30 days after the date of this notice, comments from agencies and others regarding this notice must be submitted in writing to the

**COUNTY OF ORANGE**  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

*Flood program does not have a need to comment on this note from Kevin Oruma*

Pg #1



COMMENT SHEET

PROPOSED DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

Please use the space below to provide comments to help the County of Orange identify the environmental effects that should be analyzed in the draft Subsequent Environmental Impact Report. This form should be completed and returned to the address on the back. All comments must be postmarked no later than Wednesday, January 2, 2008.

PLEASE PRINT

Regarding the environmental effects of the proposed Dana Point Harbor Marina Improvement Project,

Approx. 17 people spoke @ Sat. meeting. Approx. 12 were county employees of retailers. One of the above mentioned water quality (Jim Miller). Approx. 5 non retailers/boaters spoke. 4 of those spoke to the issues of the environment very specifically. 1 spoke to do nothing to marina. All others spoke generically in favor of revitalization which was not a topic of this meeting?? (cont.)

Please provide your mailing address below:

Jim Montrella  
127122 Cypress  
Mission Viejo CA  
92692

Sincerely,

Jim Montrella

Please print your name clearly above

EMAIL: bevandjim1@sbcglobal.net

Check the box if you wish to be added to the project mailing list.

12-11-07P02:11 RCVD

Check all that apply:

- Boater
- Merchant
- Agency
- Dana Point Resident
- Other \_\_\_\_\_

Pg. #2

Dear Brad

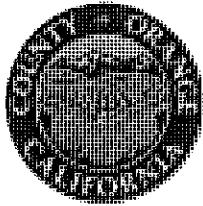
Based on what I heard you were very patient and kind to those people who spoke to issues that you said, at the beginning, were not on the table. My congratulations on your patience.

I hope you sincerely analyze the concerns of those I who stayed on the subject.

Thanks

Jim  
Montali

P.S. One a different but related issue, please get dredging done ASAP.



## RE-ISSUED NOTICE OF PREPARATION SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Date: December 21, 2009  
Subject: Re-Issue Notice of Intent to Prepare a Draft Subsequent Environmental Impact Report  
Project Title: Dana Point Harbor Marina Improvement Project SCH No. 2003101142  
Applicant: OC Dana Point Harbor

This Notice of Preparation (NOP) is being re-issued by OC Dana Point Harbor (County) for the proposed waterside Marina Improvement Project in the City of Dana Point (City). The original NOP was circulated from November 27, 2007 to January 2, 2008 to inform Responsible and Trustee Agencies, and the interested public that a Subsequent Environmental Impact Report (SEIR) was being prepared for the Marina Improvement Project. Due to the length of time that has passed, this NOP is being re-issued. The County is the lead agency for the project and will prepare the SEIR in accordance with the requirements of the California Environmental Quality Act (CEQA) and the CEQA implementing guidelines (Guidelines). This NOP is being circulated pursuant to California Public Resources Code Section 21153(a) and CEQA Guidelines Section 15082.

The Land Use Plan component of the Local Coastal Program Amendment (LCPA) for the proposed Dana Point Harbor Revitalization Project was approved with suggested modifications by the California Coastal Commission (Commission) on October 8, 2009. The waterside portion of the project is now proceeding through a separate, independent process for environmental clearance and approval. As part of the Commission's approval, a suggested modification was included to establish a goal for any dock replacement to attempt to achieve a "no net loss" of slips harborwide, but to limit the loss of boat slips to a maximum of 155 slips with an average slip length not to exceed 32 feet. In the event that the replacement of docks requires a reduction in the quantity of slips in existing berthing areas, the policy revision also provides that those slips should be replaced, if feasible in new berthing areas elsewhere in the harbor. No other changes in the project description for the Marina Improvement Project have occurred since the circulation of the previous NOP in November 2007.

The Marina Improvement Project (Project) renovations include removal of nearly all floating docks and piles in the West and East Marinas; potential repair and/or reconstruction of portions of the quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, improved lighting on the docks and supporting utilities within both marina areas. Additionally, new dry stack storage staging docks and dinghy docks, along with renovations to the OC Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. The project also includes public access improvements to gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines, and construction of temporary docks the along the breakwater adjacent to Doheny State Beach.

Potential Responsible Agencies, federal agencies involved in funding or approving the project, and Trustee Agencies are invited to comment regarding the scope and content of the environmental information to be included in the SEIR, relevant to your agency's statutory responsibilities in connection with the proposed project. The project location map is included with this NOP. Based on the analysis contained in the IS, the probable environmental effects of the project to be analyzed in the DSEIR, include but are not necessarily limited to the following: aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, recreation, transportation and traffic, and utilities. Responses received to this NOP may modify or add to the preliminary assessment of potential issues addressed in the SEIR.

A complete copy of the original NOP prepared for the proposed project may be reviewed at OC Dana Point Harbor office located at, 24650 Dana Point Harbor Drive, Dana Point, California 92629, or online at [www.dphplan.com](http://www.dphplan.com). Because of time limits mandated by State law, your response must be sent at the earliest possible date but *not later than 30 days* after receipt of this notice. The County will accept comments from agencies and others regarding this notice through the close of business on **January 20, 2010**. All comments to this notice must be submitted in writing to the following address, or by e-mail as indicated below:

**OC Dana Point Harbor**  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Attention: Brad Gross, Director  
Phone: (949) 923-2236  
[Marinaeir@dphd.ocgov.com](mailto:Marinaeir@dphd.ocgov.com)

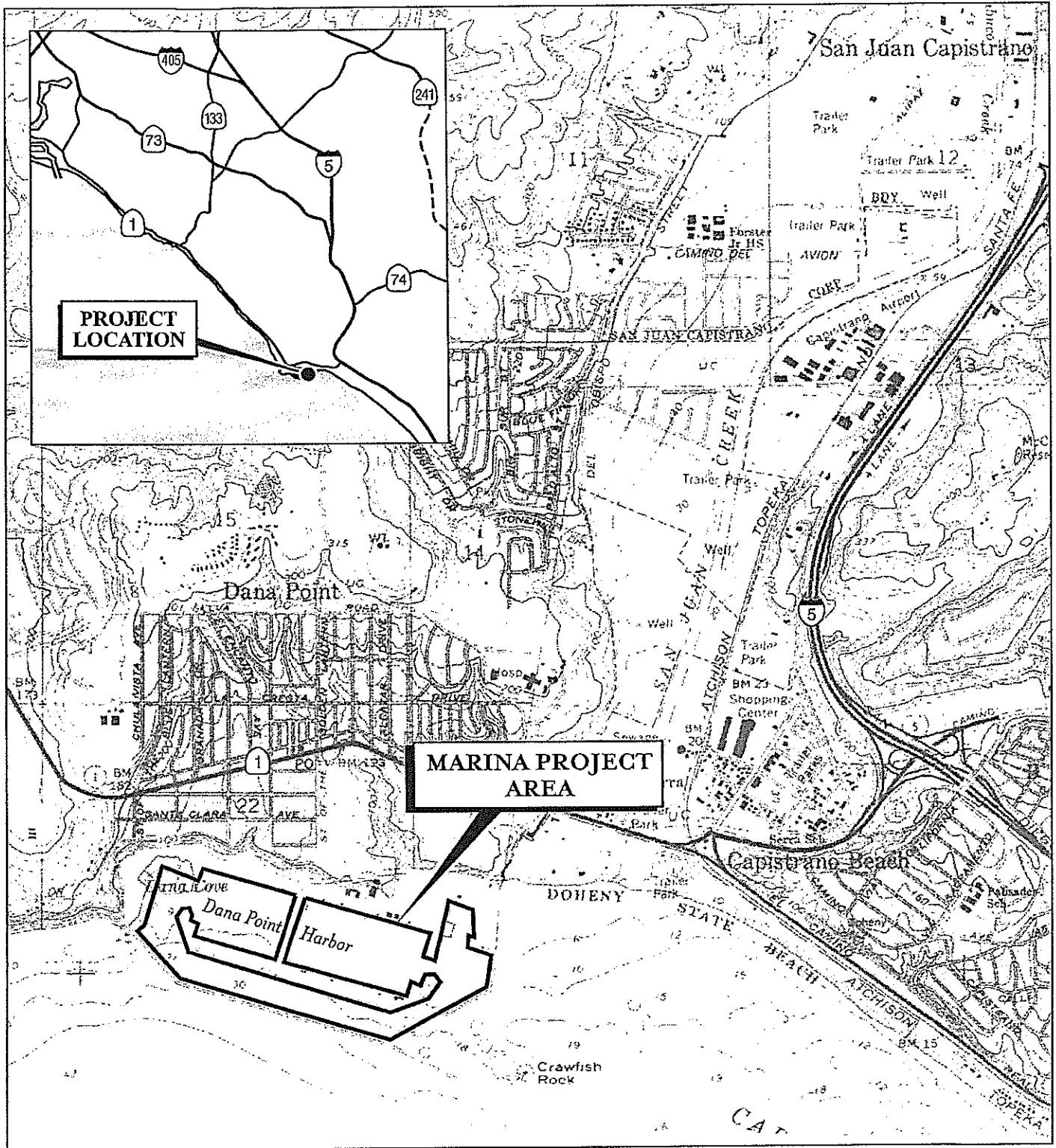


FIGURE 1

LSA



SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif."

Dana Point Harbor Marina Improvement Project  
Project Location



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

January 8, 2010

Mr. Brad Gross, Director  
County of Orange  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

01-25-10A09101 REV0

Dear Mr. Gross:

## **Notice of Preparation of a Draft Subsequent Environmental Impact Report (Draft SEIR) for the Dana Point Harbor Marina Improvement Project**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft environmental impact report (SEIR). Please send the SCAQMD a copy of the Draft SEIR upon its completion. **In addition, please send with the draft SEIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files. Electronic files include spreadsheets, database files, input files, output files, etc., and does not mean Adobe PDF files. Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

### **Air Quality Analysis**

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: [www.urbemis.com](http://www.urbemis.com).

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM<sub>2.5</sub> emissions from construction and operational activities and processes. In connection with developing PM<sub>2.5</sub> calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM<sub>2.5</sub> emissions and compare the results to the recommended PM<sub>2.5</sub> significance thresholds. Guidance for calculating PM<sub>2.5</sub> emissions and PM<sub>2.5</sub> significance thresholds can be found at the following internet address: [http://www.aqmd.gov/ceqa/handbook/PM2\\_5/PM2\\_5.html](http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html).

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: [http://www.aqmd.gov/ceqa/handbook/mobile\\_toxic/mobile\\_toxic.html](http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html). An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

#### **Mitigation Measures**

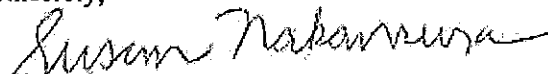
In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: [www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html) Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: <http://www.aqmd.gov/prdas/agguide/agguide.html>. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: <http://www.arb.ca.gov/ch/handbook.pdf>. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

#### **Data Sources**

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (<http://www.aqmd.gov>).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Daniel Garcia, Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

  
Susan Nakamura  
Planning Manager  
Planning, Rule Development and Area Sources

SN:DG:AK  
ORC100106-04AK  
Control Number

From: Tom S [mailto:[deboatman@sbcglobal.net](mailto:deboatman@sbcglobal.net)]  
Sent: Tuesday, January 12, 2010 9:07 PM  
To: MarinaEIR  
Cc: \ 'Rodger Beard\  
Subject: Comments on NOP Project SCH 2003101142

Dear Sirs,

I would like to comment on the proposed waterside improvement project in Dana Point Harbor.

I have concerns regarding the limited plan options that have been presented to the boaters in the past. All of the options included both channel narrowing and 1/3 double wide slips. Why were there no options that included no channel narrowing or no double wide slips? I voted on the 4 plans presented last year, but none of the designs were my preference since I really think double wide slips are a mistake and do not give you any benefit for the amount of inconvenience that all the boaters will receive. When initially polled, 84% of the boaters opposed double wide slips. So the DPHD is still ignoring this and including this in all design options. When I had communications with the waterside project consultant (Jon Conk) , he explained that there would be about a 9-10% savings for the double wides. So you would inconvenience 300 boaters forever to save 30 slips? The cost / benefit does not seem to make much sense. The same goes for channel narrowing. If you are in the harbor on any summer weekend, you would see how crowded the main channel is and how hard it is to navigate. The reality is that narrowing the channel would create many dangerous situations for boaters, kayakers and paddle boarders alike.

Please expand the options presented to the boaters to exclude these designs for our fine harbor. Very few want them, but you have continually included them in every one of your past plan options to the boaters.

Thank you.

Tom Smith  
slip renter  
East Basin



**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 384  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
e-mail: [de\\_nahc@pacbell.net](mailto:de_nahc@pacbell.net)



January 26, 2010

Mr. Brad Gross

**COUNTY OF ORANGE****DANA POINT HARBOR DEPARTMENT**

24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Re: SCH#2003101142 CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Dana Point Harbor Marina Improvement Project; located in the City of Dana Point, Orange County, California

Dear Mr. Gross:

The Native American Heritage Commission (NAHC) is the state 'trustee agency' pursuant to Public Resources Code §21070 for the protection and preservation of California's Native American Cultural Resources.. (Also see *Environmental Protection Information Center v. Johnson* (1985) 170 Cal App. 3<sup>rd</sup> 604) The California Environmental Quality Act (CEQA - CA Public Resources Code §21000-21177, amended in 2009) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following.

The Native American Heritage Commission did perform a Sacred Lands File (SLF) search in the NAHC SLF Inventory, established by the Legislature pursuant to Public Resources Code §5097.94(a) and Native American Cultural resources were not identified within one-half mile of the APE – City Boundaries. However, there are Native American cultural resources in close proximity.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Also, the NAHC recommends that a Native American Monitor or Native American culturally knowledgeable person be employed whenever a professional archaeologist is employed during the 'Initial Study' and in other phases of the environmental planning processes.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation (OHP) Coordinator's office (at (916) 653-7278, for referral to the nearest OHP Information Center of which there are 11..

Consultation with tribes and interested Native American tribes and individuals, as consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f])*et se*,

36 CFR Part 800.3, the President's Council on Environmental Quality (CSQ; 42 U.S.C. 4371 *et seq*) and NAGPRA (25 U.S.C. 3001-3013), as appropriate. .

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The authority for the SLF record search of the NAHC Sacred Lands Inventory, established by the California Legislature, is California Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10). The results of the SLF search are confidential. However, Native Americans on the attached contact list are not prohibited from and may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior' discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C, 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

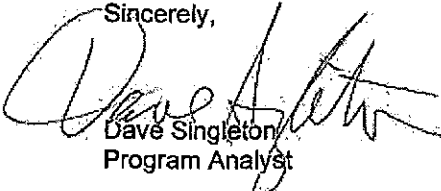
CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

Again, Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton  
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

Native American Contacts  
Orange County  
January 26, 2010

Juaneno Band of Mission Indians Acjachemen Nation  
David Belardes, Chairperson  
32161 Avenida Los Amigos Juaneno  
San Juan Capistrano CA 92675  
DavidBelardes@hotmail.com  
(949) 293-8522  
(949) 493-4933 - Home

Juanefio Band of Mission Indians  
Sonia Johnston, Tribal Chairperson  
P.O. Box 25628 Juaneno  
Santa Ana , CA 92799  
sonia.johnston@sbcglobal.  
(714) 323-8312

Juaneno Band of Mission Indians Acjachemen Nation  
Anthony Rivera, Chairman  
31411-A La Matanza Street Juaneno  
San Juan Capistrano CA 92675-2674  
arivera@juaneno.com  
(949) 488-3484

Juaneno Band of Mission Indians  
Anita Espinoza  
1740 Concerto Drive Juaneno  
Anaheim , CA 92807  
(714) 779-8832

(530) 354-5876 - cell

Juaneno Band of Mission Indians  
Alfred Cruz, Culural Resources Coordinator  
P.O. Box 25628 Juaneno  
Santa Ana , CA 92799  
alfredgcruz@sbcglobal.net  
714-998-0721  
714-998-0721 - FAX  
714-321-1944 - cell

United Coalition to Protect Panhe (UCPP)  
Rebecca Robles  
119 Avenida San Fernando Juaneno  
San Clemente CA 92672  
(949) 573-3138

Juaneno Band of Mission Indians  
Adolph 'Bud' Sepulveda, Vice Chairperson  
P.O. Box 25828 Juaneno  
Santa Ana , CA 92799  
bssepul@yahoo.net  
714-838-3270  
714-914-1812 - CELL  
bsepul@yahoo.net

Juaneno Band of Mission Indians Acjachemen Nation  
Joyce Perry  
4955 Paseo Segovia Juaneno  
Irvine , CA 92612  
949-293-8522

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106, and federal NAGPRA.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2003101142; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Dana Harbor Marina Improvement Project; located in the City of Dana Point; Orange County, California.



Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
5796 Corporate Avenue  
Cypress, California 90630



Arnold Schwarzenegger  
Governor

January 27, 2010

Mr. Brad Gross, Director  
Orange County, Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

### RE-ISSUED NOTICE OF PREPARATION FOR A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE DANA POINT HARBOR MARINA IMPROVEMENT PROJECT (SCH# 2003101142), ORANGE COUNTY

Dear Mr. Gross:

The Department of Toxic Substances Control (DTSC) has received your submitted re-issued Notice of Preparation (NOP) for a draft Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated in your document: "The Dana Point Harbor Marina Improvement Project (Project) is located within the City of Dana Point (City) at Dana Point Harbor (Harbor) in Capistrano Bay on the Southern Orange County (OC) coastline, between Los Angeles and San Diego Counties. The Project includes the removal of nearly all floating docs and piles in the West and East Marinas; potential repair and/or reconstruction of portions of the quay wall; and installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, improved lighting on the docks and supporting utilities within both marina areas. Additionally, new dry stack storage staging docks, star moorings and dinghy docks, along with renovations to the OC Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. The Harbor is bordered by the Pacific Ocean to the south; Dana Point Headlands and Old Cove Marine Preserve to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north". DTSC has the following comments:

- 1) The EIR should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances, and any known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the pertinent regulatory agencies:

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Mr. Brad Gross, Director  
January 27, 2010  
Page 2

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
  - EnviroStor: A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
  - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
  - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
  - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
  - Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
  - Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
  - The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).
- 2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. Please see comment No.11 below for more information.
- 3) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found should be clearly summarized in a table.

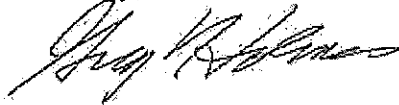
- 4) Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports by these agencies should be included in the EIR.
- 5) If buildings or other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.
- 6) Project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.
- 7) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

Mr. Brad Gross, Director  
January 27, 2010  
Page 4

- 9) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented.
- 10) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties under CERCLA, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see [www.dtsc.ca.gov/SiteCleanup/Brownfields](http://www.dtsc.ca.gov/SiteCleanup/Brownfields), or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Mr. Rafiq Ahmed, Project Manager, at [rahmed@dtsc.ca.gov](mailto:rahmed@dtsc.ca.gov) or by phone at (714) 484-5491.

Sincerely,



Greg Holmes  
Unit Chief  
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research  
State Clearinghouse  
P.O. Box 3044  
Sacramento, California 95812-3044  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

CEQA Tracking Center  
Department of Toxic Substances Control  
Office of Environmental Planning and Analysis  
1001 I Street, 22nd Floor, M.S. 22-2  
Sacramento, California 95814  
[ADelacr1@dtsc.ca.gov](mailto:ADelacr1@dtsc.ca.gov)

CEQA # 2781

**From:** Michael Murphy [mailto:[mpmurphy@moranandco.com](mailto:mpmurphy@moranandco.com)]  
**Sent:** Monday, January 11, 2010 2:46 PM  
**To:** MarinaEIR  
**Subject:** re-issued NOP

I received your notice of preparation for the SEIR dated January 5, 2010. Although the notice states that the re-issued NOP is available at [www.dphplan.com](http://www.dphplan.com), I am finding it difficult to find a clear link to the document(s) from the main website. Can you please send me a direct link to the document so that I may review?

Thank you,

Michael Murphy  
Director

Moran & Company  
2211 Michelson Drive, Suite 1170  
Irvine, CA 92612

949.242.4050 x8404  
949.242.4060 fax

[mpmurphy@moranandco.com](mailto:mpmurphy@moranandco.com)  
[www.moranandco.com](http://www.moranandco.com)



## Initial Study – Public Comments

As this is an update Boaters for Dana Point Harbor are resending an earlier document with track changes on. In the spirit of making work as easy as possible for everyone we hope that the County will extend a similar courtesy. Thank you for the opportunity to submit the following comments for:

Re-Issue Notice of Intent to Prepare a Draft Subsequent Environmental Impact Report,

Project: Dana Point harbor Marina Improvement Project SCH No. 2003101142.

The Notice of Preparation states that the Draft Subsequent Environmental Impact Report will be available in area libraries and in OC DPH offices. We respectfully ask that the Draft Subsequent Environmental Impact Report be release electronically and not locked down as images. This will facilitate maximum public involvement.

Regards,  
Boaters for Dana Point Harbor  
Bruce Heyman  
949 289-8400  
[BruceHeyman@cox.net](mailto:BruceHeyman@cox.net)

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### Procedural

1. The Dana Point Harbor Department (now OC DPH) should not be the Lead Agency for the Subsequent Environmental Impact Report.
  - a. Discussion
    - i. The California Environmental Quality Act is a “self-executing statute”
    - ii. Which is enforced, as necessary, by the public through litigation and the threat thereof
    - iii. As the Dana Point Harbor Department has declared itself the “Lead Agency”
    - iv. In this case the Dana Point Harbor Department is also the “Applicant”.
    - v. While there is significant precedent where the “Lead Agency” and the “Applicant” are the same governmental organization there is an expectation that there will be the required safeguards to insure the “Applicant” is doing a thorough job
    - vi. Furthermore the “Lead Agency” is required to perform such duties that are required to insure the validity of the “Applicant’s” submittal
    - vii. In this case the “Lead Agency”, Dana Point Harbor Department has shown a clear desire to politicize the process while also

- demonstrating a serious lack of reverence for the Subsequent Environmental Impact Report process at the Scoping Meeting
- viii. Many of the participants and speakers were there at the behest of the Dana Point Harbor Department to state, for the record, their desire to see the “Revitalization of the Harbor” to move forward as already planned. Most made these comments with no discussion of environmental issues.
  - ix. The Dana Point Boaters Association was asked by the Dana Point Harbor Department to minimize speakers so as to allow others time to talk
  - x. The Dana Point Boaters Association was also asked by the Dana Point Harbor Department to help keep boaters focused on environmental issues as opposed to slip design issues
  - xi. The Dana Point Harbor Department encouraged proponents of the plan; brokers, restaurant owners/operators, harbor merchants and marina operators (agents of the Dana Point Harbor Department) to provide as many speakers as possible and did not encourage them to speak to environmental issues
  - xii. Public involvement in the process was envisioned to be a vital element of the California Environmental Quality Act
  - xiii. Statements made by the Dana Point Harbor Department at the beginning of the Scoping Meeting implied that public comments and participation in the process will result in unnecessary delays, and increased costs.
- b. Recommendation
- i. The County of Orange should appoint a new “Lead Agency” to provide proper oversight of the Dana Point Harbor Department, “Applicant”.
    - 1. This will help to insure the validity of the Subsequent Environmental Impact Report
    - 2. Reduce the possibility of avoidable delays due to litigation or the threat there of
    - 3. Insure the optimal use of funds and resources

~~2. Work on the Subsequent Environmental Impact Report should be place on hold until the Waterside Design has been completed.~~

~~a. Discussion~~

- ~~i. Design must be completed enough to insure all environmental impacts are studied~~
- ~~ii. The Final Environmental Impact Report approved by the County Board of Supervisors on 1/31/06 was Programmatic with respect to the Waterside Project because the design was not yet complete~~
- ~~iii. The Waterside design is still not complete~~
- ~~iv. It is likely that the final design will have a different number of slips/boats from the County’s currently stated favored plan~~

- ~~v. It is very possible that these changes will not accommodate a “Negative Declaration” in effect negating the bulk of the work required to complete the Subsequent Environmental Impact Report~~
- ~~vi. County stated at the Scoping Meeting that the design can still be changed but failed to articulate a process or procedure for these possible changes~~
- ~~b. Recommendation~~
  - ~~i. Suspend all work (time and money) on the Subsequent Environmental Impact Report and~~
  - ~~ii. Establish a process to collaboratively conclude the design phase~~

### Initial Study Comments

~~3-2.~~ The Subsequent Environmental Impact Report must deal with the offsite as well onsite locations affected by this project.

- a. Discussion
  - i. {IS Page 2-4 item 2} “all answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
  - ii. As a result of the Waterside Project there will be Displace Boats (approximately ~~1100-???~~ boats displaced to accommodate approximately ~~750-???~~ to move in) [some of this displacement is already happening as a result of policies implemented by the Dana Point Harbor Department and their agents].
  - iii. The approximately ~~1100-???~~ boats will have to go somewhere,
    - 1. Some will be allowed to stay as a result of “right sizing” provided the families can afford this choice long term
    - 2. Given that there are already over ~~600-683~~ dry storage boats in the “Commercial Core” being forced into the dry stack (400) and mast up storage (93) there will not be enough space available for this boats within the already approved Commercial Core Final Environmental Impact Report
    - 3. The South Coast Water District is on record stating that they will not sell their property on Stone Hill Rd.
    - 4. Use of the South Coast Water District property as mitigation for displacing boat storage in the Harbor must be considered speculative at this point given the current state of boater acceptance and where South Coast Water District is in the process of the proposed site build out
    - 5. Dry storage, under the management of Vintage Marina Partners has been allowed to implement massive storage fee increases (10% for each of the last three years). This is distorting true demand for in harbor storage.
  - iv. {IS Page 3-12 item a} new offsite boat storage areas will/may likely have “impervious surfaces” whose impacts must be studied
  - v. {Page 2-7 #4 and page 3-8} Geology and Soils

~~v.~~vi. Additonal Traffic considerations must be accommodated as it was not fully accounted for in FEIR 541

b. Recommendation

- i. The Dana Point Harbor Department must identify all locations where the displaced boats will likely be stored
- ii. The Dana Point Harbor Department must study the environmental impacts of these storage areas as part of this Subsequent Environmental Impact Report
- iii. The Dana Point Harbor Department must study geology and soil conditions of all areas where displaced boats are going
- iii-iv. The OC Dana Point Harbor must study the traffic issues associated with any changes in circulation and storage locations.

4.3. ~~Consultation – The Dana Point Boaters Association~~Boaters for Dana Point Harbor are is requesting Consultation

a. Discussion

- i. Article 7. EIR Process Section 15086. Consultation Concerning Draft EIR
- ii. The Lead agency may consult directly with:
- iii. 2) any member of the public who has filed a written request for notice with the lead agency or the clerk of the governing body.

b. Recommendation

- i. Dana Point Harbor Department will consult directly with ~~Dana Point Boaters Association~~Boaters for Dana Point Harbor on the Subsequent Environmental Impact Report

~~5.4.~~The Final Environmental Impact Report needs to be refreshed as a part of this Subsequent Environmental Impact Report.

a. Discussion

- i. {IS Page 2-6 1 b)} Applicable Land Use Plan
- ii. Final Environmental Impact Report approved 1/31/2006
- iii. Dana Point City Council approve the Commercial Core Local Coastal Plan Amendment on 10/06
- iv. Material differences (dry stack, # and size of restaurant/store expansion) that affect boaters that now need to be re-studied.
- v. 53% increase in commercial core and significant reduction in every element of recreational boating (dedicated boater parking, trailer/tow vehicle parking, ship yard, rest room access, mast up storage, and number of locations for storing boats.)
- vi. {IS page 3-3 item b} County of Orange should not be allowed to category this area as a “Regional Recreation Area” given the displacement of recreational boating activities in favor of expanded commercial interests

b. Recommendation

- i. Re-examine all relevant issues within the Final Environmental Impact Report that were affected by changes made since 1/31/06 approval:
  - 1. Due to Dana Point City's LCPA process
  - 2. Impacts due to the waterside development that were not adequately covered

~~6.5~~ Channel Narrowing will required proper study

- a. Discussion
  - i. {IS Page 2-9 d} Increased Hazards
  - ii. Channel Narrowing will present a Potentially Significant Impact
- b. Recommendations
  - i. Initial Study Item 6 d) must be coded as Potentially Significant Impact and handled/studied appropriately

~~7.6~~ The statement is made, without explanation, that the "...future LCPA will improve overall Coastal Act compliance" {IS Page 3-2}

- a. Discussion
  - i. Changes to the plan should be considered from a base line of the existing Local Coastal Programs and not from the current situation
  - ii. Many changes have occurred without the benefit of Environmental Impact Reports or California Coastal Commission oversight.
  - iii. Why is base line for this SEIR not the official LCP vs what the County and City has allowed to be taken away from boaters without formal process
  - iv. Why has compliance to existing LCP not been managed by County and City?
    - 1. East Cove (small slips eliminated for larger)
    - 2. Several areas in West (small eliminated for larger)
    - 3. Significant non compliance with dedicated boater parking requirements
    - 4. Significant takeaways from Trailer/Tow Vehicle parking
    - 5. Elimination of 100's of smaller slips in favor of larger (right sizing implemented by marina companies)
    - 6. Increase in broker slips
    - 7. Increase commercial activity out side of Sports Fishing area.
  - v. Why has the LCP not received the 5 year reviews audited as required by Coastal law?
- b. Recommendation
  - i. Reset baseline for all Environmental impacts to existing Local Coastal Programs including this SEIR

~~8.7~~ The Final Environmental Impact Report under stated the potential impact from slip and dry storage loss on local transportation

- a. Discussion
  - i. {IS Page 3-14} Transportation Final Environmental Impact Report
  - ii. By only examining the “Macro” delta numbers the true impact of the change is lost
    - 1. Approximately ~~620-683~~ dry storage boats competing for 493 storage locations in the new plan
    - 2. Approximately ~~1400-???~~ boats competing for approximately ~~261-???~~ slips in the 29’ and under category
    - 3. Expectation that these displaced boaters, approximately ~~1100-???~~ will be come trailer boaters
  - iii. Trailer boaters place a heavier load on local roads.
- b. Recommendation
  - i. Examine traffic loading along roads in and adjacent to Harbor based on new estimate of trailer boaters.

9.8. Assume that these sections will be updated per the Coastal Commission Action taken on October 8, 2009 Mischaracterization of Design Implication due to change in slip configuration

- a. Discussion
  - i. {IS Page 2.1 Section 9} County states that average slip size will be “Slightly Larger”
  - ii. 13.77% is not a slight increase
  - iii. This issue is further confused by the County’s use of “finger” size of slip vs. the size of boat that will be allowed in the slip
  - iv. Issue c. above understates the average slip size by at least 3’
  - v. Use of the word “Slightly Larger” does not set the right frame of reference for agency and public evaluation
- b. Recommendations
  - i. Restate numbers in a non-distorting manner
    - 1. Do not limit published numbers to the Dana Point Harbor Departments 4 size categories
    - 2. Use at least 9 size categories
    - 3. Articulate all slip configuration changes from original Harbor Design, not current or estimated actual
  - ii. Using restated numbers re-evaluate impacts identified and studied in the Final Environmental Impact Report
  - iii. Using restated numbers re-evaluate impacts identified for study in the Subsequent Environmental Impact Report

10.9. Local and County Public Services may be affected by this plan

- a. Discussion
  - i. {IS page 2-13 # 15} Public Services
  - ii. Pushing ~~1100-???~~+ boats out of the Harbor and into the community may adversely affect the provision of services (police, fire, EMT, water, sewer, maintenance....)
- b. Recommendation

- i. Evaluate Public Services impact as a result of this waterside project

~~11~~.10. Population & Housing will be affected by this project

a. Discussion

- i. {IS Page 2-6 #3. B & C Also Page 3-5 b and c} Live-A-Boards
- ii. Boats are considered second homes
- iii. Over ~~1100~~???? boats in the water will be displaced
- iv. Over ~~100~~??? boats on the land are being displaced
- v. Live aboard policy in the Harbor has become more restrictive since the Dana Point Harbor Department took the leases back
- vi. The target 3% live-a-boards are not being achieved due to the restrictive policies
- vii. Harbor safety is less than it could be with a more robust live-a-board program

b. Recommendations

- i. Evaluate Environmental Impact of
  - 1. Achieving 3% Live-A-Board
  - 2. Achieving 10% Live-A-Board
- ii. Evaluate Environmental Impact of over ~~1100~~????water side and over ~~100~~??? potential second homes being eliminated

~~12~~.11. Introduction of new purposes for Revitalization Design

a. Discussion

- i. {IS Page 1-3} Dana Point Harbor Department is introducing new language for goals
- ii. Task Force was formed to identify 12 Goals of Project
- iii. This Initial Study adds new goals "...and expand existing landside Harbor facilities to meet current and projected needs of the merchants and Harbor visitors..."
- iv. Final Environmental Impact Report was approved by County Board of Supervisors on 1.31.06
- v. Local Coastal Program Amendment was approved by Dana Point City Council in October of 2006

b. Recommendation

- i. Drop, unapproved, new purposes.

~~13~~.12. Inundation by seiche, tsunami or mudflow

a. Discussion

- i. {A – IS Page 2-8 J} Inundation by seiche, tsunami, or mudflow?
- ii. Recent modest rain has shown that water run off in Harbor can be significant
- iii. City and County have identified tsunami escape routs that will be affected by:
  - 1. construction within the harbor
  - 2. increase commercial traffic due to commercial expansion

3. increased trailer/tow vehicle traffic due to increased numbers of trailer boaters

- b. Recommendation

- i. Acknowledge possible impacts and include in study for Subsequent Environmental Impact Report

~~14.13.~~ Communities will be Physically Divided

- a. Discussion

- i. {A – IS Page 2-6 1 a)} Physically divide an established community
- ii. West marina will be layout out in a similar format to the east marina.
- iii. Many Boaters feel their community or “neighborhood” will be disrupted

- b. Recommendation

- i. Potential impact level should be increased and studied as part of the Subsequent Environmental Impact Report

~~15.14.~~ Land Use Mischaracterization

- a. Discussion

- i. {IS Page 3-2} Land Use Changes Mischaracterization of Facts
- ii. Significant land use changes and allocations are occurring on the land as a result of this project.
  1. Boat storage
  2. Boater Parking
  3. Access to bathroom facilities
  4. Trailer/tow vehicle parking
  5. Ship yard size

- b. Recommendation

- i. Provide detailed land use, in terms of acres or square feet, of planning areas one and two.
- ii. Re-examine Final Environmental Impact Report and examine Subsequent Environmental Impact Report implications of these significant Land Use Plan Changes.

~~16.15.~~ Boat Slip License Agreement

- a. Discussion

- i. The Dana Point Harbor Department has implemented an overly restrictive Boat Slip License Agreement
- ii. This Agreement significantly reduces tenant access to their boats
- iii. This policy will hopefully be remediated in the future

- b. Recommendation

- i. Prepare the Subsequent Environmental Impact Report based on a roll back to a less constrained tenant usage of their boats.

16. Re-Issued Notice of Preparation Notice

- a. Discussion



- i. The California Coastal Commission ruled on October 8, 2009 that the goal of a slip redesign project should have a goal of zero slip loss
- ii. Boaters for Dana Point Harbor have provided a possible solution for the waterside design that would achieve zero slip loss
- iii. Boaters for Dana Point Harbor have provided a possible solution for water sided design that will allow for larger slips
- iv. The county states that "...the total number of boat slips under the County's preferred design would decrease from 2,409 to 2,254, resulting in a net loss of 155 slips

b. Recommendation

- i. The County should adopt the Coastal Commission's directive as the preferred plan for the Subsequent Environmental Impact Report, namely zero slip loss.

17. Wind Shadow

a. Discussion

- i. The Dana Point Revitalization requires the construction of a 65' tall dry stack building to be constructed at the water's edge.
- ii. The Dry Stack will be leeward of the prevailing winds
- iii. The Dana Point Revitalization requires the construction of many 60' buildings\
- iv. These 60' buildings will cast a prevailing wind shadow over water areas
- v. The Dana Point Revitalization requires that a two story parking deck be constructed at the end of the launch ramp apron
- vi. The City of Dana Point is requiring that the parking deck be constructed such that it can be converted to a three story parking garage in the future
- vii. The two story parking deck or three story parking garage will create a wind shadow over the water if constructed in the currently planned location
- viii. Wind shadows create winds that are shifty both in direction and angle and hence
- ix. Can create a hazard to navigation for beginning, novice and even experienced sailors
- x. Vessel Assist often is required to help sail vessels past the existing, lower impact, wind shadows in the launch ramp area.

b. Recommendation

- i. A professional analysis of the impact of building height and location must be performed to properly evaluate the environmental factors associated with the waterside layout.

**memo**

**DATE:** February 5, 2010  
**TO:** Brad Gross, Director, Dana Point Harbor Department  
**FROM:** Manager, Environmental Resources  
**SUBJECT:** Review of Reissued NOP for Subsequent EIR 591 for Dana Point Harbor Marina Improvement Project

In response to your request for input on the subject project, OC Watersheds has reviewed the subject document. It is recommended the following be addressed in the Subsequent EIR for the Proposed Dana Point Harbor Marina Improvement Project:

- 1) Synthesize the previous material related to water quality into one section in the new document, with respect to:
  - Final EIR 591 text dated 01/06
  - Appendix Water Quality Management Plan dated 12/20/05
  - Appendix Program Water Quality Management Plan dated 12/20/05
  - Related Project Design Features (4.4-1 – 4.4-3), Standard Conditions (4.4-4 – 4.4-14), and Mitigation Measures (none), as identified in the Final EIR text.
- 2) Note that as written the Standard Conditions currently require that a harbor-wide or site specific Water Quality Management Plan (WQMP) follow the County Local WQMP dated August 13, 2003. The Local WQMP is Exhibit A-7.VI of the County's Stormwater Local Implementation Plan and is the guidance document which applies to all new development and significant redevelopment projects in County controlled/unincorporated areas within the San Diego Regional Water Quality Control Board's (San Diego Regional Board) jurisdiction.

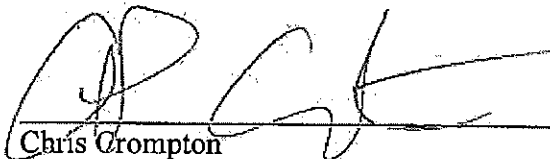
With the adoption of a fourth term Municipal Separate Storm Sewer System (MS4) Permit for south Orange County on December 16, 2009, the WQMP requirements will soon be significantly different. The fourth term MS4 Permit for the San Diego Region mandates that the permittees (cities and County) prepare and submit for Regional Board review, a "Model WQMP", within 12 months of permit adoption (by December 16, 2010). Within 180 days of the Regional Board's determination that the "Model WQMP" is in compliance with the permit, the permittees must update their "Local WQMP". Therefore, it is likely that by mid to late 2011, a new Local WQMP for the County will be in place and applicable for projects within Dana Point Harbor.

The new proposed WQMP program is currently under development by the permittees and it is difficult at this time to ascertain exactly what the impact to the Dana Point Harbor revitalization project will be. However, the following low impact development (LID) or "site design" concepts listed below will be required to be incorporated into the design where applicable and feasible:

- (a) Conserving natural areas, including existing trees, other vegetation, and soils.
- (b) Constructing streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety is not compromised.
- (c) Minimizing the impervious footprint of the project.
- (d) Minimizing soil compaction to landscaped areas.
- (e) Minimizing disturbances to natural drainages (e.g., natural swales, topographic depressions, etc.);
- (f) Disconnecting impervious surfaces through distributed pervious areas; and
- (g) Where feasible, draining runoff from impervious areas (rooftops, parking lots, sidewalks, walkways, patios, etc) into pervious areas prior to discharge into the storm drains.

The most significant change when the new WQMP requirements become applicable in mid to late 2011 is that the on-site capture of the volume of runoff generated by the 24hr 85<sup>th</sup> percentile storm event will be required using LID BMPs which promote infiltration, evapotranspiration, and runoff harvest/re-use. The use of conventional structural treatment control BMPs to remove pollutants and discharge stormwater runoff from the 85<sup>th</sup> percentile storm event will only be permitted after conducting an exhaustive infeasibility determination. Even then, a waiver from the Regional Board and payment into an "in-lieu" program or water quality credit fund may be required. Unless a WQMP is approved for the project prior to these new requirements taking effect in mid to late 2011, there is no grandfathering of projects.

Thank you for the opportunity to comment on this document. If you require any further information on our response, please contact Grant Sharp at (714) 955-0674.



Chris Crompton



## **1.0 EXECUTIVE SUMMARY**

### **1.1 PURPOSE OF THE EIR**

The County of Orange (County) is the Lead Agency under the California Environmental Quality Act (CEQA), and is responsible for preparing the Program EIR for the Dana Point Harbor Revitalization Project (the "Revitalization Plan") (State Clearinghouse Number 2003101142). The purpose of this Program Environmental Impact Report (EIR) is to review the existing conditions, analyze potential environmental impacts of the proposed Project, and suggest feasible Mitigation Measures and/or alternatives to reduce potentially significant effects of the proposed Dana Point Harbor Revitalization Project. For the purposes of this EIR, "Project" refers to all aspects and phases of the proposed Project, including subsequent discretionary actions by the County and other agencies, construction, and operations. This EIR has been prepared as a Program EIR for Planning Areas 1 through 12 of the Revitalization Project in accordance with §15168 of CEQA, while serving as a project-level analysis for Planning Areas 1 (except for the southern portion) and 2 in accordance with §15161 of CEQA.

The County as Lead Agency, landowner, and project proponent, has the principal responsibility for approving and implementing the Dana Point Harbor Revitalization Project. The County was designated over 30 years ago by the Tidelands Act as the trustee of the Harbor for the people of the State of California. The County is therefore acting as the Lead Agency in the preparation of the Environmental Impact Report for the Dana Point Harbor Revitalization Project to address the future use and operation of the Harbor and its facilities. The County, as Lead Agency, will use this EIR for Project approval deliberations, and for subsequent discretionary and ministerial approvals, such as grading and building permits. The City of Dana Point, the California Coastal Commission, and other Responsible Agencies will use this EIR for discretionary permits or approvals under their respective jurisdictions (for the City, this is for the forthcoming Local Coastal Plan Amendment and future Coastal Development Permits in landslide areas of the Harbor. The Coastal Commission is responsible for issuing CDP's for all waterside areas. Similarly, Trustee Agencies, such as the State Lands Commission and California Department of Fish and Game, will use this EIR for Project-related permits and approvals. These are discussed in more detail in Section 3.6, [Agreements, Permits, and Approvals Required]).

### **1.2 PROJECT SUMMARY**

#### **1.2.1 EXISTING CONDITIONS**

Dana Point Harbor (Harbor) is approximately 276.8 acres, owned and operated by the County of Orange (County), and located entirely in the southern portion of the City of Dana Point (City). The general configuration of the Harbor has three components: a landside area adjacent to the bluffs (consisting of open space, park, marine services, and commercial uses); the Island (consisting of marine services and restaurant/recreation uses); and the East and West Marina areas (consisting of commercial and small-craft boat slips and side tie dock facilities, federal anchorage areas, a fuel dock, and bait receiver). Off-site, on top of the bluffs to the northwest and north, restaurant, residential, and hotel uses overlook the site. The land uses



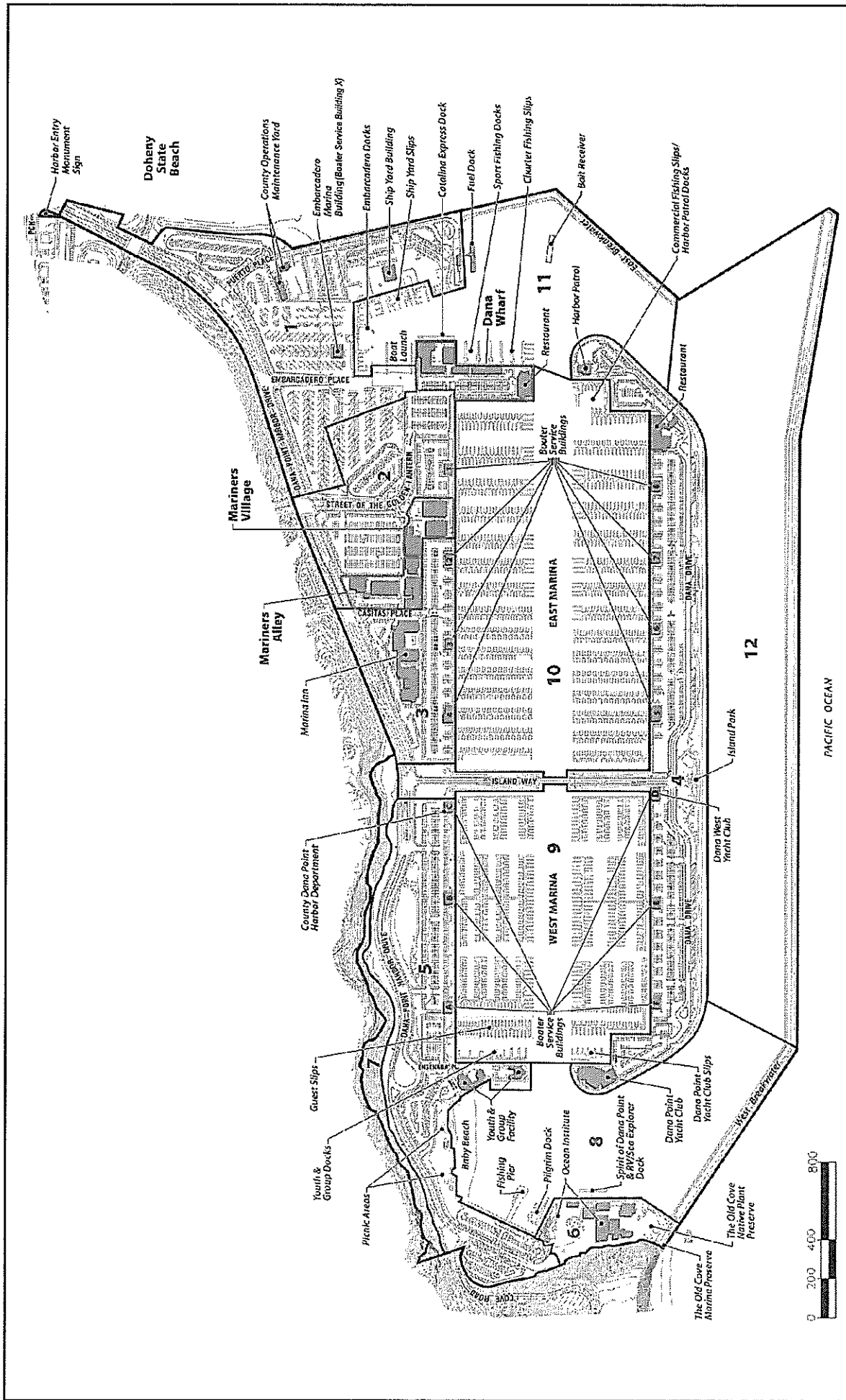
above the site, along the coastal bluffs, are generally Harbor-oriented commercial and residential properties for which the views of the Pacific Ocean and Dana Point Harbor play an important role. Adjacent land uses to the north and east include City and County parks, Doheny State Beach, and the Old Cove Marine Preserve. Refer to Exhibit 1 (Existing Conditions).

### 1.2.2 PROPOSED PROJECT

The Dana Point Harbor Revitalization Project (Revitalization Plan) will establish a Commercial Core (Planning Areas 1 and 2) at a schematic level of architectural elements and provide for the replacement and/or remodeling of all existing retail and restaurant buildings. The Commercial Core redevelopment (Phase I) also includes the reconfiguration of all existing surface parking areas to provide additional parking, new boater loading and drop-off areas, new dry-stack boat storage spaces and improvements to boater service and public restroom buildings. The first phase of the proposed Revitalization Plan will provide for the relocation of certain yacht brokerage firms and other harbor-related offices uses to the Commercial Core area. Outside the Commercial Core area (Phase II), the Revitalization Plan provides for a number of future improvements (Planning Areas 3 through 7 [landside] and 8 through 12 [waterside]). Plans for Planning Area 4 allow for the future renovation and/or expansion of the Dana Point and Dana West Yacht Clubs, restaurant renovations and modifications to the Harbor Patrol Offices to provide additional meeting rooms or staff office space. Additional work is anticipated to be performed to reconfigure and/or reconstruct the marina docks and portions of the seawall, subject to a separate permitting and environmental review process to add additional guest boater slips closer to the Commercial Core and to construct a dinghy dock area adjacent to Dana Wharf.

The proposed Revitalization Plan will occur within two phases over approximately 22 years. Phase I will take approximately 7 years to complete and consists of the development of Planning Areas 1 and 2 which would include the "Commercial Core" area of the Harbor ("Marine Services" – the Embarcadero and Shipyard area and "Day Use Commercial" – The Dana Wharf and Mariners Village area). Phase II will commence as funding sources are identified and approvals are obtained. Potential future improvements in Planning Areas 3-12 include renovations to structures and street improvements on the Island and reconfiguration of the Marinas. Future improvements may also occur in the southern portion of Planning Area 1 and may include Dry Stack Boat Storage Building #2, reconfiguration of the shipyard as well as the construction of a lighthouse facility near the end of Puerto Place.

A summary of Planning Areas 1 through 12 are as follows. Refer to Exhibit 3 (Dana Point Harbor Revitalization Proposed Plan).



**EXISTING CONDITIONS**  
 DANA POINT HARBOR REVITALIZATION PROJECT  
 PROGRAM ENVIRONMENTAL IMPACT REPORT

Source: RBF Consulting, August 1, 2005.



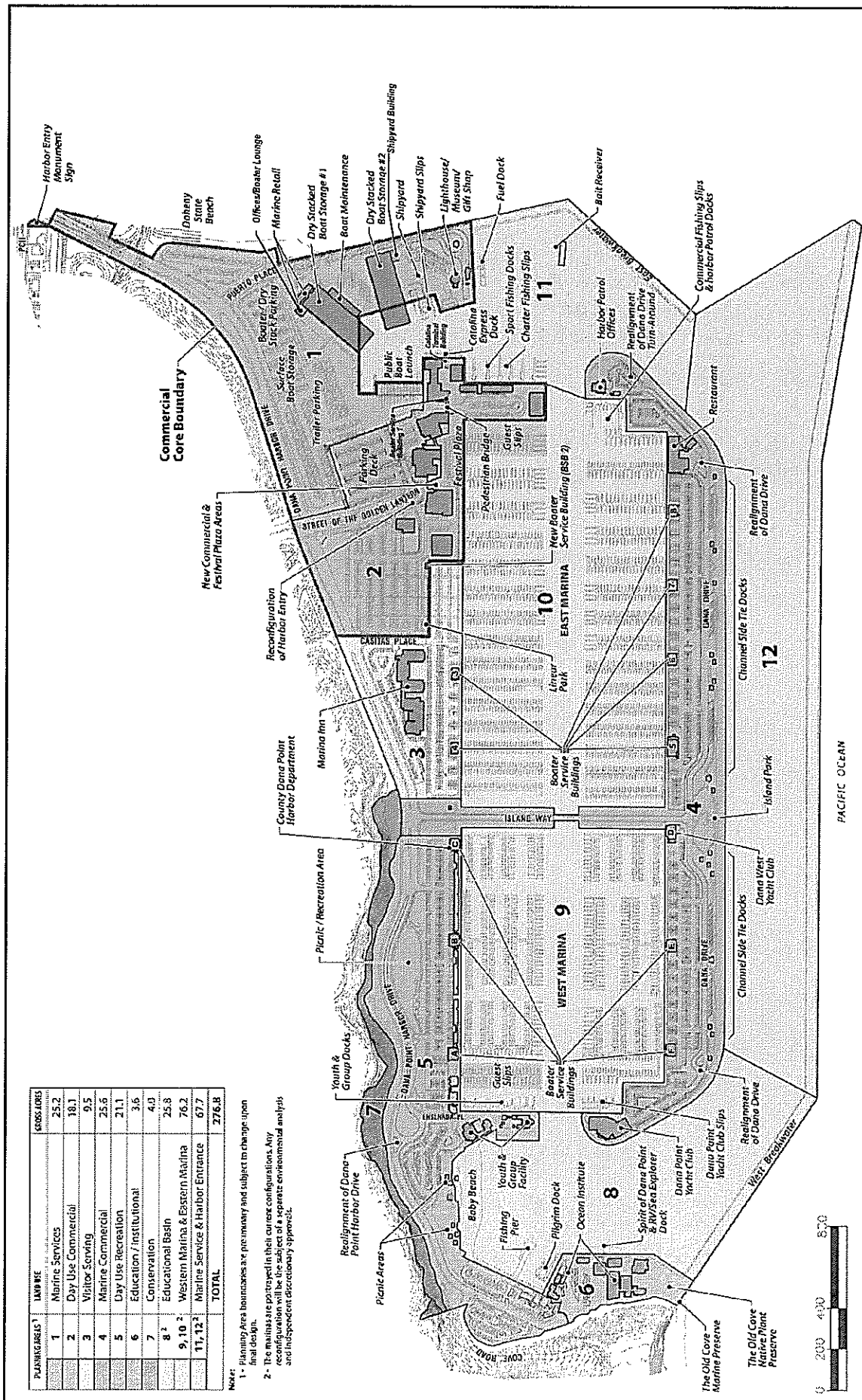
Area	Area (Acres)	Area (Hectares)	Area (Square Feet)
1	10.0	4.0	1,080,000
2	10.0	4.0	1,080,000
3	10.0	4.0	1,080,000
4	10.0	4.0	1,080,000
5	10.0	4.0	1,080,000
6	10.0	4.0	1,080,000
7	10.0	4.0	1,080,000
8	10.0	4.0	1,080,000
9	10.0	4.0	1,080,000
10	10.0	4.0	1,080,000
11	10.0	4.0	1,080,000
12	10.0	4.0	1,080,000
13	10.0	4.0	1,080,000
14	10.0	4.0	1,080,000
15	10.0	4.0	1,080,000
16	10.0	4.0	1,080,000
17	10.0	4.0	1,080,000
18	10.0	4.0	1,080,000
19	10.0	4.0	1,080,000
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22	10.0	4.0	1,080,000
23	10.0	4.0	1,080,000
24	10.0	4.0	1,080,000
25	10.0	4.0	1,080,000
26	10.0	4.0	1,080,000
27	10.0	4.0	1,080,000
28	10.0	4.0	1,080,000
29	10.0	4.0	1,080,000
30	10.0	4.0	1,080,000
31	10.0	4.0	1,080,000
32	10.0	4.0	1,080,000
33	10.0	4.0	1,080,000
34	10.0	4.0	1,080,000
35	10.0	4.0	1,080,000
36	10.0	4.0	1,080,000
37	10.0	4.0	1,080,000
38	10.0	4.0	1,080,000
39	10.0	4.0	1,080,000
40	10.0	4.0	1,080,000
41	10.0	4.0	1,080,000
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47	10.0	4.0	1,080,000
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92	10.0	4.0	1,080,000
93	10.0	4.0	1,080,000
94	10.0	4.0	1,080,000
95	10.0	4.0	1,080,000
96	10.0	4.0	1,080,000
97	10.0	4.0	1,080,000
98	10.0	4.0	1,080,000
99	10.0	4.0	1,080,000
100	10.0	4.0	1,080,000

Figure 1-1: Planning Area Overview Map. The map shows the planning area divided into 100 numbered parcels. The parcels are arranged in a grid pattern, with some parcels being larger than others. The map is oriented vertically on the page.

**PLANNING AREA OVERVIEW**  
 DANA POINT HARBOR REVITALIZATION PROJECT  
 PROGRAM ENVIRONMENTAL IMPACT REPORT  
**EXHIBIT 2**

PLANNING AREAS	LAND USE	SQ. FEET
1	Marine Services	25.2
2	Day Use Commercial	18.1
3	Visitor Servicing	9.5
4	Marine Commercial	25.6
5	Day Use Recreation	21.1
6	Education / Institutional	3.6
7	Conservation	4.0
8	Educational Basin	25.8
9, 10, 2	Western Marina & Eastern Marina	76.2
11, 12	Marine Service & Harbor Entrance	67.7
<b>TOTAL</b>		<b>276.8</b>

NOTE:  
 1 - Planning Area boundaries are preliminary and subject to change upon final design.  
 2 - The marina is portrayed in their current configurations. Any reconfiguration will be the subject of a separate environmental analysis and independent discretionary approval.



**DANA POINT HARBOR REVITALIZATION PROPOSED PLAN**  
 DANA POINT HARBOR REVITALIZATION PROJECT  
 PROGRAM ENVIRONMENTAL IMPACT REPORT  
 EXHIBIT 3





#### **1.2.2.1 PLANNING AREA 1 (MARINE SERVICES) 25.2 ACRES**

The Revitalization Plan will add two dry stack boat storage facility buildings in the northeast marine services area (near the intersection of Puerto Place and Dana Point Harbor Drive) with a capacity to store up to 800 boats, when both buildings are completed, ranging in size from 20 to 40 feet as well as provide boat launching capabilities directly into the water. At full buildout, Planning Area 1 will include an expansion of marine retail uses, reconfiguration of Embarcadero boat storage/launch and dock facilities, consolidation of the shipyard area, a designated boat washdown area, and demolition of the existing County Maintenance Yard (to a location remaining to be determined). The marine services area parking will include 458 vehicle parking spaces. There will be approximately 93 surface boat storage spaces and 230 car with trailer parking spaces. This reallocation results in the addition of 170 parking spaces and 47 car with trailer spaces, within Planning Area 1. However, there will be a decrease of 130 car with trailer spaces currently located within Planning Area 2. Surface boat parking will decrease by approximately 423 spaces, but will be partially off-set by the dry stack boat storage. Additional alterations to Planning Area 1 would include development of a 5,600 square foot Administrative offices/boater lounge; relocation and expansion of the marine retail uses from Planning Area 2 of 3,387 square feet to 9,100 square feet in Planning Area 1; new lighting and signage; reconfiguration/relocation of the rental docks; demolition of Boater Services Building X; and downsizing the shipyard building from 5,000 square feet to 2,500 square feet.

In addition to the boater services, a lighthouse may be constructed at the southern area of Planning Area 1 and will include a structure of up to 2,500 square feet, housing a nautical museum, a small retail gift shop, a meeting room, kitchen, and restrooms.

#### **1.2.2.2 PLANNING AREA 2 (DAY USE COMMERCIAL) 18.1 ACRES**

The Dana Point Harbor Revitalization Plan establishes a large, centralized outdoor Festival Plaza, located at the southern terminus of Street of the Golden Lantern, within the central portion of the Harbor's Commercial Core. The Festival Plaza provides direct views across the Commercial Core area to the Harbor by creating an open plaza area along the waterfront. The Festival Plaza adds a central gathering space for Harborwide events, activities, and celebrations throughout the year. The Festival Plaza area will compromise approximately 35,000 square feet, with a combination of landscaping, paving, and seating areas. A Pedestrian Promenade will extend from Casitas Place, west to Dana Wharf, and will vary in width from 15 feet to 50 feet. Adjacent to the commercial area is a two-level parking deck, which will provide an estimated 610 parking spaces on two levels. The lower level of the parking deck is set slightly into the ground, affording direct access from Street of the Golden Lantern to the upper and lower deck levels. Also, Planning Area 2 will replace and/or rehabilitate 26,600 sq. ft. of existing retail uses and 51,300 sq. ft. of existing restaurant uses, create a net additional 6,200 sq. ft. of retail and 27,100 sq. ft. of restaurant uses, provide new boater service facilities, relocate certain yacht brokers, and reconfigure surface parking. Additional alterations to Planning Area 2 include the addition of a Catalina Terminal Building of 1,000 square feet and the relocation and expansion of Boater Service Building 1 to total 8,000 square feet; a



linear park; adding public restrooms; and comprehensive lighting signage improvements.

#### **1.2.2.3 PLANNING AREA 3 (VISITOR SERVING) 9.5 ACRES**

The Dana Point Harbor Revitalization Plan provides for the potential future replacement of the Marina Inn with a new facility located in the present hotel location or relocated closer to the waterfront to promote a stronger pedestrian connection with the promenade and Festival Plaza in front of the new Commercial Core area. Although not yet designed, the new hotel is planned to consist of a multi-story building with a maximum height of 50 feet which provides up to a maximum of 220 guest rooms with full-service amenities, including expanded lobby area with guest services, food and beverage facilities, 12,000 square feet of function and meeting room areas, 500 square feet of ancillary retail space, a 2,750 square foot specialty restaurant, health and fitness club, pool, and other outdoor activity facilities (sand volleyball court, etc.). The new hotel facility may be built by the County or developed as a joint venture partnership with a hotel partner that would build and manage the facilities under a long-term lease agreement. In the event the hotel is relocated closer to the waterfront, Boater Service Buildings 3 and 4 may be relocated and/or replaced with new facilities that are designed with the hotel. Boater parking areas may also be reconfigured or a parking deck constructed to allow for the re-siting of the hotel.

#### **1.2.2.4 PLANNING AREA 4 (MARINE COMMERCIAL) 25.6 ACRES**

The Revitalization Plan includes an improved turn-around for the eastern part of the Island, resolving a major visitor and emergency response constraint. The Harbor Patrol facility is proposed to be expanded from 6,000 square feet to 7,500 square feet. Additionally, a potential seasonal water taxi is being considered that may have pick-up/drop-off locations along the Harbor Patrol facility, Island Park, and the Dana Point Yacht Club. The improvements at the Dana Point Yacht Club and Dana West Yacht Club will provide storage for kayaks, rowboats, and other small craft used by the yacht clubs, as well as an increase in the overall square footage. Additional alterations to Planning Area 4 would include the future expansion of all Boater Service Buildings between 2,000 square feet and 3,000 square feet; expansion of the Dana Point Yacht Club by approximately 5,600 square feet; expansion of the Dana West Yacht Club by approximately 5,000 square feet; reconfiguration of Dana Drive to provide pedestrian access and additional parking and/or boater parking for the Channel Side Tie Docks; and expansion of an existing restaurant by 5,000 square feet.

#### **1.2.2.5 PLANNING AREA 5 (DAY USE RECREATION) 21.1 ACRES**

Planning Area 5 will include an expansion of the Youth and Group Facility, which currently offers meeting rooms for recreational activities, community events, and private parties, as well as sailing and ocean-related educational programs. The Youth and Group Facility may increase by approximately 6,000 square feet to a total of 17,000 square feet. A seasonal water taxi pick-up/drop-off station may be located adjacent to the facility. Dana Point Harbor Drive will be slightly realigned adjacent to the facility to remove the existing traffic circle to improve traffic circulation and large vehicle access (including emergency vehicles and buses). Also included will be the



expansion of boater service buildings by 2,000 square feet each. Additional enhancements will include picnic area improvements, upgraded restrooms, and reconfigured parking areas. Additional improvements to Planning Area 5 include development of a water quality filter to assist with the development of the Headlands project.

#### **1.2.2.6 PLANNING AREA 6 (EDUCATIONAL/INSTITUTIONAL) 3.6 ACRES**

The Ocean Institute consists of a series of buildings devoted to creating unique marine laboratory environments that serve as learning centers for the At Sea, Ecology, and SurfScience/Overnight programs. Other support buildings house a bookstore (Campus Store), a multipurpose room, a main lobby, an exhibit area, student services, administration, a library and conference room, and other support spaces. Recreational uses within the vicinity of the Ocean Institute include the old Cove Native Plant Preserve and the Old Cove Marine Preserve. To facilitate access to the Ocean Institute, a seasonal water taxi stop may be located adjacent to the Ocean Institute's Tall Ship dock area. No additional facilities are presently contemplated.

#### **1.2.2.7 PLANNING AREA 7 (CONSERVATION) 4.0 ACRES**

The Revitalization Plan preserves the coastal bluff Area of the Harbor as an important coastal resource. In addition to its visual significance, Planning Area 7 includes a small amount of coastal sage scrub, which is a sensitive plant species that provides habitat for other sensitive plant and animal species. Only limited maintenance-related improvements to surface drainage facilities are contemplated.

#### **1.2.2.8 PLANNING AREA 8 (EDUCATIONAL BASIN) 25.8 WATERSIDE ACRES**

The Revitalization Plan would provide for the limited future renovation of the marine portions of Baby Beach ranging from on-going water quality Best Management Practices (BMPs) to provide artificial water circulation devices to enhance water circulation in this area of the Harbor if determined feasible.

#### **1.2.2.9 PLANNING AREAS 9 AND 10 (WEST MARINA AND EAST MARINA) 76.2 WATERSIDE ACRES**

Proposed as part of a subsequent phase of the Revitalization Plan are provisions for the reconfiguration and/or reconstruction of the East and West Marinas and seawall repairs. To meet boater needs, reconfiguration of the slips is being contemplated to accommodate larger boats. Proposed plans for the East Marina include the addition of visitor slips and dinghy docks adjacent to the Commercial Core and, improving visitor access.

#### **1.2.2.10 PLANNING AREAS 11 AND 12 MARINE SERVICES AND HARBOR ENTRANCE 67.7 WATERSIDE ACRES**

To improve circulation within the Harbor, the Revitalization Plan contemplates the modernization of the docks in the shipyard area, sportfishing docks and charter fishing slips, and the potential reorientation of the existing fuel dock facility to improve the efficiency for vessels fueling there. The construction of the Channel



Side Tie Docks and access paths are also being considered on a temporary basis to provide facilities for the storage of boats during construction of the marina improvements. Following completion of the marina reconfiguration projects, the long-term use of the side-tie docks will be evaluated to determine the feasibility of their permanent use.

#### **1.2.2.11 OFF-SITE AREAS**

To minimize the disruption of the Harbor facilities for marina users and visitors during construction operations, the County proposes implementation of a Construction Parking Management Plan. This plan will provide a combination of on- and off-site parking areas will be used for the temporary storage of boats and vehicles, and for employee parking. Two potential off-site parking locations, presently under consideration, include the South Coast Water District (SCWD) property, located north of Pacific Coast Highway and east of San Juan Creek; and the County operated Selva Parking Lot, located near the southern terminus of Selva Road (approximately 1.5 miles west of the Harbor). Up to 250 boats could be stored at the SCWD Lot during the intermediate phase of the Revitalization Plan. The Selva Parking Lot will be utilized as an alternative site should overflow parking be needed.

### **1.3 PROJECT IMPACTS**

This Environmental Impact Report analyzes the potential environmental impacts associated with the proposed Project. Where impacts are identified as potentially significant, Mitigation Measures are recommended to avoid or reduce impacts to a less than significant level. The analysis included in Section 4.0 (Environmental Analysis), concludes that potentially significant impacts may occur as a result of Project implementation for the following types of environmental impacts.

Project elements evaluated at a program level (Planning Areas 3-12 and the southern portion of Planning Area 1) are anticipated to require further environmental review. For more detailed information regarding the location and nature of the proposed Project, refer to Section 3.0 (Project Description).

#### **1.3.1 LAND USE AND RELEVANT PLANNING**

No unavoidable significant impacts related to Land Use have been identified related to consistency with the California Coastal Act, County of Orange General Plan and other relevant planning policies and plans, upon implementation of Project Design Features and Standard Conditions of Approval. Implementation of the Dana Point Harbor Revitalization Plan will require a series of subsequent approvals by the City of Dana Point and the California Coastal Commission to modify existing regulatory documents to include the proposed Harbor improvements. Refer to Section 4.1 (Land Use and Relevant Planning), for a complete analysis of the land use and relevant planning impacts.

#### **1.3.2 AESTHETICS, VISUAL, AND GLARE**

Grading and construction activities will temporarily affect the existing visual character and quality of the Project site and its surroundings. The incorporation of the Mitigation Measures will reduce short-term impacts to a less than significant level.



Long-term aesthetic impacts include obstruction of Harbor views from the east (including Doheny State Beach) and from Lantern Bay Park due to the proposed height of the dry stack boat storage buildings. Views from the Commercial Core and the Street of the Golden Lantern will also be altered. These impacts will be reduced to the maximum extent possible with the implementation of landscaping improvements along the northern and eastern sides of the facilities and incorporating architectural design features to break up the effects of building massing. A comprehensive signage program will be implemented in order to inform the public of the availability of, and provide direction to, public parking areas, coastal access and on-site recreational amenities. Despite Mitigation Measures, visual impacts to off-site areas to the east (including Doheny State Beach), views from public roadways, and views from parks and open space will be considered significant and unavoidable impacts due to the development of dry stack boat storage structures that would obstruct scenic vistas. The proposed Project also includes development of a Master Lighting Plan that would reduce night lighting impacts and provide better safety to Harbor users. The incorporation of the Mitigation Measures will reduce on-site and other off-site visual impacts to a less than significant level and implementation of the Project Design Features would ensure that lighting and glare impacts would remain below a level of significance. Refer to Section 4.2 (Aesthetics), for a complete analysis of the aesthetic impacts and the recommended Mitigation Measures.

### **1.3.3 GEOLOGY, SOILS, AND SEISMICITY**

Mitigation measures will be required to ensure that all structures are designed to withstand anticipated ground shaking caused by future earthquakes. In addition, the potential effects of seismic settlement, liquefaction, and lateral spreading may require mitigation. Development on-site will be subject to the standards and policies of the County of Orange Zoning Code, the Uniform Building Code, site-specific standard conditions of approval, and Project Design Features. No significant impacts related to geology, soils, and seismicity are anticipated following implementation of Mitigation Measures and/or compliance with applicable standards and policies of the County of Orange Grading Manual. Refer to Section 4.3 (Geology, Soils, and Seismicity), for a complete analysis of the geology and soils impacts and the recommended Mitigation Measures.

### **1.3.4 DRAINAGE AND WATER QUALITY**

Short-term water quality impacts could occur in construction areas due to sheet erosion of exposed soils. Long-term drainage and water quality impacts are anticipated to be similar to existing conditions, except in the commercial core area of the Harbor, due to the quality of stormwater and urban runoff, the alteration of drainage patterns, increased erosion and runoff amounts, flood hazards from San Juan Creek, and increased sedimentation. No significant impacts related to hydrology and drainage are anticipated following implementation of Best Management Practices (BMPs), Mitigation Measures, and compliance with applicable County, State, and Federal standards. Refer to Section 4.4 (Drainage and Water Quality), for a complete analysis of the impacts to drainage and water quality and the recommended Mitigation Measures. Appendix F contains the Program and Project level WQMP.

### **1.3.5 TRAFFIC AND PARKING**



Construction activities will affect the level of service at intersections and roadways as well as parking capacities. Development on-site will be subject to a Construction Management Plan. Implementation of Mitigation Measures, Project Design Features, and Standard Conditions of Approval will reduce short-term impacts to less than significant levels. Long-term impacts will include greater levels of service at intersections and roadways as well as additional parking demand. Development on-site will be subject to preparing a Traffic Management Plan (TMP) to include operational strategies to reduce vehicle trips within the Harbor (i.e., seasonal water taxi service, shuttle bus service to off-site overflow parking areas and boat storage facilities), manage on-site parking. Additionally, a queuing analysis for the parking deck located at Street of the Golden Lantern and Dana Point Harbor Drive will be conducted. Implementation of Mitigation Measures, Project Design Features, and Standard Conditions of Approval will reduce long-term traffic, circulation, and parking impacts to a less than significant level. No significant and unavoidable traffic and parking impacts will occur. Refer to Section 4.5 (Traffic and Parking), for a complete analysis of the impacts to traffic and parking and the recommended Mitigation Measures.

### **1.3.6 AIR QUALITY**

Temporary construction-related dust and vehicle emissions will occur during site preparation and Project construction. Despite implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures, construction emissions are predicted to exceed SCAQMD thresholds for NO<sub>x</sub>, resulting in a significant and unavoidable impact. Operational impacts would be below the SCAQMD thresholds, and thus are considered less than significant. Therefore, the proposed Project will be inconsistent with the AQMP also resulting in significant and unavoidable impacts. Refer to Section 4.6 (Air Quality), for a complete analysis of the impacts to air quality and the recommended Mitigation Measures.

### **1.3.7 BIOLOGICAL RESOURCES**

Implementation of the proposed Project could impact special status plants, wildlife species, and/or marine biological resources. Development on-site will be subject to BMPs. Mitigation measures require that focused surveys be conducted to identify the presence of any sensitive species on-site. If sensitive species are determined to occur on-site, Mitigation Measures will be required to reduce impacts to biological resources to a less than significant level. Implementation of BMPs, Mitigation Measures, Project Design Features, and Standard Conditions of Approval will reduce impacts to biological resources to a less than significant level. Refer to Section 4.7 (Biological Resources), for a complete analysis of the impacts to biological resources and the recommended Mitigation Measures.

### **1.3.8 PUBLIC HEALTH AND SAFETY**

Implementation of the proposed Project will have the potential to create a significant hazard to the public or the environment in relation to hazardous materials, odors or foster disease vectors associated with the implementation of BMPs, a significant hazard to the public or the environment through the release of asbestos-containing materials (primarily during construction activities), as well as a significant hazard to the public or the environment through the release of lead-based paints (LBPs) into



the environment. Implementation of Mitigation Measures, Project Design Features, and Standard Conditions of Approval will reduce impacts to public health and safety to a less than significant level. Development of the proposed Project could physically interfere with an adopted emergency response plan or emergency evacuation plan, however, a less than significant impact will occur in this regard. Refer to Section 4.8 (Public Health and Safety), for a complete analysis of the impacts to public health and safety and the recommended Mitigation Measures.

### **1.3.9 NOISE**

Short-term impacts will occur with regard to temporary noise and/or vibration impacts on nearby noise-sensitive receptors. Despite compliance with Standard Conditions of Approval and Mitigation Measures, impacts will be significant and unavoidable due to the duration of construction activities. Long-term (mobile) noise impacts will be less than significant for roadway segments under buildout traffic scenarios. Long-term (stationary) impacts will generate on-site noise associated with commercial activities, which include loading and unloading activities, mechanical equipment operation, and activity in parking lots. Analysis has concluded that stationary source impacts will be reduced to less than significant levels with adherence to the County of Orange Noise Ordinance requirements. Refer to Section 4.9 (Noise), for a complete analysis of the noise impacts and the recommended Mitigation Measures.

### **1.3.10 PUBLIC SERVICES AND UTILITIES**

Implementation of the proposed Project will incrementally increase the demand for natural gas facilities, domestic water, electricity, sewer facilities, additional telephone facilities, and additional cable television facilities. Impacts related to Public Services and Utilities will be less than significant with the implementation of the Project Design Features, Standard Conditions of Approval, and recommended Mitigation Measures. Refer to Section 4.10 (Public Services and Utilities), for a complete analysis of the impacts to public services and utilities and the recommended Mitigation Measures.

### **1.3.11 CULTURAL RESOURCES**

Implementation of the proposed Project is not anticipated to impact archaeological and/or historical resources located within the SCWD Lot, impact paleontologically sensitive soils within the Project area, or potentially disturb unknown locations of human remains within the Project area. However, implementation of the Standard Conditions of Approval and Mitigation Measures are recommended in order to ensure impacts related to cultural resources remain below a level of significance. Refer to Section 4.11 (Cultural Resources), for a complete analysis of the impacts to cultural resources and the recommended Mitigation Measures.

### **1.3.12 RECREATION**

Implementation of the proposed Project will improve the recreational facilities within the Project area, thereby reducing impacts on surrounding recreational facilities. In addition, implementation of the Standard Condition of Approval (SCA) will ensure adequate access to the proposed recreational facilities. Implementation of the Project Design Features, Standard Conditions of Approval, and Mitigation Measures will reduce impacts in this regard to a less than significant level. Refer to Section



4.12 (Recreation), for a complete analysis of the impacts to recreational facilities and the recommended Mitigation Measures.

## **1.4 CUMULATIVE IMPACTS ANALYSIS**

### **1.4.1 BASIS OF CUMULATIVE IMPACTS ANALYSIS**

Related projects include primarily only those determined to be at least indirectly capable of interacting with the Dana Point Harbor Revitalization Project (Project) within a one-mile radius. Doheny State Beach Preliminary General Plan, Dana Point Town Center Plan, and the Dana Point Headlands are related projects or other possible development in the area, which were determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative impacts analysis was based upon the development of the abovementioned projects. However, cumulative impacts for traffic were based upon the Project traffic volumes with the addition of a one percent growth rate per year and the Dana Point Headlands traffic volumes. Forecast traffic was generated for year 2012 and 2030. The cumulative noise impacts were then based on the cumulative projected traffic volumes.

### **1.4.2 IMPACTS ANALYSIS**

Implementation of the proposed Project will not result in significant land use impacts with the incorporation of the Project Design Features. Implementation of the proposed Project may result in alterations to the aesthetic character and quality of the Project area due to greater urbanization, increased short-term geological impacts such as erosion and sedimentation, and long-term seismic impacts within the area, increased hydrology and drainage impacts in the area, potentially affect cultural resources, and increase the use of existing recreational areas and facilities, thereby creating the potential for physical deterioration, which may include recreational facilities (e.g., marina) that could have physical impacts on the environment as well. All cumulative impacts referenced above will be mitigated to less than significant levels on a project-by-project basis.

The proposed Project will generate additional trips on the adjacent roadways, thus affecting the level of service at intersections and roadways. Impacts related to traffic trip generation, distribution, and assignment will be reduced to less than significant with implementation of Project Design Features, Standard Conditions of Approval, and Mitigation Measures. The proposed Project will also generate a greater parking demand. Conformance with Project Design Features and Mitigation Measure 4.5-7 will ensure that impacts will be less than significant. The proposed Project, including other cumulative projects, will incrementally increase air emissions within the surrounding areas. Cumulative development (including the proposed Project) in the Harbor and Off-Site areas will impact the area's biological resources; however, analysis has concluded that Project implementation will not result in significant cumulative biological impacts with implementation of Mitigation Measures. The proposed Project, including other cumulative projects, will increase exposure to the public of hazardous substances; compliance with Federal, State, and local requirements will reduce cumulative impacts to a less than significant level. Implementation of the proposed Project, including other cumulative projects, will not





result in a significant impact on the demand of public services and utilities. Implementation of Standard Conditions of Approval, Project Design Features, and Mitigation Measures will reduce impacts to a less than significant level.

Implementation of the proposed Project, including other cumulative projects, will increase the ambient noise levels in the site vicinity. Analysis has concluded that these noise impacts will be significant and unavoidable; no feasible mitigation within the purview of the lead agency exists to reduce this impact to a less than significant level.

## **1.5 ALTERNATIVES ANALYSIS**

### **1.5.1 NO PROJECT/NO DEVELOPMENT**

The No Project and No Development Alternative assumes the Revitalization Plan will not be implemented and that land uses and other improvements identified in the Revitalization Plan will not be constructed. Additionally, no infrastructure improvements (such as water, wastewater, drainage and circulation facilities) will be constructed. The No Project and No Development Alternative is considered neither environmentally superior nor inferior with regards to land use and relevant planning. The No Project and No Development Alternative will be considered environmentally superior to the proposed Project with regards to aesthetics, visual, and glare; geology, soils, and seismicity; air quality; biological resources; noise; public services and utilities; and cultural resources. Finally, the No Project and No Development Alternative can be considered environmentally inferior to the proposed Project with regards to traffic and parking; drainage and water quality; public health and safety; and recreation. The No Project and No Development Alternative will not fulfill the Project objectives.

### **1.5.2 REDUCED DENSITY**

The Reduced Density Alternative will include limited expansion of existing uses, but will not develop any additional retail or commercial space, nor will it demolish and reconstruct existing Commercial Core buildings. In addition, this alternative will not develop a parking deck but instead will utilize a Parking Management Plan and restriping in order to improve parking and traffic distribution throughout the Harbor. The Reduced Density Alternative will not develop dry stacked-boat storage, nor expand the hotel. Infrastructure improvements will involve only reconstruction of currently deficient utilities, and will not include providing additional capacity. The Reduced Density Alternative will be considered neither environmentally superior nor inferior to the proposed Project with regards to cultural resources. The Reduced Density Alternative is considered environmentally superior to the proposed Project with regards to land use and relevant planning; aesthetics, visual, and glare; geology, soils, and seismicity; air quality; biological resources; noise; and public services and utilities. The Reduced Density Alternative can be considered environmentally inferior to the proposed Project with regards to traffic and parking; public health and safety; drainage and water quality; and recreation. This Alternative will not fulfill the Project objectives to the full extent of the proposed Project.

### **1.5.3 COMMERCIAL CORE ONLY**



This alternative consists of a phased demolition of the existing facilities; construction of the Commercial Core retail area and parking deck; construction of a dry-stacked boat storage building; remodel of existing commercial/restaurant buildings; Catalina Express Service facility improvements; construction of new boater service facilities; modification of the boat slips to be in conformance with ADA requirements, street and infrastructure improvements; and implementation of all required Mitigation Measures (on and off-site) involving construction of improvements. This alternative will have similar impacts as the Project as the demolition, renovation, and expansion it proposes for the Commercial Core is almost as great as with the proposed Project. There will be slightly less overall buildout square footage because it will not have certain "Program-level" elements described above. This alternative will have similar construction-related impacts, and slightly less long-term operational impacts. As this will achieve some of the Project objectives while generating slightly less air quality and noise impacts, it is considered Environmentally Superior and may be considered by the decision-makers.

#### **1.5.4 INFRASTRUCTURE ONLY**

This alternative consists of projects that are contemplated either by the County or other utility and service agencies as part of ongoing maintenance operations throughout the Harbor, and excludes all proposed commercial renovation and new building construction (i.e., no changes in existing buildings, and no new or renovated buildings). The impacts of this alternative will be identical to those identified in Section 6.2, No Project/No Development Alternative; therefore no analysis is required for each environmental impact area. Compared to the proposed Project, this alternative will substantially reduce or avoid many of the significant impacts, particularly those related to building demolition, renovation and construction. In addition, this alternative will avoid the potentially significant visual impacts associated with the addition of dry stack boat storage facilities. This alternative will have fewer operational impacts due to not including the additional 6,200 square feet of retail and 27,100 square feet of restaurant uses and other Project-related structures. This alternative is considered the environmentally superior alternative, however, this alternative may not be feasible, due to limited funding available for Harbor improvements, as well as failure to meet several key Project objectives.

#### **1.5.5 ALTERNATIVE SITE**

The purpose and goal of the proposed Project is to enhance the specific existing facilities and services provided at Dana Point Harbor. Therefore, any alternative sites proposed will not fulfill the objectives of the Project. In addition, Dana Point is already heavily developed; no additional area exists to increase marina services and provide additional commercial opportunities within the City. Any alternative site will have greater construction-related air quality and noise impacts because it will require construction within developed areas that will require greater demolition and construction. Finally, enhancement of the proposed Project site will limit the environmental impacts associated with developing an undeveloped area. Therefore, this alternative will be considered environmentally inferior to the proposed Project.

### **1.6 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED**



The Dana Point Harbor Revitalization Plan has been subject to extensive public outreach, beginning in 1997 with the Dana Point Harbor Task Force and continuing through the current process with numerous meetings with various stakeholders and the City of Dana Point. In addition, the Program EIR included a formal public scoping meeting as part of the Notice of Preparation public review process. The Project has been designed to address the 1998 Task Force goals as well as respond to stakeholder input regarding important issues such as:

- Adequacy of parking;
- Construction phasing that minimizes business impacts; and
- Improving Harbor water quality.

As the Project includes various conceptual design elements (referred to as "Phase II", addressed at a programmatic level in the EIR), these potential future improvements will require separate environmental review, and may be modified from the conceptual descriptions noted in this Program EIR. In addition, through the normal course of final engineering and construction, certain Project improvements, even for the more detailed Phase I (Commercial Core) area, may be refined from the description contained in this Program EIR. In addition, a key approval needed by the Project is a Local Coastal Plan Amendment, which requires approval from the City of Dana Point and California Coastal Commission certification. It should also be noted that the settlement agreement between the County and City of Dana Point regarding ownership and maintenance of facilities in the Harbor (including roads, traffic signals, and drainage improvements, etc.) is scheduled to expire next year. Issues related to the implementation of the Revitalization Plan improvements may require negotiation and result in an amendment agreement.

Significant irreversible environmental changes that would result from the proposed Project, should it be implemented, consist of the following. Construction-related (temporary) air quality impacts due to building demolition, asphalt, grading, and related construction activities; long-term air quality impacts associated with construction of new buildings, due to exceedance of SCAQMD thresholds; construction-related (temporary) noise impacts due to building demolition and related construction activities; cumulative off-site traffic noise impacts would exceed the 65 dBA CNEL level; construction-related (temporary) impacts on parking and circulation within the Harbor area; long-term parking impacts during peak Harbor events; and aesthetic impacts on views at certain locations.

## **APPENDIX B**

# **GEOLOGICAL ENGINEERING REPORT, ADDENDUM TO GEOLOGICAL ENGINEERING REPORT, AND GUIDE PILE MEMORANDUM**

January 15, 2008

Project No. 600024-004

To: URS/Cash and Associates  
5772 Bolsa Avenue, Suite 100  
Huntington Beach, California 92649

Attention: Mr. Randy Mason, P.E.

Subject: Addendum to Geotechnical Engineering Report for the Proposed  
Renovations to Dana Point Harbor, City of Dana Point, California

The following letter is submitted in response to the conference call conducted on January 7, 2008 with the project team regarding the issue of liquefaction and the intent of the recommendations presented in the geotechnical report prepared by our firm (PN 600024-004, dated January 7, 2008) for the proposed renovation to Dana Point Harbor. This letter is considered to be an addendum to the geotechnical report and is intended to supplement the recommendations presented in the report.

#### Liquefaction Mitigation

As discussed in the geotechnical report, the soils that underlie the harbor and, in particular, the soils encountered below the Island and the peninsulas at the east and west ends of the marina, are susceptible to liquefaction in the event of strong ground shaking associated with an earthquake that has a 10 percent probability of occurrence in a 50-year exposure period. The results of liquefaction were estimated to include instability of the slopes that support the current seawall system, a short cantilever retaining wall that borders a slope that descends into the harbor in which the slope face is protected by concrete panels. The slope instability is expected to be manifested by lateral translation and associated distortion to the seawall system. Due to the fact that the soils that underlie the seawall system (retaining wall and slope panels) are fill materials, significant variation in the quality and compaction of the material should be expected to exist. The variability in the soil conditions may result in a corresponding variance in the effect of liquefaction on the seawall system.

Although the potential for liquefaction exists with potentially unfavorable effects, the necessity to implement remedial measures is left to the discretion of the client. The

proposed renovations do not include the construction of any permanent structures that could be inhabited which would, therefore, require some form of remedial action through either the improvement of the subsoils to reduce liquefaction potential or design of foundation system that could resist the effects of liquefaction. If such types of structures are contemplated in the future or as part of the currently proposed renovation, the appropriate recommendations can be provided by our firm.

#### ADA Platform Foundations

The proposed renovation concept as currently proposed is not considered to have any effect on the liquefaction potential of the soils, i.e., the construction associated with renovation will not worsen or increase the potential for liquefaction. The installation of guide piles by pile driving, and the associated vibrations may initiate some consolidation of loose granular soils which could result on some settlement of improvements in close proximity to pile driving activities. Careful monitoring of the seawall or other improvements is recommended to be conducted when driving piles in close proximity. If distortions do occur, pile installation may need to be altered to consist of pre-dilling and setting the piles within pre-drilled boreholes.

The recommendations for the foundations of the platforms that are required for the ADA gangways include both shallow and deep alternatives. The selection of the appropriate foundation was considered to be dependent upon the desired level of serviceability should liquefaction occur. The shallow foundation alternate consisted of a mass-concrete pour in which the concrete mass would be of the same plan dimension as the proposed platform with the bottom supported a minimum of 7 feet below grade. Based upon our understanding of the size of the platform (approximately 8 x 10 feet), the volume of the excavation (and concrete mass) would be approximately 21 yd<sup>3</sup>. The deep foundation was recommended to consist of a drilled pier foundation extended an adequate depth below grade to resist the lateral forces associated with slope instability and maintain serviceability of the platform. The actual depth of embedment is to be determined on the basis of structural analysis considering the magnitude of the lateral soil surcharge force and the available resistance of the soils and bedrock below the plane of potential slope instability.

The drilled pier foundation may be substituted by the pile foundations where installed in a pre-drilled borehole to the required depth. Installation of the piles by driving should be used with caution as previously discussed relative to the potential for initiating some consolidation of the loose granular soils and settlement to the wall system.

Wall Surcharges

The construction of the ADA platforms will require the use of potentially heavy equipment to perform the construction activities. The weight of vehicles in close proximity to the wall could result in load surcharges that may result on distortion to the wall. Geotechnical design parameters and recommendations were presented in the report that allow the static stability of the wall and the effect of such surcharges to be evaluated.

Closing

We sincerely appreciate this opportunity to be of continued service. We hope that the discussion presented herein clarified the recommendations presented in the report with respect to the liquefaction potential of the soils and the considerations for future development. If you have any questions regarding this letter, please do not hesitate to contact this office.

Respectfully submitted,

LEIGHTON CONSULTING, INC.

John E. Haertle, PE, GE 2352  
Senior Project Engineer

JEH/lr

Distribution: (2) Addressee  
(2) LSA Associates, Inc.  
Ms. Ashley Davis

GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS FOR THE  
PROPOSED RENOVATIONS TO DANA POINT HARBOR,  
CITY OF DANA POINT, CALIFORNIA

Prepared for:

**URS/Cash and Associates**

5772 Bolsa Avenue, Suite 100  
Huntington Beach, California 92649

Project No. 600024-004

January 7, 2008



Leighton Consulting, Inc.

A LEIGHTON GROUP COMPANY





Leighton Consulting, Inc.  
A LEIGHTON GROUP COMPANY

January 7, 2008

Project No. 600024-004

To: URS/Cash and Associates  
5772 Bolsa Avenue, Suite 100  
Huntington Beach, California 92649

Attention: Mr. Randy Mason, P.E.

Subject: Geotechnical Engineering Exploration and Analysis for the Proposed Renovations  
to Dana Point Harbor, City of Dana Point, California

In accordance with your request and authorization, Leighton Consulting, Inc. has conducted a geotechnical engineering exploration and analysis for the renovations proposed for the Dana Point Harbor in the city of Dana Point, California. The exploration and analysis was conducted to allow evaluation of the existing seawall under static and seismic conditions, and provide recommendations for the design and construction of pedestrian platform structures and guide piles within the marina for new permanent and temporary boat docks.

The results of the current study indicate the seawall along the northern boundary (Cove region) of the harbor may be considered to be generally stable with respect to the overall rotational or gross stability in spite of the presence of layers of soils that exhibited the susceptibility to liquefaction. The potential for liquefaction was considered to be of greater significance along the southern seawall (Island region) and the small peninsular areas along the Sport Fishing Docks in the eastern region of the harbor and the Youth & Group facility in the western region of the harbor. The potential for liquefaction to occur may result in slope instability and associated lateral displacements.

The performance requirements of the new guide piles are expected to be primarily influenced by the lateral load capacity of the piles. The piles are recommended to be installed to a depth below the submarine bedrock surface a distance of 10 to 15 feet. Pile installation by in-situ

construction techniques is understood to be the preferred manner of construction to minimize noise and vibration disturbances to the occupants and residents in the area as compared to pile driving. The installation of the piles is, however, expected to encounter some difficulties due to the presence of oversize material such as boulders or rock slabs that posed difficulty in advancing some of the test borings and CPT soundings to planned depth.

The foundations for the pedestrian platforms at the ADA Gangways are recommended to consist of drilled piers in areas where the liquefaction potential of the subsoils could result lateral translation if the serviceability of the platforms after liquefaction is desired. If the risk of damage is acceptable, the platforms may be supported by a deepened, mass-concrete spread footing foundation or shallower drilled piers to transfer load below the depth at which the adjacent seawall bears to avoiding lateral load surcharges on the wall.

The report provides additional details regarding the subsurface conditions and recommendations for design and construction.

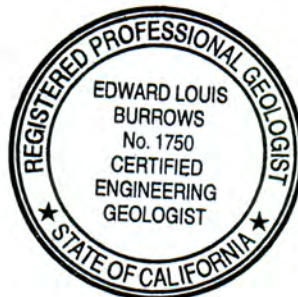
If you have any questions regarding this report, please do not hesitate to contact this office. We appreciate this opportunity to be of service.



Respectfully submitted,

LEIGHTON CONSULTING, INC.

John E. Haertle, PE, GE 2352  
Senior Project Engineer



Edward L. Burrows, PG, CEG 1750  
Director of Geology

JEH/ELB/lr

Distribution: (4) Addressee  
(2) LSA Associates, Inc.  
Attn.: Ms. Ashley Davis



## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION .....	1
1.1 Site Location and Description .....	1
1.2 Existing Seawall System .....	2
1.3 Purpose and Scope .....	2
2.0 FIELD EXPLORATION AND LABORATORY TESTING .....	4
2.1 Field Exploration .....	4
2.2 Seafloor Profiling.....	6
2.3 Laboratory Testing.....	6
3.0 SUBSURFACE CONDITIONS AND SEISMICITY .....	7
3.1 Regional Geology .....	7
3.1.1 Geologic Setting .....	7
3.1.2 Bedrock Units .....	7
3.2 Subsurface Soil Conditions.....	8
3.3 Groundwater Conditions .....	9
3.4 Faulting and Seismicity.....	9
3.4.1 Faulting.....	9
3.4.2 Ground Motion.....	10
3.5 Seismic Hazards.....	11
3.5.1 Fault Rupture.....	11
3.5.2 Liquefaction.....	11
3.5.3 Seawall Global Stability.....	13
3.5.4 Seismically-Induced Slope Displacements .....	14
3.5.5 Earthquake-Induced Settlements .....	14
3.5.6 Earthquake-Induced Flooding.....	15
3.5.7 Seiches .....	15
3.5.8 Tsunamis.....	15
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	16
4.1 Design Considerations .....	16



## TABLE OF CONTENTS (Cont'd)

<u>Section</u>	<u>Page</u>
4.2 ADA Platform Foundations .....	17
4.2.1 Spread Footing Foundations .....	17
4.2.2 Drilled Pier Foundations .....	19
4.3 Seawall Stability .....	22
4.3.1 Lateral Earth Pressure .....	23
4.3.2 Lateral Load Resistance .....	24
4.3.3 Bearing Capacity .....	24
4.4 Seismic Design Parameters .....	24
4.5 Guide Pile Recommendations .....	25
4.6 Corrosivity Considerations.....	28
5.0 LIMITATIONS.....	29

Appendices

- Appendix A – References
- Appendix B – Boring Logs and CPT Soundings
- Appendix C – Laboratory Test Results
- Appendix D – Seismic Hazard and Liquefaction Analysis
- Appendix E – Slope Stability Analysis
- Appendix F – Pile Capacity Calculations

LIST OF ILLUSTRATIONSFigures

Figure 1 – Site Location Map	Rear of Text
Figure 2 – Proposed Improvements to Harbor	Rear of Text
Figure 3 – Boring and CPT Location Map	Rear of Text
Figure 4 – Geotechnical Cross-Section A-A'	Rear of Text
Figure 5 – Geotechnical Cross-Section B-B'	Rear of Text
Figure 6 – Geotechnical Cross-Section C-C'	Rear of Text
Figure 7 – Geotechnical Cross-Section D-D'	Rear of Text
 Plate 1 - Boring and CPT Location Map	 In Pocket



## 1.0 INTRODUCTION

### 1.1 Site Location and Description

The proposed project consists of renovation of the Dana Point Harbor, the location of which is shown in Figure 1 included at the end of the text. The renovation will include reconstruction of the boat slips within the marina, improvements to the docks at the Embarcadero, Shipyard, Sport Fishing and the Harbor Patrol in the eastern region of the harbor; new docks at the Youth and Group facility in the western region; new ADA access ramps at six locations within the harbor; and new temporary docks along the south and west sides of the Island and along the eastern breakwater. The proposed improvements are shown in Figure 2.

The Dana Point Harbor was constructed in the late 1960s by the County of Orange and The United States Army Corps of Engineers. The current capacity of the harbor is approximately 2,400 boat slips. The northern half of the harbor is referred to as the Cove region while the southern half is referred to as the Island region. The northern and southern regions are divided into eastern and western basins by a bridge (Island Way) that provides vehicle access from the Cove side of the harbor to the Island side, thereby dividing the harbor into approximate quadrants. The harbor is protected from wave action of the Pacific Ocean by a breakwater south of the island.

Information provided by personnel familiar with the historical development of the harbor indicates the harbor was constructed by excavation of the basins after initially dewatering through the construction of a coffer dam. The construction of the coffer dam is understood to have included the installation of sheetpiling and initial filling with earth materials placed in-the-wet. The basins were originally planned to be excavated to an elevation (El.) of 10 feet below mean low level water (MLLW). However, due to the hardness of the bedrock material, the northwestern quadrant was only excavated to approximately El. -8 feet. Verbal accounts provided by individuals familiar with the initial construction of the harbor indicated significant pile driving difficulties were encountered. Pile driving ultimately required the use of a "stinger," a steel beam spliced to the end of a square concrete pile.



## 1.2 Existing Seawall System

A structural evaluation of the seawall system was previously conducted by Bluewater Design Group (Bluewater, 2003). Structural details of the existing wall system were obtained from review of the referenced report. Review of the report indicates the seawall system along the north and south sides of the basins of the harbor consists of a cantilever retaining wall that is located at the crest of a slope that descends at an inclination of 1.5H:1V into the adjacent basins. The face of this descending slope is covered by a revetment which consists of a series of cast-in-place concrete panels that are approximately 10 feet wide and 20 feet in length. The panels have been reported to be approximately 6 inches in thickness. The panels are typically situated such that a gap of approximately 1½ inches exists between successive panels.

The seawall system that exists in the boat launch area and along the eastern access channel of the marina generally consists of a similar retaining wall with rock rubble revetment covering the descending slope. The retaining structure along the south side of the boat launch ramp consists of a cantilever retaining wall of varying height.

The retaining walls along the northern and southern sides of the basins consist of a conventional cantilever wall that is approximately 5 feet in height. The wall foundation was reported to be constructed as cast-in-place concrete with the wall consisting of pre-cast panels. The typical wall section indicates the wall stem is slightly battered. Due to the lack of footing embedment and the proximity to a descending slope, the design of the wall relative to lateral sliding stability was based solely on sliding friction acting on the base of the footing. Load transfer to the revetment panels is precluded by the as-designed 1½-inch wide gap between the wall footing and the panels.

## 1.3 Purpose and Scope

This report presents the results of the geotechnical study conducted by our firm for the improvements planned for Dana Point Harbor. The primary focus of our evaluation was the stability of the seawall under seismic conditions; the construction of new guide piles that will be required for permanent and temporary docks; and the foundations to support the platforms for the ADA gangways. The scope of our work included the following tasks:



- Review of available geologic reports and maps.
- Notification of Underground Service Alert (USA) of marked boring locations prior to the commencement of our field exploration and coordination of a drilling contractor.
- Subsurface exploration consisting of excavation, logging, and sampling of nine (9) hollow-stem auger borings and ten (10) Cone Penetrometer Test (CPT) soundings. The initial phase of exploration was conducted at locations pre-selected by the client, while the subsequent phase was conducted at locations selected by the project engineer based upon the proposed construction.
- Collection of relatively undisturbed and bulk soil samples at selected depth intervals from the soil borings and transportation of the samples to our laboratory for testing.
- Laboratory testing of selected samples to evaluate engineering characteristics of the onsite earth materials within the exploration depths.
- Geotechnical evaluation of collected test boring and CPT data and relevant engineering analyses.
- Preparation of this report summarizing our findings, conclusions, and recommendations.



## 2.0 FIELD EXPLORATION AND LABORATORY TESTING

### 2.1 Field Exploration

Prior to the field explorations conducted in January and then later in November 2007, a cursory visual site reconnaissance was performed by a geotechnical engineer from our staff to review the locations of the proposed test borings and CPT soundings and to evaluate the marked locations with respect to access for heavy equipment. Underground Service Alert of Southern California (USA) was then notified of the marked locations so that known utilities could be indicated on the ground surface. In addition to utility location by USA, Geovision, Inc. was retained to provide geophysical testing to further identify underground utilities.

The locations of the soil borings and CPT soundings are shown in Plate 1, Boring and CPT Exploration Map, included (in pocket) at the end of the report and on Figure 3, which is reduced version of the oversize Plate.

*January 2007:* Four (4) soil borings (B-1 through B-4) were drilled at the pre-selected locations during the period of January 11 and 12, 2007. The boring locations were initially selected by the client for the primary purpose of evaluating the stability of the existing seawall. The borings were advanced to depths that ranged from 34 to 50 feet below the current grade by a truck-mounted drilling rig using rotary drilling techniques. All borings were extended into the formational bedrock that underlies the area.

In addition to the soil borings, five (5) CPT soundings were performed during the same time frame as the test borings. It should be noted that CPT-5 was located adjacent to CPT-2 in an effort to explore conditions to a greater depth than was achieved at CPT-2. For purposes of this report, the data from CPT-5 has been used in place of CPT-2; references to CPT-2 are actually the data collected from CPT-5. The CPT soundings were situated in close proximity to the boring locations so that samples collected from the test boring locations could be correlated to the CPT data and the profile penetrated by the CPT probe. The CPT soundings met with refusal at depths of 12½ to 33 feet below grade. Based upon the boring data, all CPT soundings except for CPT-4 were terminated in the formational bedrock while CPT-4 was presumed to have been terminated on cobble or boulder material.





November 2007: Five (5) soil borings (B-5 through B-9) were drilled during the period of November 5 and 6, 2007 at locations that were selected on the basis of the proposed improvements. The borings were advanced to depths that ranged from approximately 26½ to 55½ feet below current grade by a truck-mounted drilling rig using rotary drilling techniques. All borings with the exception of Boring B-6 were extended into the formational bedrock that underlies the area. Boring B-6 (south of the Yacht Club) was terminated at a depth of approximately 26½ feet due to drill rig auger refusal on possible cobble and boulder or rock slab material.

Exploration by soil borings was supplemented by advancing five (5) CPT soundings (CPT Nos. 6 through 10) during the same time period as the test boring exploration. The CPT soundings were situated in close proximity to the boring locations so that samples collected from the test boring locations could be correlated to the CPT data and the profile penetrated by the CPT probe. The CPT soundings met with refusal at depths of 16½ to 35½ feet below grade. Based upon the boring data, all CPT soundings except for CPT-6 and -7 were terminated in the formational bedrock where CPT-6 and -7 were presumed to have been terminated on cobble or boulder material.

Equipment and Procedures: The test borings were advanced by a conventional truck-mounted drill rig using hollow-stem flight augers. Drilling fluid was added to the drill stem to provide a counteractive effect to unbalanced hydrostatic pressures that could develop due to the depth of the borings below the water table. The rig was equipped with an automatic-trip hammer that ensures a consistent hammer drop during sampling and field testing. All borings were continuously logged during drilling by a member of our technical staff. Samples were collected at selected intervals using spilt-barrel sampling methods in accordance with ASTM D1586 and D3550 specifications. Each sample collected was classified in the field in general conformance with the Unified Soil Classification System (USCS) and subsequently reviewed in the laboratory. All samples were sealed and packaged for transportation to our laboratory for testing.

Field testing conducted during soil sampling consisted of driving the sampler below the bottom of the borehole with successive drops of a 140-pound weight falling 30 inches. The number of blows (blow counts) to drive the sampler 18 inches was recorded for each 6-inch increment of penetration. The blow counts were recorded on the logs of the test borings. In addition, bulk samples of the soils were collected from selected depths. Upon completion of the drilling, the boreholes were backfilled with soil cuttings and the boreholes patched.



The CPT soundings were performed in accordance with ASTM D5778 and D3441 specifications. The test boring logs and the logs of the CPT soundings are included in Appendix B.

## 2.2 Seafloor Profiling

Field exploration has also included the use of specialized geophysical testing to conduct a survey of the seafloor bottom throughout the harbor. The profiling provides a generalized description of the seafloor bottom as well the contact between seafloor sediments and the underlying bedrock or other materials that provide a contrast in density. The results of the survey were not yet available at the time of geotechnical analysis. An addendum to this report will be prepared upon receipt of the survey and review of the interpretation of the findings.

## 2.3 Laboratory Testing

Laboratory tests were performed on selected samples to verify the field classification of the recovered samples and to determine the geotechnical engineering properties of the subsurface materials. Laboratory testing was performed to evaluate the following engineering properties of the soils and bedrock:

- Determination of the in-situ moisture content and density;
- Particle size distribution by mechanical sieve analysis and hydrometer sedimentation;
- Determination of fines content by Percent Passing No. 200 Sieve;
- Shear strength by Direct Shear, Unconfined Compression and Triaxial Compression testing;
- Soil plasticity by determination of Atterberg Limits; and
- Soil corrosivity as indicated by the concentration of water soluble sulfate, minimum resistivity, chloride concentration and pH.

All laboratory tests were performed in general conformance with ASTM Standard Test Methods. The results of the in-situ moisture content and density are included on the logs of the test borings while the results other tests are presented in Appendix C of this report.



### 3.0 SUBSURFACE CONDITIONS AND SEISMICITY

#### 3.1 Regional Geology

##### 3.1.1 Geologic Setting

Dana Point Harbor is located within the northwest trending Peninsular Ranges geomorphic province in southern California. The Peninsular Ranges province is elongated area characterized by parallel fault-bounded mountain ranges and intervening valleys. The province extends southward from the Transverse Ranges at the northern side of the Los Angeles Basin southward into Mexico. The site lies at the southernmost end of The San Joaquin Hills, which are a northwest trending topographically elevated area that extend southward from Newport Beach to Dana Point.

The harbor is a coastal reentrant or cove protected by the headland at Dana Point. The protected cove owes its existence to the differing resistance to wave erosion of the two bedrock formations exposed along a fault in the steep coastal bluff. Bedrock units include the Capistrano Formation and the San Onofre Breccia. Both the San Onofre Breccia and the Capistrano Formation are exposed in the sea cliffs behind the harbor where they are separated by the Dana Cove Fault. However, we only encountered the Capistrano Formation during our subsurface investigation. The weaker Capistrano Formation has been preferentially eroded, creating Dana Cove. More youthful sediments have been deposited in the harbor including colluvium, alluvium, beach deposits, landslide debris, talus, and artificial fill placed during construction of the modern harbor in 1969 and 1970.

##### 3.1.2 Bedrock Units

San Onofre Breccia: The San Onofre Breccia is a Middle Miocene-age (about 11 to 16 million years old) formation of marine origin. It consists of a very coarse, reddish-brown to blue-gray, massive to crudely bedded breccia with interbeds of coarse, pebbly sandstone and siltstone. The matrix is generally an earthy, poorly cemented silt, or a well-cemented angular sand. The San Onofre Breccia is exposed at the western end of Dana Point Harbor along the east-facing sea cliffs where it is in fault contact with the Capistrano Formation. The San Onofre Breccia is a bedrock unit that is resistant to erosion and forms the headland at Dana Point.



Capistrano Formation: The Capistrano Formation is a Late Miocene to Early Pliocene-age (about 3.6 to 11 million years old) formation of marine origin. In the Dana Point area, the Capistrano Formation is widespread with a total thickness of nearly 2,400 feet (Eddington, 1974). This marine (ocean deposited) bedrock formation is divided into a few recognizable subunits: a siltstone facies, a sandstone facies, and sandstone with conglomerate and sedimentary breccia. These three facies of the Capistrano Formation are all exposed in the sea cliffs surrounding the subject site generally dipping into slope (north). The siltstone facies is medium to dark gray and brownish gray to dark greenish gray, fine grained, poorly to moderately consolidated and massive to moderately fissile (Eddington, 1974). The sandstone facies is yellowish brown to pale yellowish brown and medium gray to light gray, fine to medium grained and weakly cemented, and massive to poorly bedded (Eddington, 1974). The sandstone and breccia facies is yellowish brown and coarse grained, weakly cemented to friable, with angular to rounded pebbles and cobbles of multiple origins, massive to poorly bedded, and with interbeds of well-graded sand and silt (Eddington, 1974). The bedrock encountered in the borings are from the siltstone facies of the Capistrano Formation. Capistrano Formation bedrock adjacent to the Dana Cove fault contact is sheared in a zone about 70 to 100 feet wide (Kerwin, 1992).

### 3.2. Subsurface Soil Conditions

The subsurface conditions that are described below have been summarized for clarity. Specific descriptions of the materials encountered at the boring and CPT sounding locations can be found on the logs presented in Appendix B. The boring logs provide the subsurface stratigraphy relative to the grade at the time of exploration and the corresponding elevations, which were referenced to the site grades shown on the base map provided by the client that was used as the basis for our exploration map (Plate 1, Figure 3). The elevations shown on the base map have been assumed to be relative to Mean Sea Level (MSL).

Existing Fill: The results of the field exploration indicate the presence of fill to depths that varied from approximately 10 to 20 feet on the Cove side of the harbor to depths of approximately 23 to 30 feet below the Island side of the harbor. The fill that underlies the Cove side of the harbor typically consisted of fine to medium grained sands with varying clay content that exhibited loose to medium dense relative density on the basis of field testing (N-values). The fill material encountered below the Island side of the harbor



also consisted primarily of sand with greater silt and occasional clay content. The fill generally exhibited loose to medium dense relative density on the basis of field testing. Field tests that indicated dense relative density (N-values greater than 30) are not considered to be indicative of the actual relative density of the material but rather due to the influence of the presence of oversize (cobble and boulder) material within the fill.

Native Alluvial Soils: At several boring locations, the fill was underlain by native soils comprised of loose relative density sands with varying clay content to a depth of about 17 to 25 feet on the Cove side of the harbor. Native soils were generally not identified at the boring located on the Island side of the Harbor. Possible alluvial material was, however, identified at Boring B-3 at a depth of about 30 feet below grade.

Bedrock: The bedrock was encountered at depths of 17 to 25 feet below grade in the Cove region of the harbor and at greater depths below the Island region. The bedrock contact appeared to be shallower along the north side of the Island where bedrock was encountered at depths of 23 to 28 feet as compared to the south side of the Island where bedrock was encountered and at a depth of 37 feet at Boring B-7.

Bedrock of the Capistrano formation was encountered below the fill and native soils at the depths described above. The bedrock typically consisted of interbedded layers of sandstone and siltstone.

### 3.3 Groundwater Conditions

Groundwater was typically encountered at depths of 9 to 16 feet below grade at the test boring locations during field exploration. The groundwater table was, however, estimated to exist at depths of 6 to 10 feet below grade on the basis of the relative moisture contents of the recovered soil samples. Groundwater in the areas of the seawalls is, however, expected to be subject to tidal fluctuation.

### 3.4 Faulting and Seismicity

#### 3.4.1 Faulting

Two major faults are located in close proximity to the site. A description of these faults is presented below:



*Newport-Inglewood Fault Zone:* The Newport-Inglewood Fault Zone is a broad zone of left-stepping en echelon faults and folds striking southeastward from near Santa Monica across the Los Angeles basin to Newport Beach. Altogether these various faults constitute a system more than 150 miles long that extends into Baja California, Mexico. Faults having similar trends and projections occur offshore from San Clemente and San Diego (the Rose Canyon and La Nacion Faults). A near-shore portion of the Newport-Inglewood Fault Zone was the source of the destructive 1933 Long Beach earthquake ( $M_L$  6.3) (Hauksson and Gross, 1991). This fault zone is considered a Type B fault (CDMG, Peterson et al., 1996), and the reported recurrence interval for a large event along this fault zone is 1,200 to 1,300 years with an expected slip of 1 meter (Forest et al., 1997).

*San Joaquin Hills Blind Thrust Fault:* The seismic hazards in Southern California have been further complicated with the recent realization that major earthquakes can occur on large thrust faults that are concealed at depths between 5 to 20 km, referred to as “blind thrusts.” The uplift of the San Joaquin Hills is produced by a southwest dipping blind thrust fault that extends at least 14 km from northwestern Huntington Mesa to Dana Point and comes to within 2 km of the ground surface (Grant et al., 1997; Mueller et al., 1998). Work by Grant et al. (1997 and 1999) suggest that uplift of the hills began in the Late Quaternary and continues during the Holocene. Uplift rates have been estimated between 0.25 and 0.5 mm/yr. If the entire length of the fault ruptured, the earthquake generated has been estimated to be  $M_w$  6.8 (Grant et al., 1999).

### 3.4.2 Ground Motion

The site is likely to experience strong ground shaking during the life of the development. Peak horizontal ground acceleration (PHGA) is generally used to characterize the amplitude of ground motion. A probabilistic seismic hazard analysis (PSHA) was performed using FRISKSP (Blake, 2000) and the recently published fault data (Cao, et al., 2003 and Peterson, et al., 1996) to estimate the PHGA value at the site for all active or potentially active faults from results of our search within a 100-kilometer radius of the site. This approach takes into account site-specific response characteristics, historical seismicity, and the geological characteristics of all faults under consideration. Three attenuation relationships were used in this analysis: Bozorgnia et al, 1999, Campbell et al., 1997 rev., and Sadigh et al., 1997. The results are presented in Appendix D.



Based on our probabilistic seismic hazard analysis, the results suggest that the estimated PHGA with a 10 percent probability of exceedance in 50 years is approximately 0.38 (recurrence interval of 475 years) for the site.

### 3.5 Seismic Hazards

The potential hazards to be evaluated with regard to seismic conditions include fault rupture, soil liquefaction, earthquake-induced vertical and lateral displacements, landslides triggered by groundshaking, earthquake-induced flooding due to the failure water containment structures, seiches, and tsunamis. An evaluation of these effects on the marina was previously discussed in our geotechnical report (Leighton, 2002) for preliminary planning purposes associated with Dana Point Master Plan. The following discussion is limited to the seismic factors associated with seawall system. The primary seismic hazard associated with the seawall is the potential for liquefaction and the potential for slope instability.

#### 3.5.1 Fault Rupture

The harbor is not located within a currently designated Alquist-Priolo Earthquake Zone (Hart and Bryant, 1999). No known active faults are mapped on the site. Based on this consideration, the potential for surface fault rupture at the site is considered to be low.

#### 3.5.2 Liquefaction

Liquefaction is a seismic phenomenon in which loose, saturated, non-cohesive granular soils exhibit severe reduction in strength and stability when subjected to high-intensity ground shaking. The mechanism by which liquefaction occurs is the progressive increase in excess pore pressure generated by the shaking associated with seismic event and the tendency for loose non-cohesive soils to consolidate. As the excess pore fluid pressure approaches the in-situ overburden pressure, the soils exhibit behavior similar to a dense fluid with a corresponding significant decrease in shear strength and increase in compressibility. Liquefaction occurs when three general conditions exist: 1) shallow groundwater; 2) low density, non-cohesive sandy soils; and 3) high-intensity ground motion. Studies indicate that saturated, loose and medium dense, near-surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense,



cohesionless soils exhibit low to negligible liquefaction potential. Bedrock and cohesive fine-grained soils are not considered susceptible to liquefaction.

The proposed project site is located in an area that has been identified by the State of California as being potentially susceptible to liquefaction, thereby requiring a site-specific evaluation of the potential for liquefaction to occur and appropriate remedial measures commensurate with the proposed structure.

The potential for liquefaction to occur has been evaluated based primarily upon the subsurface data collected by the CPT sounding exploration and the software package *LiquefyPro* (CivilTech, 2003). The procedure used in the software to determine the potential for triggering of liquefaction was the empirical procedure described by Robertson and Wride as adapted by the NCEER (1998; Youd 2001). The liquefaction analysis was conducted on the basis of a seismic event ( $M_w$ ) of 6.8 and peak horizontal ground acceleration (PHGA) of 0.38g. The analysis was based upon a minimum Factor of Safety of 1.1 for liquefaction triggering.

The results of the liquefaction analysis are included in Appendix D which consists of the graphical output of the computer program. The analysis was focused on the CPT soundings rather than the test borings due to the refinement offered by the continuous record of the subsurface profile provided by the data collected during the penetration of the CPT probe. Analysis was not conducted for CPT-6 and CPT-4 since the conditions encountered at these CPT locations were not considered to be representative of the actual subsurface profile due to the apparent premature termination of the CPT soundings on oversize material as evidenced by comparison the of the interpreted CPT profiles with the adjacent borings. Liquefaction analysis at CPT-4 was substituted by the recently conducted CPT-9 while CPT-6 was substituted by Boring B-5.

The liquefaction analysis indicated the potential for liquefaction to occur within the fill and alluvial soils that comprise the Island as well the small peninsula adjacent to the Sport Fishing Docks in the eastern region of the harbor and in the peninsula area of the Youth & Group facility in the western region of the harbor. Liquefaction potential was determined to exist in either relatively thin layers or significantly thicker zones, typically on the order of 10 to 15 feet in thickness. The liquefaction potential was found to significantly less extensive in the Cove side of the harbor.





### 3.5.3 Seawall Global Stability

The occurrence of liquefaction is expected to primarily result in the reduction in slope stability due to the presumption that the subsurface profile consists of generally continuous horizontal layers of alluvial/sea floor deposits and fill materials. Liquefaction within layers that are assumed to be continuous below the seawall and extend into the adjacent basin results in predetermined planes or zones of weakness along which instability may occur.

The stability of the slopes that support the retaining wall of the seawall system was analyzed using the software package *GSTABL7 with STED* (Gregory, 2003). The program is capable of performing a search routine to determine the potential slip surface with the lowest Factor of Safety. The subject slopes were analyzed using Block Glide and Circular slip surface models. The Block Glide model allows the analysis to consider the shear strength of specific horizontal planes or other planes of geologic discontinuity. In the case of the seawall stability, the plane of weakness would be a continuous horizontal layer of liquefied soils. The shear strength characteristics used in the analysis were determined by laboratory testing of representative samples of the fill and bedrock material for the layers that were determined to not be susceptible to liquefaction.

The strength parameters used in the analysis for soil layers that were determined to be susceptible to liquefaction were based upon the recommendations presented by Seed and Harder (1990; SCEC, 1999) and Stark and Mesri (1992). The methodology to estimate the post-liquefaction residual undrained shear strength for slope stability analysis requires the correlation of the field N-value, corrected for overburden pressure, hammer efficiency, fines content, etc.  $[(N_{160})_{cs}]$ , to the residual undrained shear strength. The correlation was performed using the field N-values obtained by field sampling of the test borings and the equivalent N-values derived from CPT data based upon published correlations. The slope stability analysis is presented in Appendix E for the subsurface profile determined at the locations of the CPT-1/Boring B-1, CPT-2/Boring B-2, and CPT-3/Boring B-3 and CPT-10/Boring B-8 based upon the typical seawall system described in the preliminary structural evaluation (Bluewater 2003).

A minimum Factor of Safety of 1.25 was considered to be appropriate for the analyzed conditions, i.e., the relatively short time frame in which the residual undrained shear strength is representative of the potentially liquefiable strata.



Upon completion of excess pore pressure dissipation, the static, non-liquefiable strengths are considered to be re-established and the stability of the seawall system is increased. Based upon the results of the analysis, slope instability appears to be of significance for the profiles analyzed in the western region of the Island (CPT-3/Boring-3) and the peninsula area adjacent to the Sport Fishing Docks (CPT-10/Boring B-8). The similarity in profiles and results of the liquefaction triggering analysis also indicates the potential for slope instability in the peninsula at the Youth & Group facility. Due to the fact that the Island consists of reclaimed land, significant variance in the subsurface conditions should be expected to exist. The conditions encountered at CPT-3/Boring B-3 and farther south at CPT-8/Boring B-7 are anticipated to be representative of the majority of the Island unless further field exploration is performed to better define the subsurface profile. The results of the analysis are presented in Appendix E.

#### 3.5.4 Seismically-Induced Slope Displacements

The occurrence of liquefaction and the potential for slope instability at the referenced locations indicates lateral displacement of the seawall system is likely through the phenomenon of Lateral Spreading. Evaluation of the potential displacements that may occur due to lateral spreading was performed using the empirical procedure developed by Youd, Hansen and Bartlett (1999) for the Free Face condition. Estimation of the potential lateral displacement by the empirical method suggests displacements on the order of several feet for the referenced profiles. In consideration of the adequate factor of safety for the remaining analyses, the potential for lateral spreading is considered to be low along the Cove side of the harbor, although variance in soil conditions in areas not previously explored as part of this study may result in different effects on wall stability and distortions.

#### 3.5.5 Earthquake-Induced Settlements

Earthquake-induced settlements will consist of dynamic settlements (above groundwater) and liquefaction settlements (below groundwater). These settlements occur primarily in loose sandy soils due to reduction in volume during or after an earthquake event. The results of the liquefaction analysis indicated several strata were susceptible to liquefaction at the locations explored within the Cove region, but slope stability analysis indicated adequate factor of safety



(greater than 1.25) for the short-term conditions in which the residual shear strength the liquefied deposits govern slope stability.

Although the potential for slope stability was not considered to be of significance along the Cove side of the harbor, the consolidation of the liquefiable deposits indicates the potential for settlement and distortions to the seawall. Based upon the empirical procedure described by Tokimatsu and Seed (1987), the post-liquefaction seismically-induced settlement was estimated to be on the order of 1 to 2 inches. The settlement may, therefore, result in distortion to the seawall system.

### 3.5.6 Earthquake-Induced Flooding

The failure of dams or other water-retaining structures as a result of earthquakes could result in flooding. The potential of earthquake-induced flooding that will affect the site is considered to be low due to the lack of a major dam or water-retaining structure located near the site.

### 3.5.7 Seiches

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Because of the partially enclosed configuration of the Dana Point Harbor, the possibility of seiche phenomena occurring within the harbor could be of concern. Further study of wave run-up near the harbor during a major seismic event should be performed during the design phase.

### 3.5.8 Tsunamis

Tsunamis are waves generated in large bodies of water as a result of change of seafloor topography caused by tectonic displacement. As a result of the proximity of the site to the ocean and its near-sea level elevation, tsunami hazard should be considered during design. McCulloch (1985) predicted a 100-year tsunami event could result in a runup of about 4 feet at the harbor. When combined with high tide, the wave runup may topple the existing seawall. Further study of the potential effect on the seawall should be performed during the design phase by a qualified engineer experienced in coastal engineering.



## 4.0 CONCLUSIONS AND RECOMMENDATIONS

### 4.1 Design Considerations

ADA Platforms: The proposed renovation includes the construction of six new pedestrian platforms that comply with ADA specifications at various locations throughout the harbor. The platforms are intended to provide access from the Boardwalk to the gangways that extend to the floating docks. The platforms would typically be situated offshore adjacent to the seawall and the Boardwalk, but the use of this type construction technique would require penetration of the existing submarine concrete panels. Due to their age and to avoid damage to the panels, we understand that the platforms will consist of a structural slab supported by a fixed foundation that will be situated behind (landside) the existing seawall with the slab cantilevering to the gangway, a distance of approximately 8 feet from the harbor-side face of the wall. The foundations for the platform will, therefore, be supported within the soils that underlie the site along the perimeter of the marina. The soils typically consist of existing fill that are then underlain by native alluvial soils and bedrock. The liquefaction potential of the soils and the potential for instability of the slopes will affect the design of the platform foundations if the intent of the design is to maintain serviceability after a seismic event that triggers liquefaction.

Seawall: The results of the liquefaction and post-liquefaction slope stability analyses indicated the potential for slope and seawall instability in the peninsulas adjacent to the Sport Fishing Docks and the Youth & Group facility as well as along the Island. In the event liquefaction occurs, significant lateral displacement is expected to occur of the seawall and surface improvements within the influence of the slope instability. Mitigation measures typically include the in-situ ground modification techniques to reduce the liquefaction potential. Based upon prior discussions with the client and the County of Orange, we understand that liquefaction mitigation is not desired at this time. Recommendations for such improvement techniques are, therefore, not included in this report, but can be provided under separate cover upon request.

Guide Piles: The renovation of the harbor includes reconfiguration the marina, thereby requiring new guide piles to fix the position of the boat docks within the marina. Piles will also be required for permanent slips at the Youth & Group facility, Sport Fishing Docks, and the Embarcadero Docks; and piles will be required for the temporary docks along the western and southwestern sides of the Island as well as the western side of the eastern breakwater.



The pile foundations may consist of either driven pre-cast concrete piles or steel pipe piles, or pre-cast pre-stressed concrete piles set in pre-drilled boreholes socketed into the bedrock. Preliminary project team meetings indicated the preferential alternative is the use of pre-stressed concrete piles set in pre-drilled boreholes to reduce noise nuisance to the existing facility and to the adjacent developments. In addition, a driven pile alternative is expected to encounter driving difficulties due to the in-situ density/consistency of the bedrock and the historical accounts pile driving difficulties during the original construction of the marina. We understand that the existing guide piles consist of a composite section in which the lower region consists of a steel beam “stinger” extending below the bottom of the pre-cast concrete pile.

The termination of several CPT soundings and test borings at depths shallower than planned due to the presumed presence of cobble, boulder and/or rock slab material indicates the potential for difficulties during the installation of pile foundations. Pre-drilling in conjunction with rock coring may be necessary to ensure embedment to the recommended depth.

## 4.2 ADA Platform Foundations

The primary consideration in the design of the foundations for the ADA Platforms will be the liquefaction potential at the various locations. As previously discussed relative to the stability of the seawall, the subsurface conditions at the borings and CPT soundings along the north (Cove) side of the marina do not suggest extensive damage due to liquefaction based upon the relatively thin thickness and number of soil layers of soils that were potentially susceptible to liquefaction. However, the liquefaction analysis at the majority of the remaining CPT and boring locations indicated a significant potential for liquefaction and a corresponding potential for slope instability and significant lateral displacement. The design of the foundations for the platforms will be dependent upon the desired degree of serviceability in the event of liquefaction.

### 4.2.1 Spread Footing Foundation

*Design Considerations:* The platforms will consist of a reinforced structural concrete slab that will cantilever a distance approximately 8 feet beyond the seawall into the marina to provide access to the associated gangways. The platforms will be located adjacent to the seawall and will, therefore, potentially surcharge the wall if the platform is supported at an elevation above the bearing



grade of the seawall. The platform is, therefore, recommended to be supported at an elevation no shallower than the bearing grade of the seawall. The schematic structural cross-section of the retaining wall indicates the bearing grade is approximately 6 to 6½ feet below current grade. Due to limited lateral/plan dimension of the platform and the eccentric loading associated with the cantilever section of the platform, the most feasible spread footing foundation is considered to be a mass concrete pour to fill the excavation that will be required to establish a consistent bearing grade between the seawall and the platform foundation. For purposes of preliminary analysis presented in this report, the mass concrete pour foundation will be of dimensions that are approximately 7 feet perpendicular to the wall orientation by 10 feet parallel to the wall. The 7-foot dimension will extend from the heel of the existing seawall foundation. The platform slab will cantilever a distance of 11 feet from the edge of the foundation closest to the wall.

*Bearing Capacity:* The mass concrete foundations may be designed for a maximum net allowable soil bearing pressure of 1,500 psf. The resistance to lateral loads will be derived by the friction developed along the bottom of mass concrete and the passive earth pressure against the sides of the foundation. The sliding resistance may be calculated using a coefficient of sliding friction of 0.30 for foundation concrete placed on the existing soils. The passive earth pressure may be calculated on the basis of an **ultimate** (no safety factor) equivalent passive fluid pressure of 300 psf per foot of foundation embedment. The recommended passive pressure pertains to level grade that extends continuously from the foundation a minimum distance of twice the footing embedment; no passive resistance should be included in design for translation in the direction of the seawall.

The vertical load bearing capacity and the equivalent passive fluid pressure values stated above may be increased by one-third for design under short-term, transient loading conditions.

The footing excavations are recommended to be reviewed and approved by a representative of the geotechnical engineer at the time of construction to verify that the footings are supported in suitable bearing soils. Due to the presence of fill and variances in support characteristics, some additional excavation may be necessary based upon the conditions encountered in the field. The actual depth of overexcavation should be reviewed by the geotechnical engineer prior to concrete placement after overexcavation to the recommended depth.



Upon completion of subgrade evaluation prior to construction and design as recommended in this report, the settlement of the platform foundations is estimated to be less than 1 inch. Care should be used in the structural detailing of the slab cantilever to reduce the vertical load that will be transferred to the and thereby supported by the seawall foundation.

#### 4.2.2 Drilled Pier Foundations

*Design Considerations:* A drilled pier foundation system is considered to be a feasible alternate foundation system for support of the platforms. A drilled pier foundation that is extended through the existing fill and the potentially liquefiable soils to bear within the bedrock will reduce overexcavation as required for a shallow spread footing foundation system and can be designed to reduce the effects of liquefaction and maintain serviceability.

The slope stability analyses indicate the potential for instability and lateral translation. The potential slip surfaces typically extend from the toe of the submarine slope and intersect the ground surface at distances of 12 and 17 feet behind the seawall at the analyzed cross-sections, Island West at CPT-3 and Sport Fishing Docks at CPT-10. The positioning of the platforms and the supporting foundations within the potential slide mass requires the design of the pier foundations to include the associated lateral load due to soil translation. Based upon the encountered subsurface profiles at the boring and CPT sounding locations, the design of the pier foundations to support the platforms may be classified in three categories:

- The platforms along the northern shore of the marina (Cove side) where the liquefaction potential was found to be relatively minor and did not present a significant potential for slope instability;
- The platforms located in the peninsula area adjacent to the Sport Fishing docks in the eastern region and the Youth and Group facility in the western region where a relatively thick and continuous zones of potentially liquefiable soils were identified; and
- The platforms along the northern shore of the Island where the potential for liquefaction and slope instability was also identified, but the effect on pier design was found to be somewhat less than the peninsula areas.



Lateral Load Conditions: In the area where a significant risk of liquefaction induced slope instability exists, the design of the drilled pier foundations is anticipated to be controlled by the resistance to lateral load relative to the axial compressive load to support the platform structures. The load applied to the piers due to liquefaction induced slope instability is dependent upon the depth at which the critical slip surface intersects the pier and the required resisting force to be provided by the pier foundations to obtain a suitable factor-of-safety. The results of the slope stability analysis indicates the piers must provide an equivalent load of 1.5 kips per lineal foot (klf) for the platforms located on the Island; and a load of 8.7 klf for the platforms located on the peninsulas. On the basis of this analysis, it is recommended that the pier foundations that support the platforms on the Island be designed for a lateral load surcharge calculated on the basis of an equivalent fluid pressure of 30 pcf per foot of pier diameter. The pier foundations that support the platform in the peninsula areas are recommended to be designed for an equivalent fluid pressure of 105 pcf per foot of diameter. The equivalent fluid pressures attributed to soil surcharge should be applied from the top of the pier to a depth of 15 feet below grade for the locations on the Island; and to depth of 13 feet for the locations on the peninsulas. The total lateral load applied to the piers should be determined on the basis of an area of influence behind the pier equal to twice the diameter.

The resistance to the lateral load will be provided by the passive earth pressure that develops along the lengths of the piers that extend below the critical slip surface. The encountered subsurface profiles generally indicate the presence of soils to a depth of 10 feet below the critical slip surface followed by the formational bedrock. In some locations, portions of these soils are susceptible to liquefaction and, therefore, provide significantly lower resistance. On this basis, the **ultimate** (no safety factor) equivalent passive fluid pressure for use in design is recommended to be 130 pcf for the portion of the piers extending below the critical slip surface a distance of 10 feet to the bedrock contact. The **ultimate** equivalent passive fluid pressure is recommended to be 450 pcf for the portion of the piers that are founded within the formational bedrock material.

The previously stated values for passive equivalent fluid pressure are based upon **ultimate** strength capacity; the appropriate factor of safety should be applied by the structural engineer.





*Axial Compressive and Tensile Loads:* The pier foundations are recommended to be extended to bear within the formational bedrock that underlies the harbor. The axial compressive capacity of the drilled pier foundations is recommended to be calculated on the basis of a net allowable bearing pressure of 6,000 pounds per square foot (psf) for piers extended to bear a minimum depth into the bedrock the equivalent of two pier diameters. Piers that are extended to bear at greater depths below the top of the bedrock stratum may include the additional load bearing capacity developed by skin friction. In this event, the allowable axial compressive capacity may be increased by 1,100 psf per foot of pier diameter per foot of embedment below a depth of 2 pier diameters into the bedrock.

The resistance to uplift may be calculated on the basis of the weight of the pier and the friction that develops along the surface. The unit skin friction that is recommended for use in calculation of uplift resistance is 600 psf per foot of diameter per foot of embedment into the bedrock.

*Construction Considerations:* The drilling operations associated with drilled pier construction are recommended to be observed and evaluated by a representative of the geotechnical engineer to allow further evaluation of the actual subsurface conditions and verify proper embedment depth into the bedrock material. If the end-bearing capacity of the piers is required based upon structural design, the drilling operations are recommended to include the use of clean-out bucket to remove loose/sloughed soils that accumulate in the bottom of the borehole. However, based on the encountered soil conditions and shallow groundwater conditions, it is anticipated that the construction of drilled piers will require drilling mud and/or temporary casing to prevent caving. Furthermore, the placement of concrete is recommended to be performed by tremie to displace groundwater and drilling fluid. Care should be used in the installation/removal of temporary casing and/or the use of slurry for borehole stability to reduce the potential for adversely affecting the frictional resistance of the soils and thereby reduce the load capacity of the piles. A minimum concrete head of 5 feet is recommended to be maintained at all times during the removal of the temporary casing to prevent caving.

Drilling for the pier foundations may encounter difficulties due to occasional oversize and/or very dense material within the fill and the underlying native soils. Drilling difficulties are expected to be encountered in the areas of the Youth and Group facility and in the eastern region of the Island where our test borings and/or



CPT soundings required termination at depths shallower than planned due to refusal. Borehole drilling may, therefore, require special techniques such as rock coring or other methods to extend through zones of resistance to achieve design depth.

#### 4.3 Seawall Stability

The structural integrity of the seawall system was previously evaluated on a preliminary basis by Bluewater Design Group (Bluewater 2003). As part of their evaluation, the static stability of the retaining wall was calculated using geotechnical parameters presented in a report prepared by our firm for the preliminary evaluation of the Dana Point Master Plan (Leighton 2002). The results of the previous stability analysis, using parameters presented for future development proposed for the marina, indicated a factor of safety of 1.0 with respect to sliding and 4.0 with respect to overturning. Recommendations are subsequently presented in this report that may be used to refine the stability analysis of the retaining wall based upon conditions encountered in close proximity to the retaining walls that are expected to be more representative of actual conditions.

The results of the current study indicate the seawall along the northern boundary (Cove region) of the harbor may be considered to be generally stable with respect to the overall rotational or gross stability in spite of the presence of layers of soils that exhibited the susceptibility to liquefaction. The occurrence of liquefaction is, however, expected to result in some post-liquefaction settlement due to consolidation of the liquefied soils. The magnitude of this settlement was estimated to be on the order of 1 to 2 inches using currently available empirical prediction techniques. The potential for liquefaction was considered to be of greater significance along the southern seawall (Island region) where the potential for liquefaction to occur is expected to result in slope instability and lateral displacements.

The following recommendations for lateral pressure, foundation bearing and seismic loading conditions are based upon the conditions encountered at the test boring locations. The design values for earth pressure presented herein do not contain an appreciable factor of safety; the structural engineer should apply the applicable factors of safety and/or load factors for use in design evaluation. Due to the presence of fill, significant variance may exist between the boring locations in areas that have not been explored. As a result,



additional exploration of the seawall areas may be warranted to verify the design parameters subsequently presented.

#### 4.3.1 Lateral Earth Pressure

*Static Conditions:* The retaining wall of the seawall system is considered to be a cantilever structure. As such, the Active earth pressure condition is considered to be appropriate for use in the evaluation of the stability. The evaluation of the wall stability may be based upon earth pressure modeled as a fluid with equivalent fluid weight of 37 pcf for the Active earth pressure condition. The recommended earth pressure condition pertains to drained conditions behind the wall. In consideration of the probable long term water condition behind the wall corresponding to a depth of approximately 5 feet below grade, i.e., approximate El. 0 feet MLLW, the water that may accumulate behind the wall will be due to infiltration from the ground surface. However, based upon our understanding of wall design which includes joints between adjacent stemwall panels, the potential for the accumulation of water and development of hydrostatic pressures is considered to be relatively low.

*Seismic Conditions:* The magnitude of the surcharge load subjected to the retaining wall of the seawall system will be dependent upon the magnitude of the peak ground acceleration experienced at the site. The seismic load surcharge is typically modeled as a concentrated load situated at a distance above the base of the wall equivalent to approximately 60 percent of the wall height (0.6H). The seismic load surcharge is recommended to be of 0.35 kips for seawalls with a height of 6 feet 3 inches and a equivalent horizontal ground acceleration of 0.19g, which is approximately equivalent to 50 percent of the PHGA. The magnitude of the seismic increment load for walls of other height or other seismic scenarios can be determined on a case-by-case basis.

*Static Surcharges:* In addition to the above lateral pressures from retained earth, lateral pressures from other superimposed loads, such as those from automobile traffic and adjacent structures should be added to the load imposed upon the wall, if the surcharge is located a distance from the back of the wall equal to or less than the height of the wall. The magnitude of the surcharge load depends upon the size of the surface area that is subjected to a vertical load relative to the wall height and distance from the wall.



The lateral surcharge may be modeled as a uniform pressure distribution with a pressure intensity equivalent to 31 percent of the vertical surcharge for loaded areas that are adjacent to the wall and of large lateral extent. The surcharge attributed to surface loads of limited lateral extent and/or situated at various distances from the wall requires analysis on a case-by-case basis.

#### 4.3.2 Lateral Load Resistance

The soil resistance available to withstand lateral loads is a function of the frictional resistance along the base of the foundation and the passive resistance that may develop as the face of the structure tends to move into the soil. The frictional resistance between the base of the retaining wall foundations and the subgrade soil may be computed using a coefficient of friction of 0.39. Based upon the design of the wall in which the toe of the retaining wall is not in contact with the concrete panels of the revetment and the fact that the wall is situated at the crest of the slopes that descend into the basins, the evaluation of wall stability should include only frictional resistance along the base of the foundation and no contribution from passive resistance.

#### 4.3.3 Bearing Capacity

The retaining wall foundation is situated at the crest of the slope that descends into the adjacent basin with no appreciable footing embedment. The lack of embedment and proximity to the slope affects the allowable soil bearing pressure that may be used in the evaluation of the bearing capacity. Based upon the near surface soils conditions encountered at our test boring locations to depth of significant foundation influence and the reported footing width of 6 feet – 3 inches, a maximum net allowable soil bearing pressure of 1,800 psf is recommended for use in evaluation of bearing capacity under static conditions. The recommended bearing capacity may be increased to 2,400 psf for short-term loading conditions.

#### 4.4 Seismic Design Parameters

Based upon the California Building Code (CBC, 1998), the site is within Seismic Zone 4 with a Z factor of 0.4, as is the case for most of Southern California. A soil profile type of  $S_D$  (i.e., stiff soil profile) should be used, as shown in Table 16-J of the 2001 CBC.



Seismic design may be based on a Seismic Source Type of "B" (i.e., Newport-Inglewood Fault located approximately 3.5 km from the site) with Near-Source Factors  $N_a$  and  $N_v$  of 1.15 and 1.4, respectively.

#### 4.5 Guide Pile Recommendations

Design Considerations: The guide piles that will be installed within the marina will be primarily subjected to lateral loading conditions associated with minor wave action, wind and more significantly by the impact loads associated from boats that dock at the platforms. The magnitude of the lateral loads and the tolerable pile deflections have not yet been provided, but the loads are anticipated to be relatively low while the allowable lateral deflections are expected to be greater than deflections that are typically used for design of buildings. For preliminary design purposes, we have assumed that deflections of  $\frac{1}{4}$ ,  $\frac{1}{2}$  and 1 inch at the mudline will result in total deflection at the top of the piles that will be within tolerable levels.

Based upon the conditions encountered at the CPT soundings and test borings located onshore, the submarine profile is anticipated to be such that the thickness of seafloor sediments overlying the bedrock increases progressing across the harbor from the Cove to Island sides. Consequently, the load capacity of the guide piles will be influenced by the lower strength characteristics of the seafloor sediments in the southern region of the harbor and in the entry channel along the south side of the Island. The geophysical seafloor profiling will provide additional information regarding the subsurface conditions in the areas of pile installations. Upon receipt and review of the profiling report, an addendum to this report will be issued that presents further recommendations and construction considerations for pile construction.

The results of the seawall study indicated the potential for liquefaction along the southern seawall (Island region) which was expected to result in slope instability and lateral displacements. The slope movements that may occur as a result of liquefaction could impart significant additional lateral load on the guide piles within the zone of slide movement. The loads associated with slope movement may require evaluation and consideration in the design of the piles depending upon the distance between the piles and the seawall.

Lateral Load Capacity: Evaluation of lateral load capacity has been conducted on the basis of the anticipated submarine profiles at the locations of CPT-1/Boring-1 (Cove side west) and CPT-3/Boring-3 (Island side west) using the software package *LPile Plus* by



Ensoft. The subsurface profiles used in these analyses are considered to be representative of the harbor and of the areas in which the temporary docks will be installed. A summary of the analysis is included in Appendix F. The analysis was conducted for either a 14-inch square or a 16-inch diameter precast concrete pile extended to depths of 10, 15 and 20 feet into the bedrock.

The selection of appropriate pile type and construction technique will be somewhat influenced by the required embedment depth to achieve the required lateral load capacity and the associated lateral deflection at the top of the pile. The results of the analysis depict the deflection of the respective piles and the distribution of shear forces and bending moment along the length of the pile. The "depth" indicated as "0 feet" represents the mudline which was assumed to be approximately El. -10 feet MSL at the shore along the Cove side and at the location of Temporary Dock T-5; El. -18 feet MSL along the shore of the Island; and El. -27 to -28 feet MSL in the areas of Temporary Docks T-1 through T-4 assuming that El. 0 feet MSL corresponds to approximately 10 feet below the ground surface of the Cove and Island.

The results of the preliminary analysis indicate that pile embedment will be approximately 10 to 15 feet into the underlying bedrock with a pile tip elevation ranging from El. -20 to -25 in the northern region of the West Basin as well as the northern and southern regions of the East Basin; El. -28 to El. -33 in the southern region of the West Basin; and El. -38 to -43 at Temporary Docks T-1 through T-4. Upon completion of the geophysical seafloor profiling, revision to the pile embedment depths may be warranted.

*Construction Considerations:* Lateral loading is expected to be the primary load demand of the piles. Consequently, the piles should be in continuous contact with the adjacent soils and bedrock to provide lateral load resistance. Therefore, the selection of pile type and method of installation will be highly dependent upon this primary consideration for design. The use of driven piles is expected to result in piles properly embedded within the adjacent materials such that continuous contact with undisturbed material is maintained. However, pile driving will result on noise and vibrations that could be a disturbance to marina users, occupants of the harbor facilities and the local residents.

The preferred method of pile installation is understood to be piles that are drilled and set in-place within pre-drilled boreholes. In-situ construction techniques will minimize disturbance and yet allow proper continuity between the piles and boreholes to achieve lateral load resistance. Therefore, we anticipate that the piles will be set in a borehole of slightly greater dimension in which the pile is secured by grout injection around the



perimeter of the pile, filling the annular space. Alternate construction techniques such as sand-jetting may be feasible, but field testing will be warranted to verify proper contact between the pile and borehole and verify lateral load capacity.

The anticipated depth of embedment relative to the consistency/hardness of the bedrock material indicates special considerations exist for the installation of driven piles. At a minimum, precast concrete piles are expected to require a driving shoe integrally fabricated with the pile. Alternatively, the piles may consist of a composite section in which the lower portion consists of steel H-beam protrusion ("stinger") to serve as a driving point to break the bedrock. Based upon the driving resistance encountered during geotechnical sampling, a minimum driving energy of 150 ft-kip is anticipated to be necessary for pile driving. However, a specific evaluation of the hammer-cushion-pile system that is planned for use at the site can be performed once potential combinations have been identified to determine the feasibility of pile driving. Of primary importance in pile driving is to maintain driving stresses within specific ranges of the compressive and tensile strength of the pile material. Guidelines published by the Federal Highway Administration (FHWA) indicates the maximum driving stresses for conventionally reinforced concrete piles is  $0.85 f'_c$  in compression and  $0.70 f_y$  in tension.

An alternate pile type that may be considered consists of steel pipe piles or steel H-beams (H-piles) fitted with a driving shoe to allow penetration of the bedrock. The use of steel pipe or beam piles within a marine environment will, however, require provisions to protect the steel wall of the pipe or steel of the beam from corrosion. The FHWA guidelines indicate the maximum driving stresses for steel H-piles and steel pipe piles is less than  $0.9 f_y$ .

The use of pre-drilled boreholes to facilitate pile driving may be feasible, but the performance of submarine drilling will present difficulties with borehole stability where the seafloor sediments are of significant thickness. Pre-drilling is recommended to be performed such that the borehole diameter is no larger than the diameter of a circular pile or the width of a square pile so that once driven to the design tip elevation, sufficient continuity exists between the pile and the adjacent soils and bedrock.



#### 4.6 Corrosivity Considerations

Based on the results of soluble sulfate content testing, we recommend that foundation concrete for the proposed structures at the subject site be designed in accordance with the “moderate” category of the concrete mix design guidelines contained within the California Building Code for resistance to sulfate exposure.

The results of the resistivity and chloride content tests of the soil indicate that these soils are severely corrosive to metals. Significant precautions are, therefore, anticipated to be necessary relative to corrosion. Consideration should be given to retaining a corrosion engineer to obtain recommendations for the protection of metal components embedded in the site soils.





## 5.0 LIMITATIONS

The conclusions and recommendations presented in this report have been based upon the generally accepted principles and practices of geotechnical engineering utilized by other competent engineers at this time and place. No other warranty is either expressed or implied.

The conclusions and recommendations presented in this report have been based upon the subsurface conditions encountered at discrete and widely spaced locations and at specific intervals below the ground surface. Due to the inherent variance in soils conditions, variability may be encountered during construction. Where encountered during construction, such variances should be brought to our attention to determine the impact upon the recommendations presented in this report.

This report has been prepared for the use of our client for the project described in this report. The report may not be used by others without the written consent of our client and our firm.



# Important Information About Your Geotechnical Engineering Report

*Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.*

*The following information is provided to help you manage your risks.*

## **Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects**

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

## **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## **A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors**

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## **Subsurface Conditions Can Change**

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

## **Most Geotechnical Findings Are Professional Opinions**

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## **A Report's Recommendations Are *Not* Final**

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

### **A Geotechnical Engineering Report Is Subject to Misinterpretation**

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

### **Do Not Redraw the Engineer's Logs**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

### **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

### **Obtain Professional Assistance To Deal with Mold**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

### **Rely on Your ASFE-Member Geotechnical Engineer for Additional Assistance**

Membership in ASFE/THE BEST PEOPLE ON EARTH exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.



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# Leighton Consulting, Inc.

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GEOTECHNICAL CONSULTANTS


## PROJECT MEMORANDUM

To: URS / Cash and Associates  
5772 Bolsa Avenue, Suite 100  
Huntington Beach, California 92649

Date: May 11, 2007

Project No. 600024-003

Attention: Mr. Randy Mason

From: John E. Haertle, G.E. 

Subject: Preliminary Recommendations for Guide Piles, Dana Point Harbor Renovation,  
Dana Point, California

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In accordance with your request, Leighton Consulting, Inc. (Leighton) presents this project memorandum to address the selection, design and construction of the guide piles within the marina as part of harbor renovation. This memorandum is presented as an addendum to the Draft Geotechnical Report (March 13, 2007) prepared by our firm and submitted for review. The focus of the geotechnical report was a preliminary evaluation of the seawall of the Dana Point Harbor. As part of the preliminary evaluation, subsurface exploration was performed in close proximity to the existing seawall at predetermined locations.

### Field Exploration

Four (4) soil borings were drilled to depths that ranged from 34 to 50 feet below the current grade by a truck-mounted drilling rig using rotary drilling techniques. All borings were extended into the formational bedrock that underlies the area. In addition to the soil borings, five (5) CPT soundings were performed in close proximity to the boring locations so that samples collected from the test boring locations could be correlated to the CPT data and the profile penetrated by the CPT probe. The CPT soundings met with refusal at depths of 12½ to 33 feet below grade. Based upon the boring data, all CPT soundings except for CPT-4 were terminated in the formational bedrock while CPT-4 was presumed to have been terminated on cobble or boulder material. The locations of the soil borings and CPT soundings are shown on Figure 2, Boring and CPT Exploration Map included in the referenced report.

### Subsurface Soil Conditions

The results of the field exploration indicated the presence of fill to depths that varied from approximately 13 feet on the Cove side of the harbor to depths of approximately 23 to 28 feet below the Island along the southern side of the harbor. The fill that underlies the Cove side of the harbor typically consisted of fine to medium grained sands with varying clay content that exhibited loose to medium dense relative density on the basis of field testing (N-values). The fill material encountered below the Island side of the harbor also consisted primarily of sand with greater silt and occasional clay content. The fill generally exhibited loose to medium dense relative density on the basis of field testing. Field tests that indicated dense relative density are not considered to be indicative of the actual relative density of the material but rather the influence of the presence of oversize (cobble and boulder) material within the fill.

The fill was underlain by native soils comprised of loose relative density sands with varying clay content to a depth of about 16 feet where bedrock was encountered on the Cove side of the marina. The bedrock was encountered at depths of 23 to 28 feet below grade below the Island, but native soils were not identified in the samples recovered of the material that overlain the bedrock.

Bedrock of the Capistrano formation was encountered below the fill and native soils at the depths described above. The bedrock typically consisted of siltstone, but a layer of sandstone was encountered at the location of Boring B-3 in the western region of the Island that overlies the siltstone to a depth of 38 feet.

### Preliminary Conclusions and Recommendations

Design Considerations: The guide piles that will be installed within the marina will be primarily subjected to lateral loading conditions associated with minor wave action, and more significantly by the impact loads associated from boats that dock at the platforms. The magnitude of the lateral loads and the tolerable pile deflections have not yet been provided, but the loads are anticipated to be relatively low while the allowable lateral deflections are expected to be greater than deflections that are typically used for design of buildings. For preliminary design purposes, we have assumed that deflections of  $\frac{1}{4}$ ,  $\frac{1}{2}$  and 1 inch at the mudline will result in total deflection at the top of the piles that will be within tolerable levels.

Based upon the conditions encountered at the CPT soundings and test borings located onshore, the submarine profile is anticipated to be such that the thickness of seafloor sediments overlying the bedrock increases progressing across the harbor from the Cove to Island sides. Consequently, the load capacity of the guide piles will be influenced by the lower strength characteristics of the seafloor sediments in the southern region of the harbor.

The results of the seawall study indicated the potential for liquefaction along the southern seawall (Island region) which was expected to result in severe slope instability and large lateral displacements. The slope movements that may occur as a result of liquefaction could impart significant additional lateral load on the guide piles within the zone of slide movement. The loads associated with slope movement will require evaluation and consideration in the design of the piles.

Lateral Load Capacity: A preliminary evaluation of lateral load capacity has been conducted on the basis of the anticipated submarine profiles at the locations of CPT-1/Boring-1 (Cove side west) and CPT-3/Boring-3 (Island side west) using the software package *LPile Plus* by Ensoft. A summary of the analysis is included in the attached figures. The analysis was conducted for either a 14-inch square or a 16-inch diameter precast concrete pile extended to depths of 10, 15 and 20 feet into the bedrock.

The selection of appropriate pile type and construction technique will be somewhat influenced by the required embedment depth to achieve the required lateral load capacity and the associated lateral deflection at the top of the pile. The results of the analysis depict the deflection of the respective piles and the distribution of shear forces and bending moment along the length of the pile. The "depth" indicated as "0 feet" represents the mudline which was assumed to be approximately El. -10 feet MLLW at the shore along the Cove side and El. -18 feet MLLW along the shore of the Island side assuming that El. 0 feet MLLW corresponds to approximately 10 feet below the ground surface of the Cove and Island.

The results of the preliminary analysis indicate that pile embedment will be approximately 10 to 15 feet into the underlying bedrock with a pile tip elevation ranging from El. -25 to El. -28 from the Cove to the Island regions of the marina.

Construction Considerations: Lateral loading is expected to be the primary load demand of the piles. Consequently, the piles should be in continuous contact with the adjacent soils and bedrock to provide lateral load resistance. Therefore, the selection of pile type and method of installation will be highly dependent upon this primary consideration for design. The use of driven piles is expected to result in piles properly embedded within the adjacent materials such that continuous contact with undisturbed material is maintained.

The anticipated depth of embedment relative to the consistency/hardness of the bedrock material indicates special considerations exist for the installation of driven piles. At a minimum, precast concrete piles are expected to require a driving shoe integrally fabricated with the pile. Alternatively, the piles may consist of a composite section in which the lower 3 to 5 feet consist of steel beam protrusion ("stinger") to serve as a driving point to break the bedrock.

An alternate pile type that may be considered consists of steel pipe piles or steel beams (H-piles) fitted with a driving shoe to allow penetration of the bedrock. The use of steel pipe or beam piles within a marine environment will, however, require provisions to protect the steel wall of the pipe or steel of the beam from corrosion.

The use of pre-drilled boreholes to facilitate pile driving may be feasible, but the performance of submarine drilling will present difficulties with borehole stability where the seafloor sediments are of significant thickness. Pre-drilling is recommended to be performed such that the borehole diameter is no larger than the diameter of a circular pile or the width of a square pile so that once driven to the design tip elevation, sufficient continuity exists between the pile and the adjacent soils and bedrock. Alternate construction techniques may be feasible depending upon the experience of the contractor, but continuity must be maintained to ensure lateral load resistance within the range of tolerable lateral deflection.

Pile installation by other methods that involve drilling and cast-in-place techniques may also be feasible, but the primary consideration will be borehole stability within the seafloor sediments. On a conceptual basis, one scenario may consist of driving a steel casing a sufficient depth below the soil/bedrock contact to prevent caving with the remainder of the pile constructed by drilling to the design depth followed by installation of reinforcing bars and casting concrete.

### Closing

The conclusions and recommendations presented in this memorandum are considered to be preliminary in nature based upon the available subsurface data obtained from our recent and prior exploration of the harbor facility. As discussed in this memorandum, the design and installation of the guide piles include considerations regarding the varying depth of seafloor sediments and the presence of formational bedrock at relatively shallow depth below the harbor bottom. Techniques exist that can provide a more detailed depiction of the seafloor bottom and, in particular, the contact between the sediments and bedrock which could be of benefit in determining pile length and potentially driving difficulties.

We recommend that the information presented herein and the subsurface boring and CPT logs of the Draft Geotechnical Report be reviewed with prospective piling contractors to better evaluate the most feasible manner of guide pile construction. Further study of the harbor bottom and borings and CPT soundings conducted in other areas of interest can also be of benefit in refining pile design and construction.

# **Lateral Load Capacity**

## **14-inch Wide Precast Concrete Square Piles**

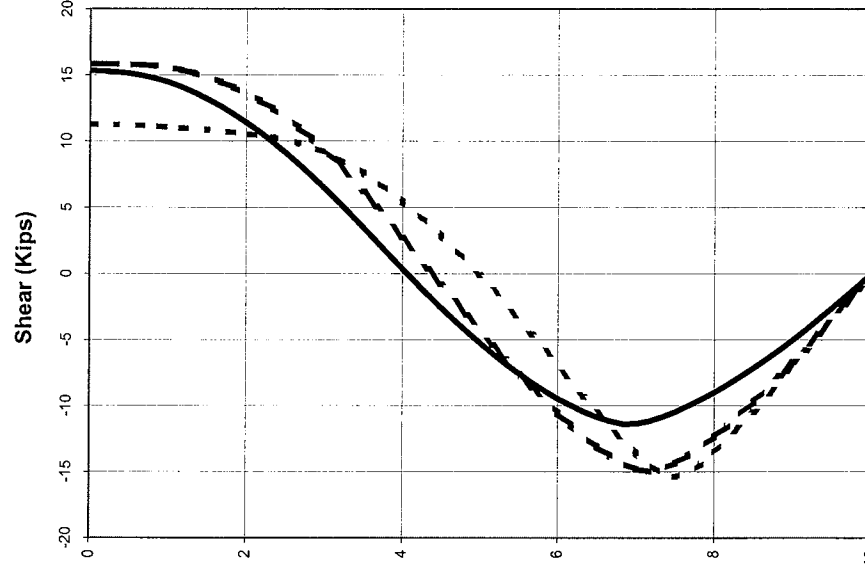
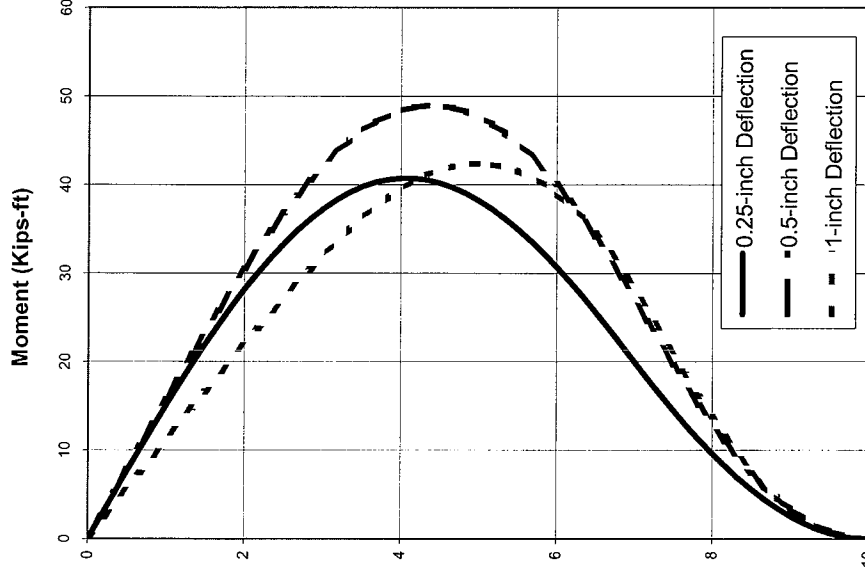
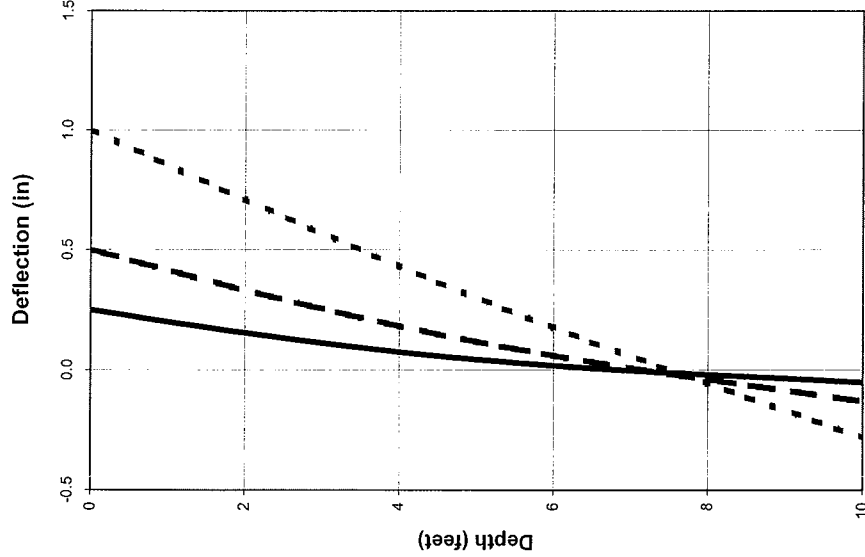
Cove West

Pile Tip Embedment at 10, 15 and 20 feet  
Into the Bedrock

Graphical Summary of Pile Deflection, Shear and  
Bending Moment Distribution along Pile Length



SECTION A-A' (Boring B-1)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

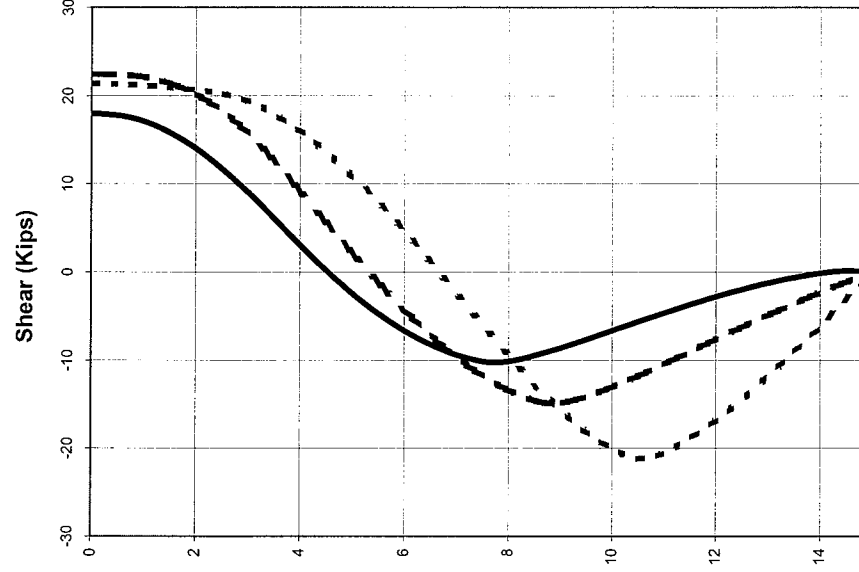
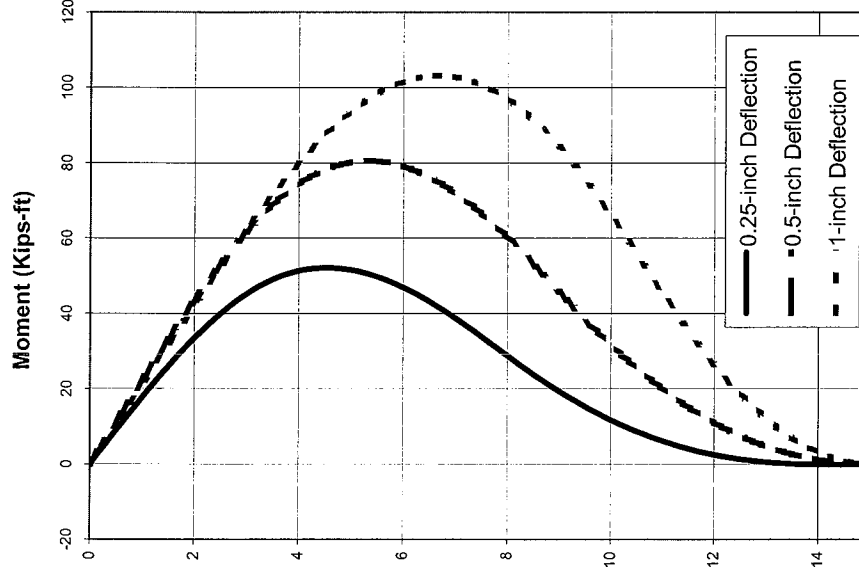
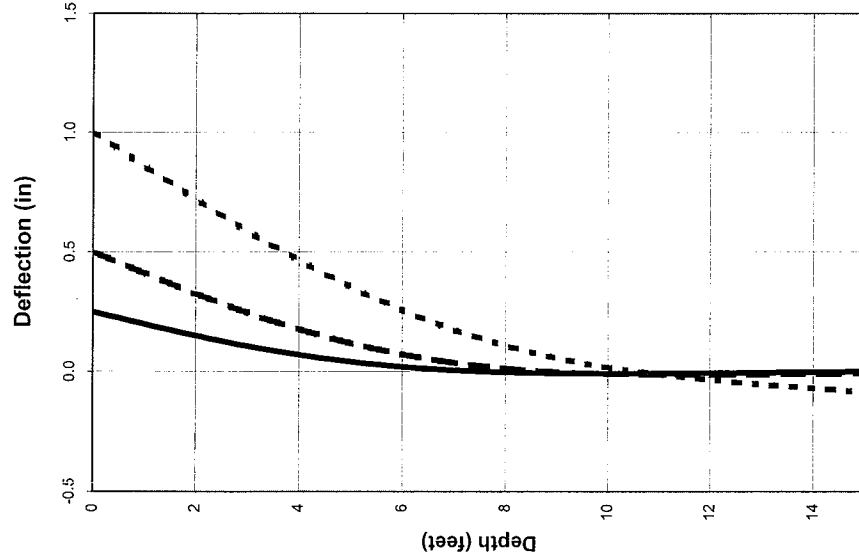
LATERAL LOAD CAPACITIES: 14-INCH SQUARE CONCRETE PILE  
 10-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR



Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07

Figure 1a

SECTION A-A' (Boring B-1)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

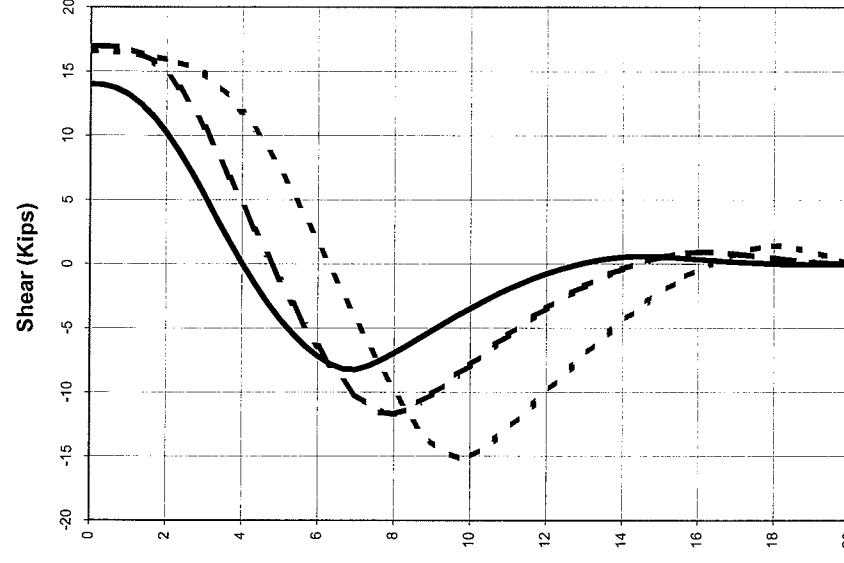
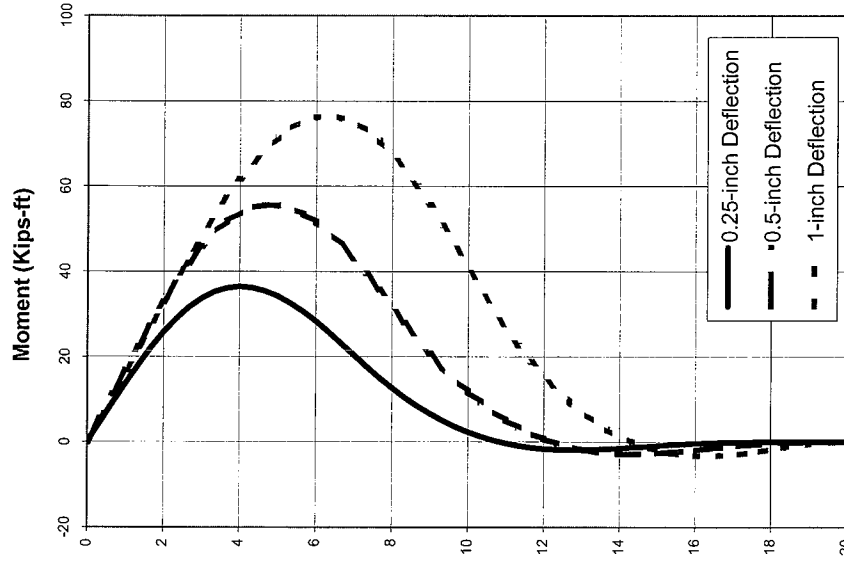
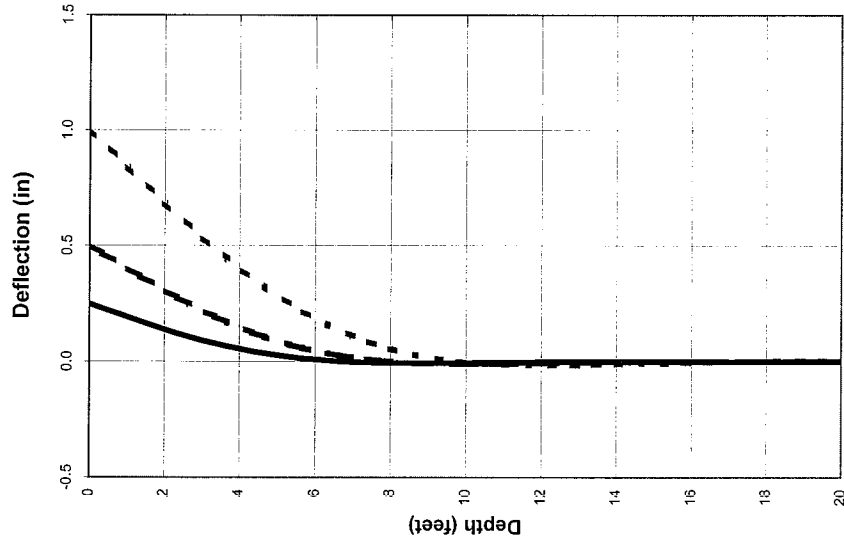
LATERAL LOAD CAPACITIES: 14-INCH SQUARE CONCRETE PILE  
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 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR



Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07

Figure 1b

SECTION A-A' (Boring B-1)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

LATERAL LOAD CAPACITIES: 14-INCH SQUARE CONCRETE PILE  
 20-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR



Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07

Figure 1c

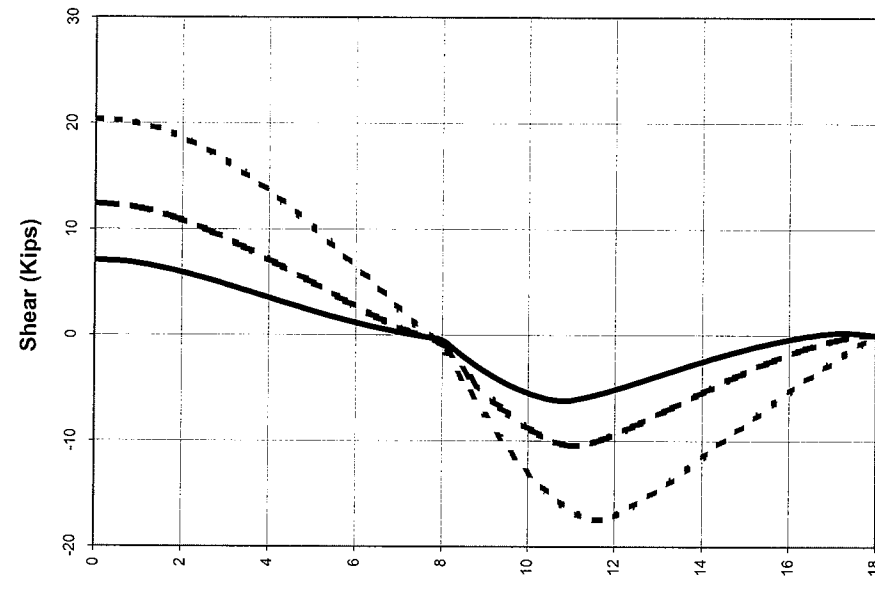
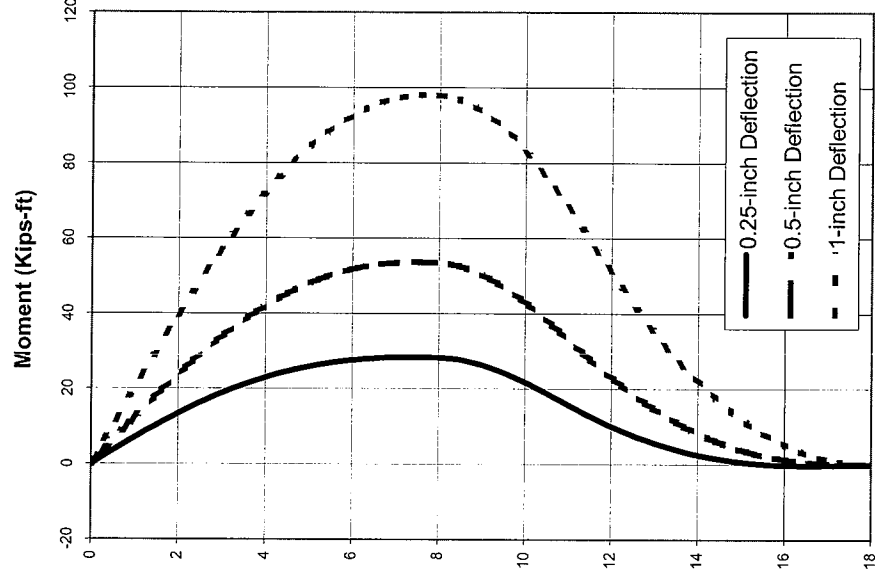
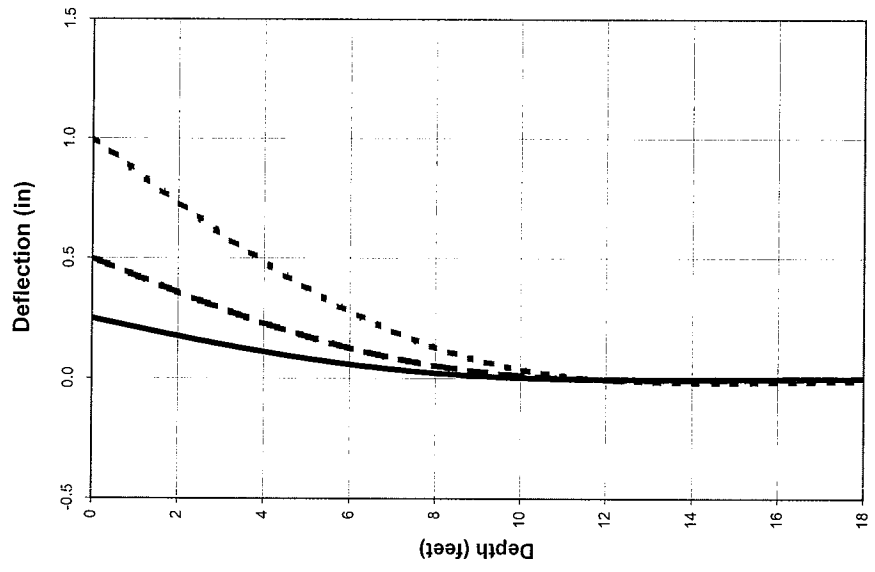
# **14-inch Wide Precast Concrete Square Piles**

Island West

Pile Tip Embedment at 10, 15 and 20 feet  
Into the Bedrock

Graphical Summary of Pile Deflection, Shear and  
Bending Moment Distribution along Pile Length

SECTION B-B' (Boring B-3)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

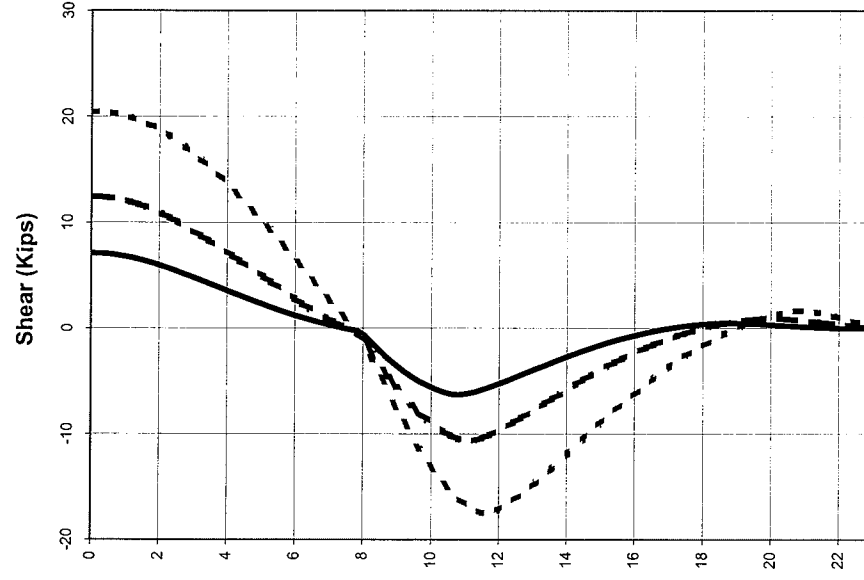
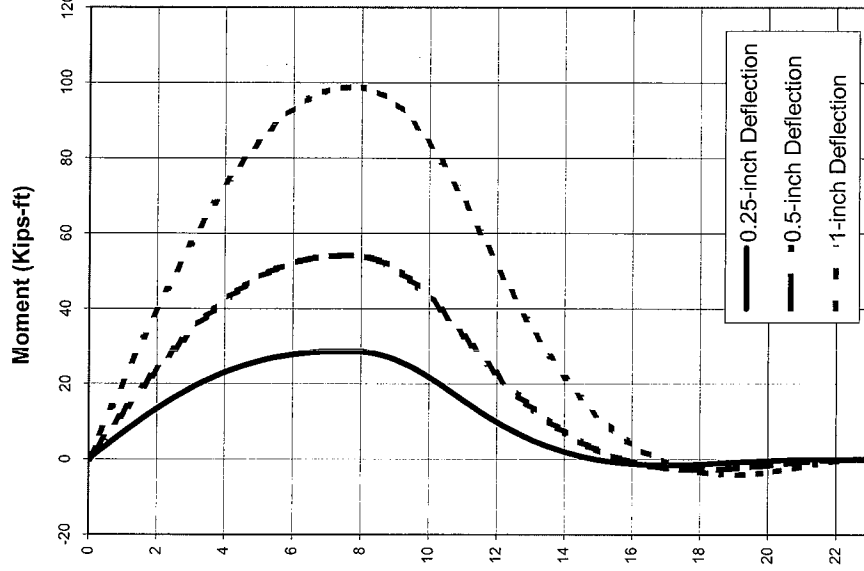
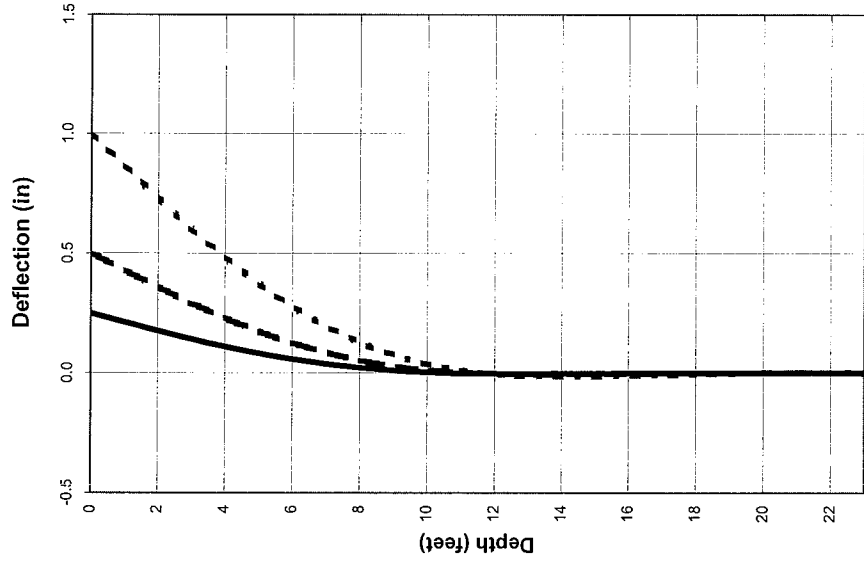
LATERAL LOAD CAPACITIES: 14-INCH SQUARE CONCRETE PILE  
 10-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR



Figure 2b

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07

SECTION B-B' (Boring B-3)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

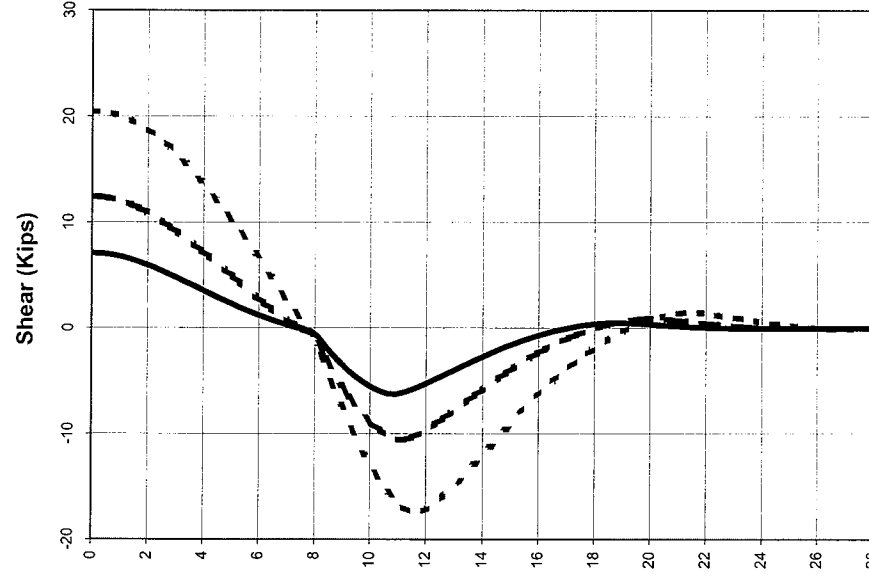
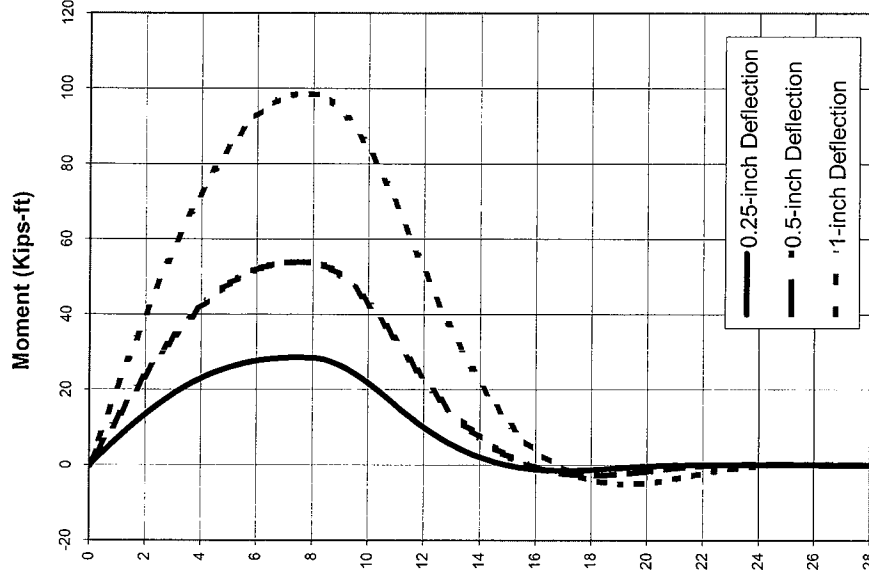
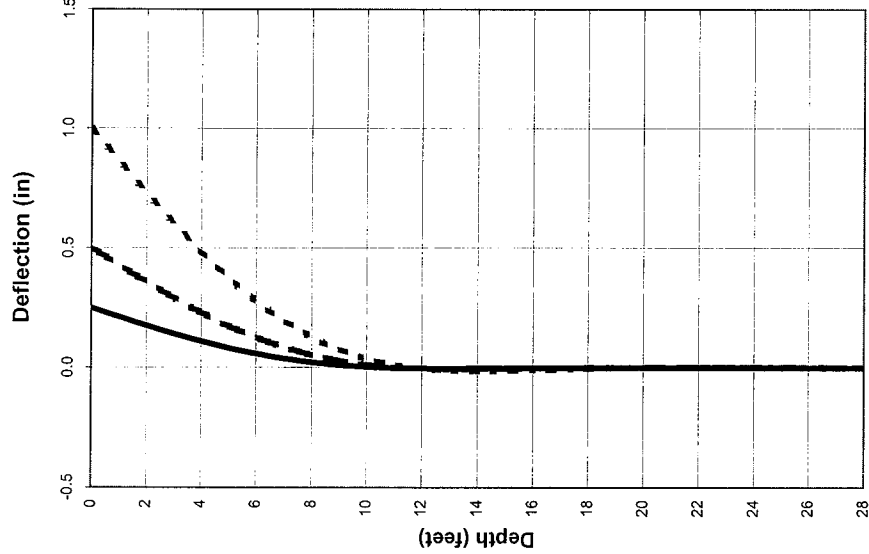
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 15-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07



Figure 2c

SECTION B-B' (Boring B-3)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

LATERAL LOAD CAPACITIES: 14-INCH SQUARE CONCRETE PILE  
 20-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07



Figure 3d

# **Lateral Load Capacity**

## **16-inch Diameter Precast Concrete Circular Piles**

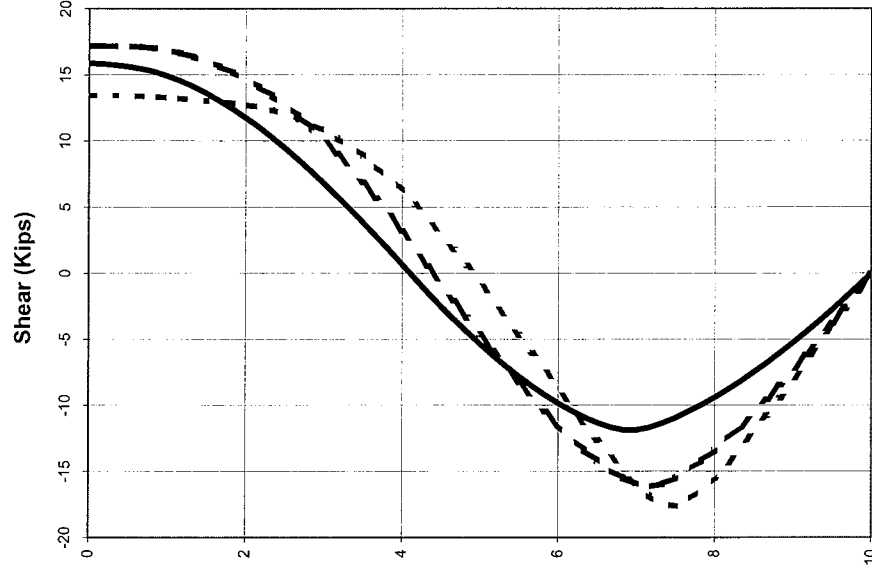
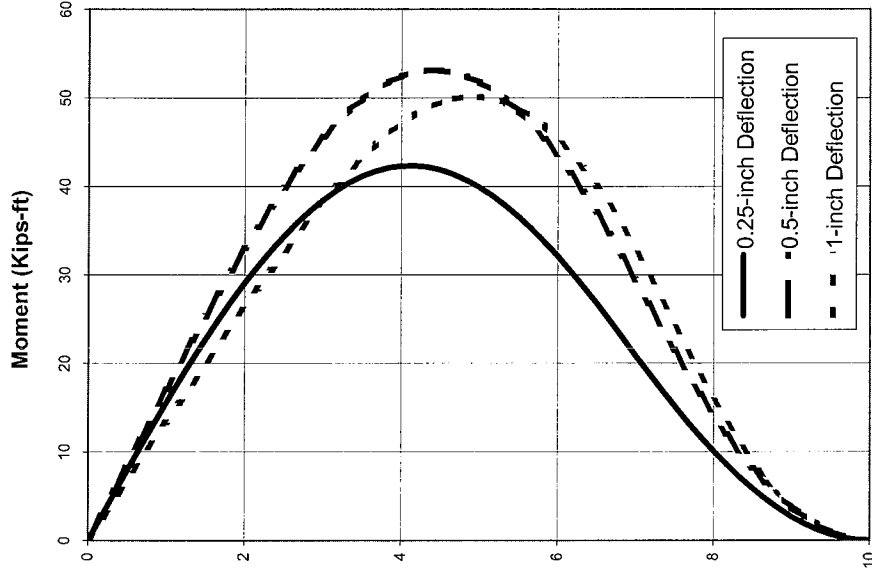
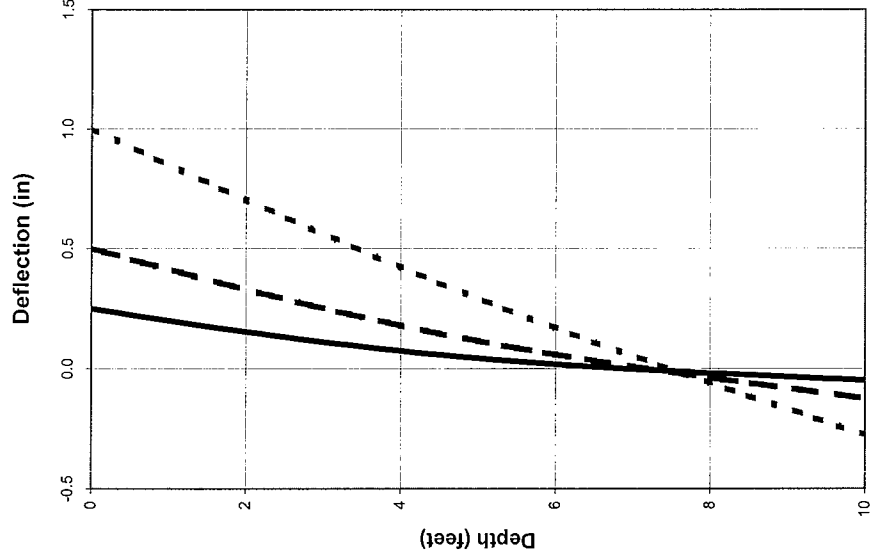
Cove West

Pile Tip Embedment at 10, 15 and 20 feet  
Into the Bedrock

Graphical Summary of Pile Deflection, Shear and  
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SECTION A-A' (Boring B-1)



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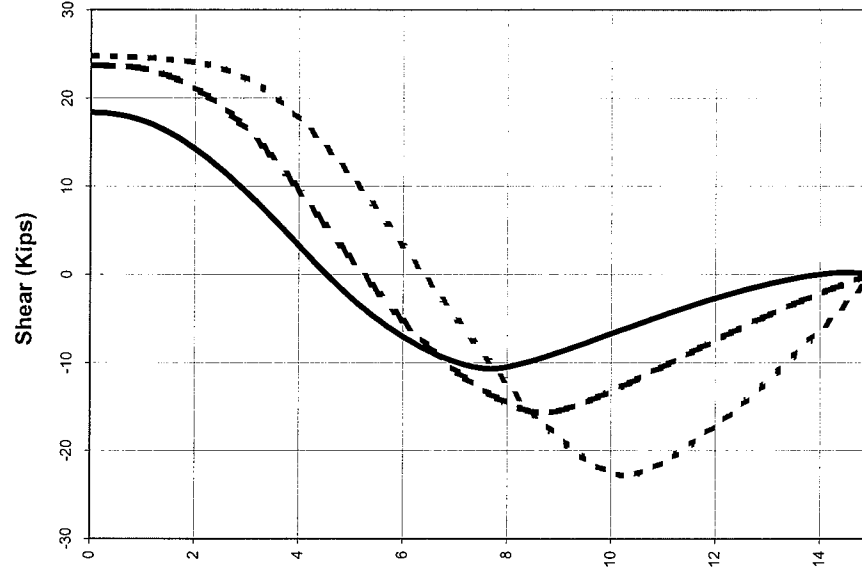
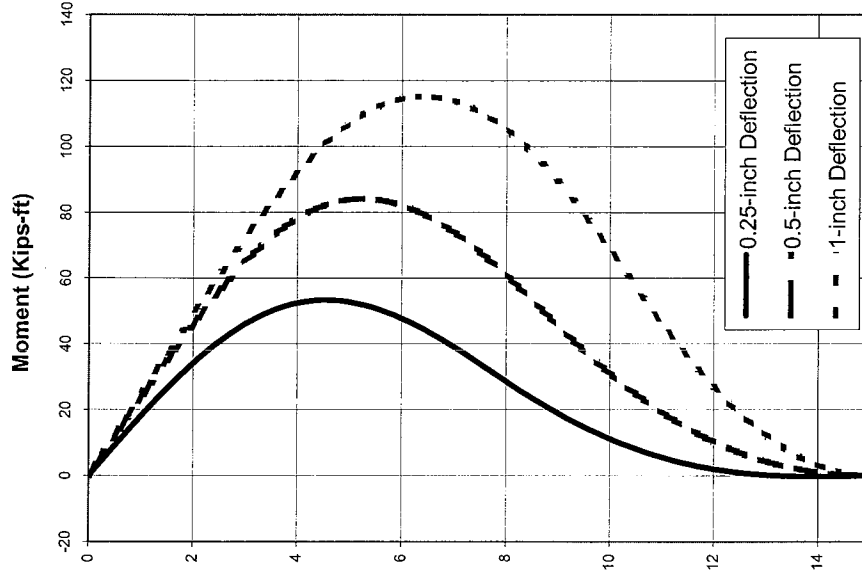
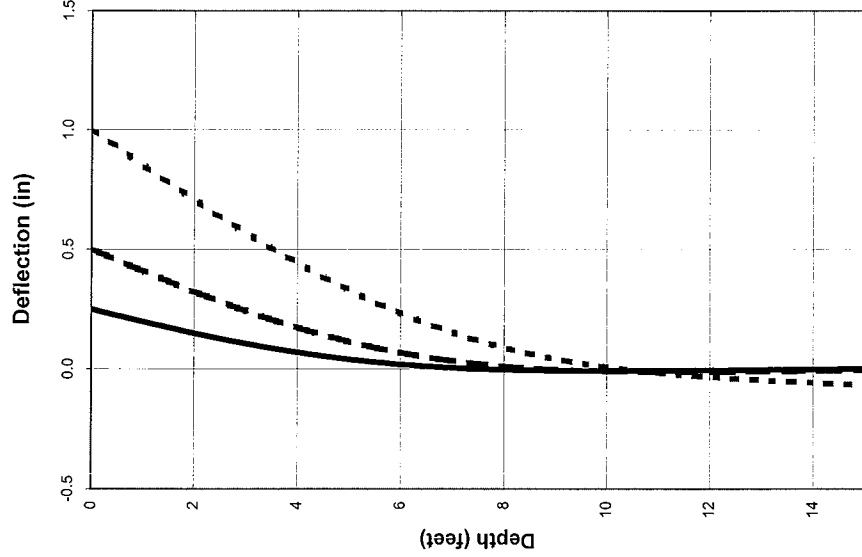
LATERAL LOAD CAPACITIES: 16-INCH CIRCULAR CONCRETE PILE  
 10-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07



Figure 1a

SECTION A-A' (Boring B-1)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

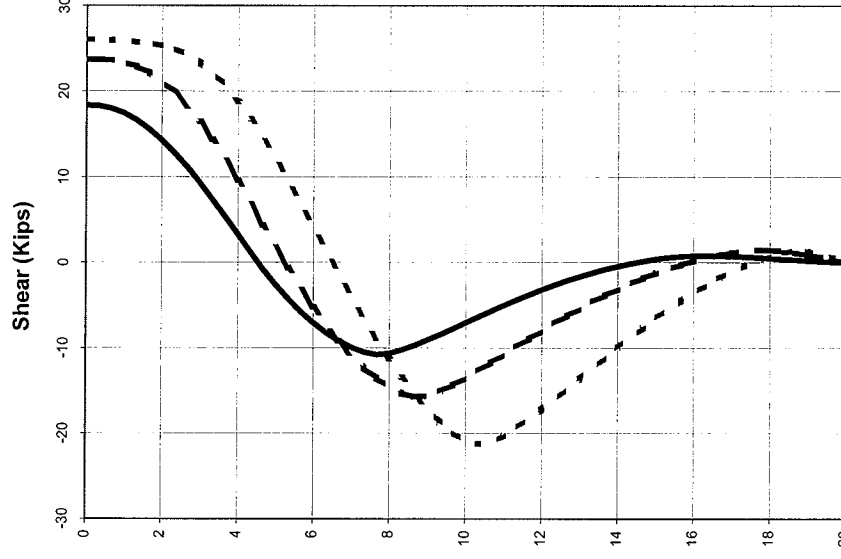
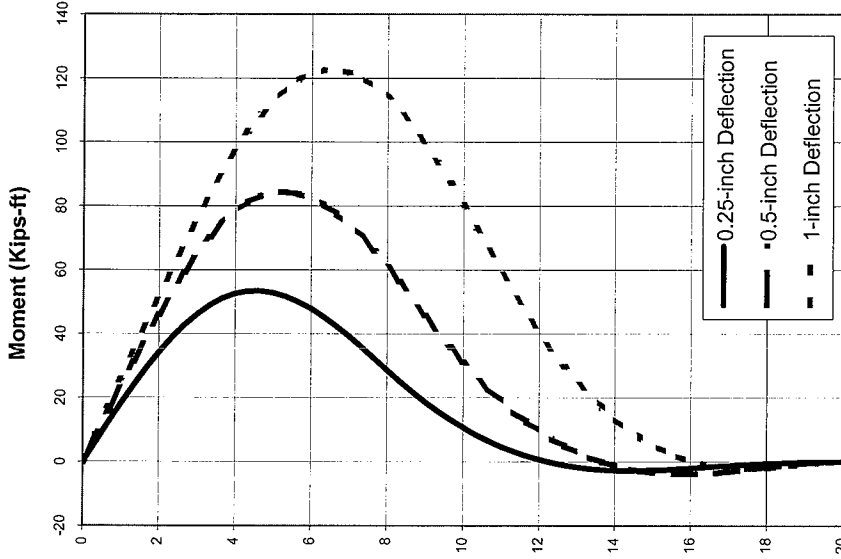
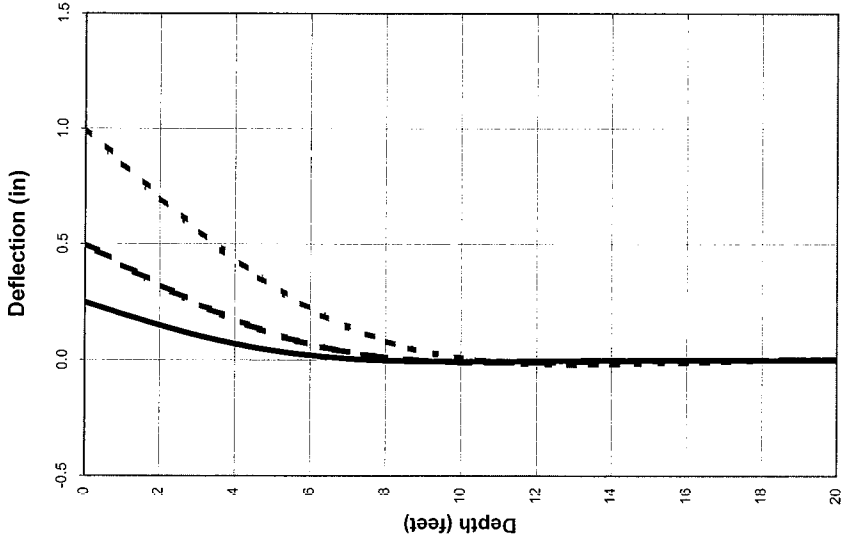
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 15-FOOT EMBEDMENT INTO BEDROCK  
 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07



Figure 1b

SECTION A-A' (Boring B-1)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

LATERAL LOAD CAPACITIES: 16-INCH CIRCULAR CONCRETE PILE  
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 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07



Figure 1c

# **Lateral Load Capacity**

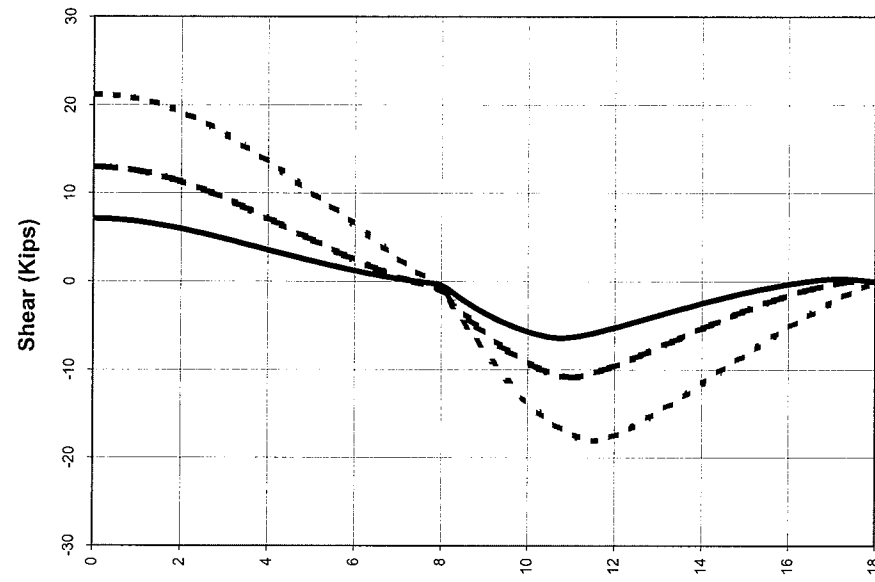
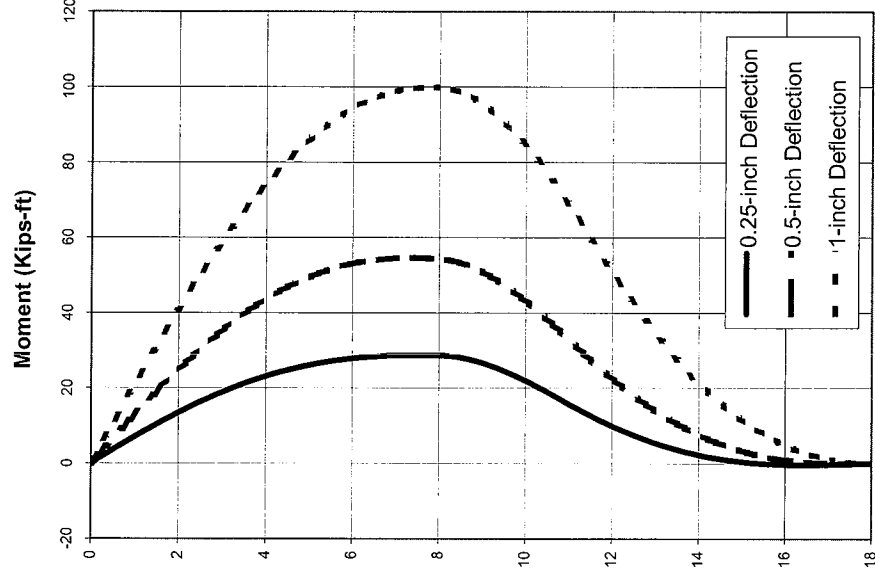
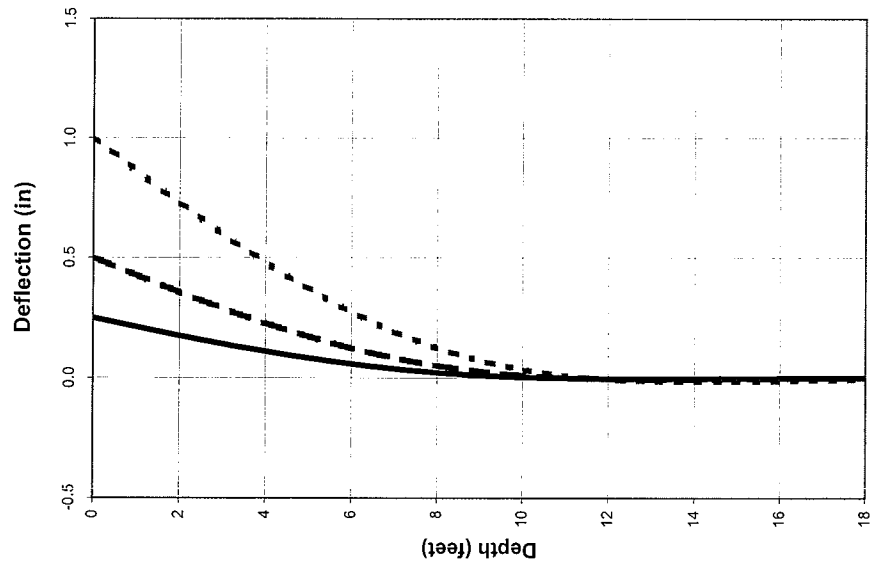
## **16-inch Diameter Precast Concrete Circular Piles**

Island West

Pile Tip Embedment at 10, 15 and 20 feet  
Into the Bedrock

Graphical Summary of Pile Deflection, Shear and  
Bending Moment Distribution along Pile Length

SECTION B-B' (Boring B-3)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

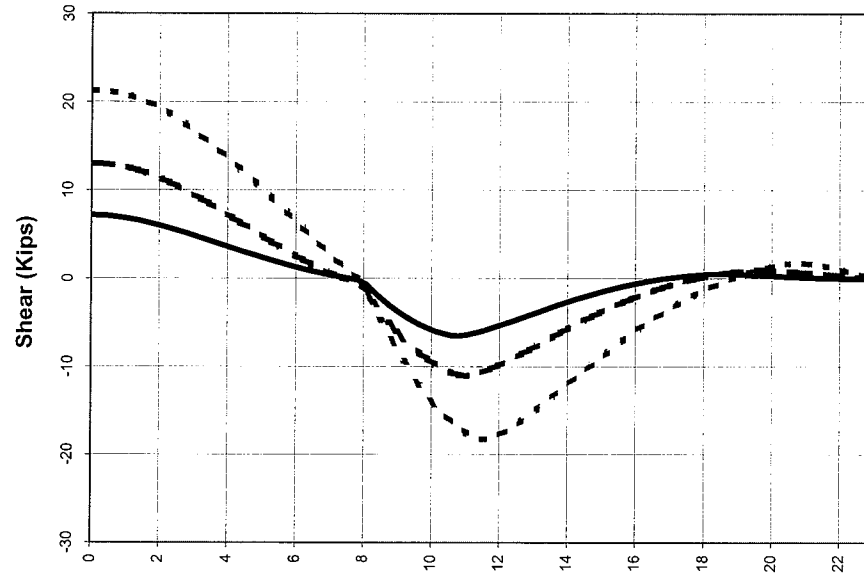
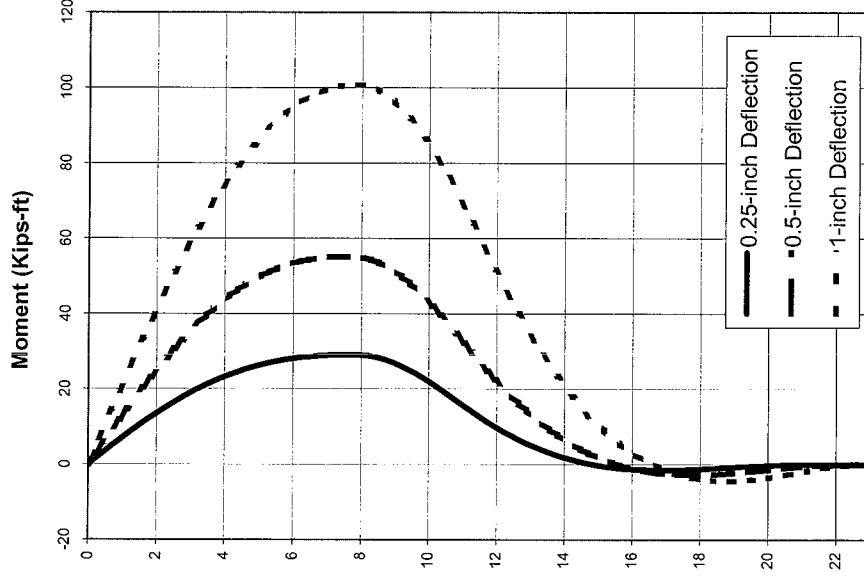
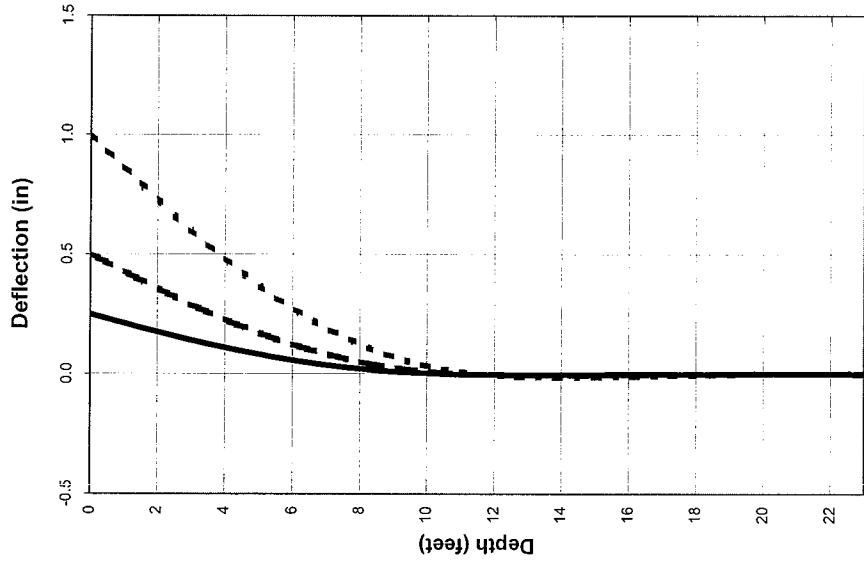
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 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
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 Date: 4/23/07



Figure 2b

SECTION B-B' (Boring B-3)



NOTE: Depth is depth of embedment below harbor bottom (k500pci)

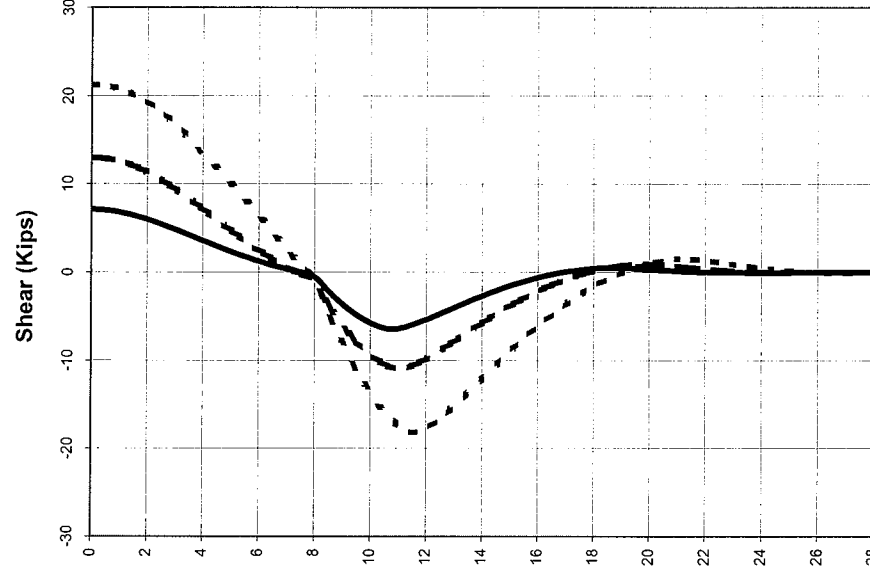
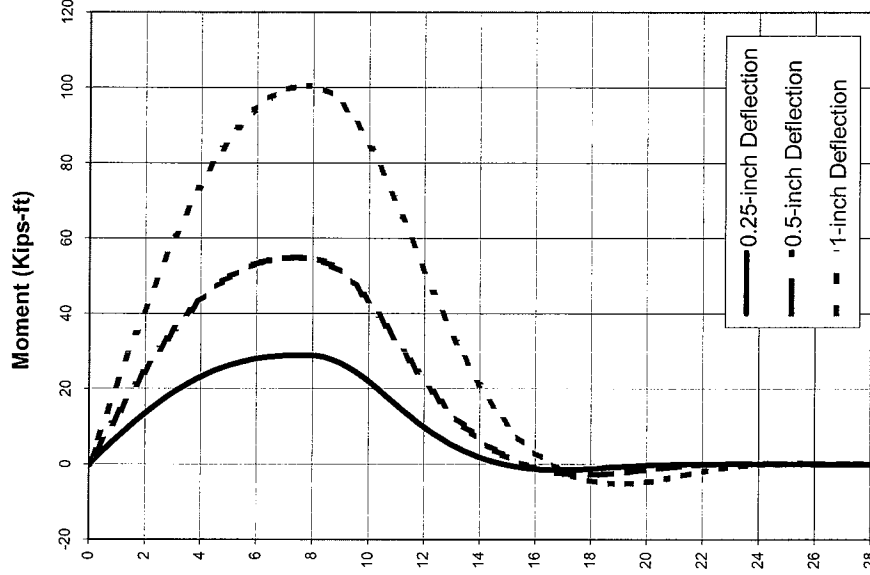
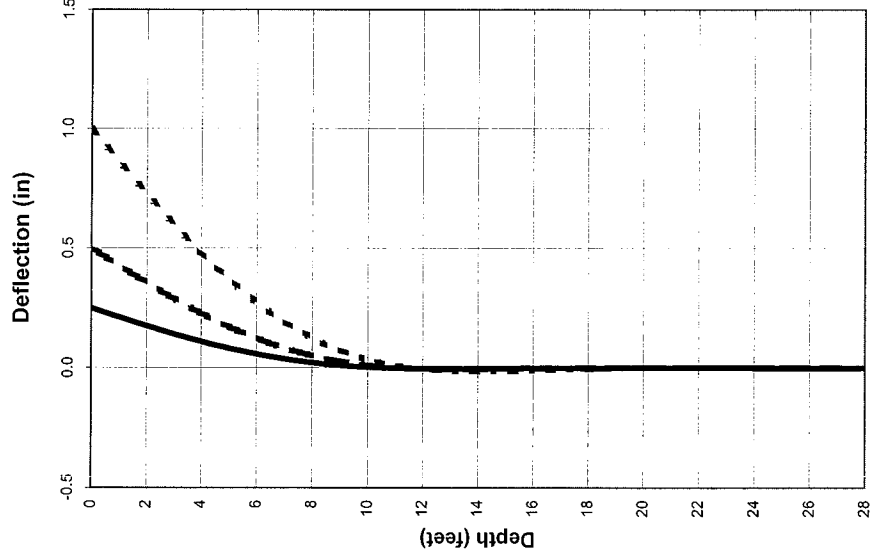
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 DANA POINT HARBOR

Project Name: Dana Point Harbor  
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 Date: 4/23/07



Figure 2c

SECTION B-B' (Boring B-3)



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 PRELIMINARY SEAWALL EVALUATION  
 DANA POINT HARBOR

Project Name: Dana Point Harbor  
 Project No.: 600024-003  
 Date: 4/23/07



Figure 3d

## APPENDIX C

### DANA POINT HARBOR BOAT TRAFFIC STUDY





# Dana Point Harbor Boat Traffic Study

Submitted to:

Project Dimensions, Inc.

Submitted by:



November 2007



**COUNTY OF ORANGE**  
**DANA POINT HARBOR DEPARTMENT**

*Brad Gross, Director*  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Telephone: (949) 923-2236  
Fax: (949) 923-3792

November 27, 2007

Dana Point Harbor Community:

The Dana Point Harbor Marina Improvement Project, is currently in the planning, design and environmental review phase. Proposed changes in the Marinas include a modest change to the slip mix in the Harbor, increasing the average slip length from just under 30 feet to just under 34 feet. The result will net fewer slips in the Harbor than exist today. In an effort to retain as many slips as possible, The Dana Point Harbor Department's (DPHD) Team has explored a number of design options in an effort to retain as many slips as possible. One of the design options being considered is the narrowing of the Inner Channel width and lengthening each finger to allow for more slips to be included.

In order to determine the feasibility of this option, DPHD commissioned Moffatt and Nichol, a marine engineering firm experienced in studying marina / harbor traffic conditions, to conduct a study to assess the existing traffic conditions, interview Harbor users, study the proposed designs and make recommendations regarding the feasibility of narrowing the channel as well as propose mitigation measures as needed.

Once the draft report was completed, we requested both the County of Orange Harbor Patrol and the State of California Department of Boating and Waterways (Cal Boating) to review the study and provide us with their comments and recommendations. Letters from both of these agencies are included on the following pages.

Based on the conclusions found in this study, along with the recommendations of both the Harbor Patrol and Cal Boating, DPHD will continue to pursue the narrowing of the Inner Channel in order to maximize the number of slips in the Dana Point Harbor Marina Improvement Project.

More information on the entire Dana Point Harbor Revitalization Plan is available at [www.dphplan.com](http://www.dphplan.com).

Thank you,

  
Brad Gross, Director  
Dana Point Harbor Department

**DEPARTMENT OF BOATING AND WATERWAYS**2000 Evergreen Street, Suite 100  
SACRAMENTO, CA 95815-3888  
(916) 263-1331

November 19, 2007

Mr. Brad Gross, Director  
Dana Point Harbor Department  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

**Re: Dana Point Harbor Boat Traffic Study**

Dear Mr. Gross:

The California Department of Boating and Waterways (Cal Boating) received copies of the final draft version of the *Dana Point Harbor Traffic Study*. The document was reviewed by Cal Boating staff and our comments are listed below.

First, the widths achieved in the narrowing of the harbor as proposed meet Cal Boating's small craft harbor design guidelines for interior channels. Typically this would be sufficient for Cal Boating to allow such changes in the design.

Next, Cal Boating does not have expertise in boating traffic modeling so we must defer to Moffatt and Nichol engineers as the experts in this instance. Moffatt and Nichol posit that the proposed change in design would not present a significant change in traffic patterns on a regular basis and that the listed mitigation measures, specifically increased enforcement and education (Chapter 7), should be sufficient safety measures to justify the change.

Because the narrowing still meets the minimums set forth in our guidelines and because the experts (Moffatt and Nichol) have indicated that the design change will not cause a significant change to traffic on a regular basis, Cal Boating would support the Harbor Department's request to make this change to its final design.

Cal Boating concurs with Moffatt and Nichol's recommended mitigation measures and recommends that the Harbor Department follow the list.

If you have any questions please feel free to contact me at 916.263.8165 or by email at [hlflood@dbw.ca.gov](mailto:hlflood@dbw.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Harold Flood", written over a circular stamp or seal.

Harold Flood  
Planning Supervisor

11-26-07A09:20 RCVD



1901 BAYSIDE DRIVE  
CORONA DEL MAR, CA 92625  
(949) 673-1023

**SHERIFF-CORONER DEPARTMENT  
COUNTY OF ORANGE  
CALIFORNIA**

**MICHAEL S. CARONA  
SHERIFF-CORONER**

**UNDERSHERIFF  
JO ANN GALSKY**

**ASSISTANT SHERIFFS  
JACK ANDERSON  
STEVE BISHOP  
DANIEL MARTIN  
CHARLES WALTERS**

November 14, 2007

Mr. Brad Gross, Director  
**DANA POINT HARBOR DEPARTMENT**  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

RE: Dana Point Harbor – Marina Improvement Project  
Boat Traffic Study

Dear Mr. Gross:

I have received and reviewed the final draft copy of the *Dana Point Harbor Boat Traffic Study* completed as part of the DPHD Marina Improvement Project. The proposal to "narrow" the existing West Basin and East Basin Inner Navigation Channels, due to marina/slip reconfiguration, was evaluated by Orange County Sheriff's Department (OCSD) Harbor Patrol staff, with user safety as the primary concern.

I concur with the comprehensive findings of the study identified in *Section 8.0 – Summary and Conclusions* regarding "existing and proposed future boating traffic issues" and OCSD Harbor Patrol agrees that a harbor public education program and/or increased enforcement efforts, as outlined in *Section 7.0 – Mitigation Measure*, should effectively reduce or eliminate most impacts of Inner Channel encroachment.

Our collaborative goal is to maintain a user friendly, safe harbor which provides an enjoyable experience for all recreational interests.

Sincerely,  
**ORANGE COUNTY SHERIFF'S DEPARTMENT  
HARBOR PATROL DIVISION**

  
Captain D. Bergquist  
Harbormaster

**PROUDLY SERVING THE UNINCORPORATED AREAS OF ORANGE COUNTY AND THE FOLLOWING CITIES AND AGENCIES:**

ALISO VIEJO • DANA POINT • LAGUNA HILLS • LAGUNA NIGUEL • LAGUNA WOODS • LAKE FOREST • MISSION VIEJO  
RANCHO SANTA MARGARITA • SAN CLEMENTE • SAN JUAN CAPISTRANO • STANTON • VILLA PARK  
HARBORS, BEACHES & PARKS • JOHN WAYNE AIRPORT • OCTA • SUPERIOR COURT



**DANA POINT HARBOR  
BOAT TRAFFIC STUDY**

Prepared for:

**PROJECT DIMENSIONS, INC.**  
3 Park Plaza, Suite 1490  
Irvine, CA 92614

Prepared by:

**MOFFATT & NICHOL**  
3780 Kilroy Airport Way, Suite 600  
Long Beach, California 90806

NOVEMBER 2007

M&N File 6231

## CONTENTS

EXECUTIVE SUMMARY .....	1
1.0 INTRODUCTION .....	2
1.1 Purpose.....	2
1.2 Approach.....	2
2.0 EXISTING FACILITIES AND BOATING ACTIVITIES .....	3
3.0 BOAT TRAFFIC GENERATION .....	6
3.1 Historical Boat Traffic Information .....	6
3.2 On-Site Observations .....	10
3.3 Model Calibration .....	12
3.4 Configuration 2C.2 Traffic Generation.....	14
4.0 INTERVIEWS .....	16
4.1 Harbor User Interviews.....	16
4.2 Harbor Patrol Interview .....	18
5.0 CHANNEL DESIGN CRITERIA .....	20
6.0 BOAT TRAFFIC ANALYSIS .....	22
6.1 Level-of-Service Concept .....	22
6.2 Analysis of Harbor Traffic.....	23
6.2.1 Channel Capacity .....	23
6.2.2 Level-of-Service Criteria .....	25
6.2.3 Level-of-Service Base Results .....	26
6.2.4 Pitchfork Design .....	29
6.3 Boat Traffic Impacts – Sensitivity Analyses .....	33
6.3.1 Sensitivity to Peak Holiday Weekend Traffic .....	33
6.3.2 Sensitivity to Average Boat Speed and Spacing.....	34
6.4 Boat Traffic Impacts – Additional Issues .....	34
6.4.1 Small Day-Use Vessel Influences.....	34
6.4.2 Bridge Area.....	36
6.4.3 Boat Parades, Etc. ....	36
7.0 MITIGATION MEASURES .....	37
8.0 SUMMARY AND CONCLUSIONS .....	39

## TABLES

Table 3-1 – Existing Slip Counts .....	7
Table 3-2 – Traffic Observation Results and Impacts .....	10
Table 3-3 – Measured vs. Modeled Comparison .....	11
Table 3-4 – Measured vs. Modeled Calibration.....	12
Table 3-5 – Existing and Proposed Slip Counts .....	14
Table 5-1 – Channel Capacity Estimates .....	21
Table 6-1 – Levels-of-Service for Roadway and Traffic Conditions .....	23
Table 6-2 – Channel Capacity Estimates .....	25
Table 6-3 – Level-of-Service Criteria for One-Way Entrance Channel Traffic .....	25
Table 6-4 – Peak Hour Level-of-Service for Typical Summer Traffic Conditions .....	29
Table 6-5 – Normalized Number of Pitchfork Slips .....	30
Table 6-6 – Peak Hour Level-of-Service with Influence of Pitchfork Design .....	32
Table 6-7 – Peak Hour Level-of-Service for Peak Holiday Traffic Conditions .....	33

Table 6-8 – Sensitivity to Average Boat Speed and Length Peak Hour Level-of-Service	34
Table 6-9 – Peak Hour Level-of-Service with Small Day-Use Vessels Occupying One Lane of Traffic	35
Table 6-10 – Peak Hour Level-of-Service with Influence of Channel Narrowing at Bridge	36

**FIGURES**

Figure 2-1 – Dana Point Harbor General Layout	3
Figure 2-2 – Dana Point Harbor Aerial (2004)	4
Figure 2-3 – East Basin Inner Channel – Navigational and Recreational Uses	4
Figure 2-4 – Proposed Layout 2C.2	5
Figure 3-1 – Hourly Usage Factors – Sail boats	6
Figure 3-2 – Hourly Usage Factors – Power Boats	7
Figure 3-3 – Combined Sail and Power Outbound Usage Factors	8
Figure 3-4 – Combined Sail and Power Inbound Usage Factors	8
Figure 3-5 – Measured vs. Modeled Outbound Traffic	11
Figure 3-6 – Measured vs. Modeled Inbound Traffic	12
Figure 3-7 – Measured vs. Modeled Outbound Traffic Calibration	13
Figure 3-8 – Measured vs. Modeled Inbound Traffic Calibration	13
Figure 3-9 – Existing and Proposed (2C.2) Outbound Boat Traffic	15
Figure 6-1 – Boats Traveling in Lanes Regardless of Width	24
Figure 6-2 – West Basin Existing Base Level-of-Service	27
Figure 6-3 – East Basin Existing Base Level-of-Service	27
Figure 6-4 – West Basin Proposed (2C.2) Base Level-of-Service	28
Figure 6-5 – East Basin Proposed (2C.2) Base Level-of-Service	28
Figure 6-6 – West Basin Existing Level-of-Service with Pitchfork Influence	30
Figure 6-7 – East Basin Existing Level-of-Service with Pitchfork Influence	31
Figure 6-8 – West Basin Proposed Level-of-Service with Pitchfork Influence	31
Figure 6-9 – East Basin Proposed Level-of-Service with Pitchfork Influence	32
Figure 6-10 – East Basin Crowding	35

## EXECUTIVE SUMMARY

This report presents a study of the boat traffic conditions at the Dana Point Harbor under existing conditions and a proposed reconfiguration of the marina. The existing Inner Channel has a design width of approximately 200' from dock to dock, but an effective navigable width of approximately 180' due to the side-tie boats at the ends of many of the docks. The proposed plan reduces the number of slips from 2409 to a range between 1932 and 2035, increases the average boat length from 30' to 34', and narrows the Inner Channel width from 200' to 160' over the majority of both basins with a further reduction to just under 95' near the bridge.

The analysis of the traffic conditions includes the generation of representative long-term boat traffic for the existing and proposed configurations, verification of the long-term traffic through observations, development of a boat traffic evaluation model based on highway traffic principals, interviews with existing users, review of applicable design criteria for channel dimensions, quantification of boat traffic impacts, and presentation of potential mitigation measures.

The traffic generation values for the proposed reconfiguration of the marina are slightly less than the traffic generation values for the existing marina due to the reduction in total slips.

The interviews with the Harbor users and the on-site observations indicated that there is typically little traffic congestion in the Inner Channel. Congestion and traffic conflicts tend to be the result of small Day-Use Vessels, novice boaters, and/or failure to obey the "Rules of the Road".

The boat traffic model is based on the concept of Level-of-Service (LOS), which is a statistical approach to developing a qualitative representation of the effects of traffic on the channel user. It relates the capacity of the channel to the volume of traffic under different conditions, and is represented by a scale of service levels from A to F, with A being the best condition.

The modeling investigated various parameters including the number of boats, timing of boat arrivals/departures, holiday traffic increases, special events, channel width, average boat speed, average boat length, average boat spacing in the channel, slip orientation relative to the traffic flow, and small Day-Use Vessels. The model corroborates the general consensus that there is little to no present Inner Channel congestion, and there will be no significant change in the new configuration on a regular basis. Typical LOS values ranged from A to B, and none exceed a LOS of more than C for a few hours on a weekend day. This is considered to be a very high service level average for typical marinas. The findings of the modeling study are consistent with the interviews of the Harbor users and the on-site observations of July 14<sup>th</sup> 2007.

Potential mitigation measures identified include increased enforcement of present statues as required and additional boater education.



# 1.0 INTRODUCTION

## 1.1 Purpose

The purpose of this study is to assess the boat traffic conditions at the Dana Point Harbor under existing conditions and a proposed reconfiguration of the marina. The proposed plan reduces the number of slips from 2409 to a range between 1932 and 2035, increases the average boat length from 30' to 34', and narrows the Inner Channel width from 200' to 160' over the majority of both basins with a further reduction to just under 95' near the bridge.

Dana Point Harbor is manmade and located between Los Angeles and San Diego on the southern Orange County coast. It has traditionally been a small-craft, recreational harbor with +/- 2,400 slips, a boat ramp, and several land-based boating facilities. Presently there is an extensive waiting list for slips.

9

Project Dimensions Inc. has been selected by the County of Orange as the project manager for a planned redevelopment and renovation for both the landside and waterside. URS Cash and Associates are providing marina renovation planning and engineering services. There have been several iterations of the proposed slip layout, and this study is focused on the layout called "Layout 2C.2 with Channel Encroachment."

## 1.2 Approach

This boat traffic study analyzes the impacts of the proposed project on existing Harbor conditions and provides measures to mitigate the impacts. The general approach for the analysis is summarized as follows:

1. Generate representative boat traffic patterns for the existing and proposed layouts for regular summer weekend conditions based on long-term observations from similar Southern California marina historical data.
2. Verify the applicability of the long-term traffic data with on-site observations and use the results of the observations to calibrate the model.
3. Conduct interviews with key Harbor users and administrative personnel to help understanding of "how the Harbor works" in terms of usage patterns, any existing congestion areas, and input on potential mitigation measures associated with the potential impacts of the proposed project.
4. Review small craft harbor design guidelines and channel design criteria that relate recommended channel widths to size of marina.
5. Quantify boat traffic impacts based upon a boat traffic simulation model.
6. Propose potential mitigation measures to avoid or reduce any significant impacts.

## 2.0 EXISTING FACILITIES AND BOATING ACTIVITIES

The construction of Dana Point Harbor began in the late 1960's and the Harbor was officially dedicated on July 31, 1971. The Harbor is located in Capistrano Bay on the southern Orange County coastline, approximately half way between Los Angeles and San Diego. Dana Point Harbor is a County of Orange owned facility located within the City of Dana Point, and serves recreational boaters and County residents alike with numerous recreational and leisure activities. It is a vital commercial and community center.

Facilities within the Harbor immediately adjacent to the water include the East and West and Embarcadero Marinas containing approximately 2,500 slips, a fuel dock, bait barge, boat launch ramps, commercial fishing docks, a boatyard, guest docks, boat rental docks, yacht clubs, the Youth and Group Facility, an interior swim beach (Baby Beach), a fishing pier, and the Ocean Institute docks for tall ships and research vessels. Figure 2-1 shows the general Harbor layout; Figure 2-2 is an aerial photograph of the Harbor.

The Harbor has an active sailing community and has become a popular location for kayakers, personal watercraft (PWCs) and stand-up paddle boarders (Figure 2-3)

Figure 2-4 presents the "Proposed Layout 2C.2 with Channel Encroachment" which has been identified as the preferred alternative for this boat traffic analysis.

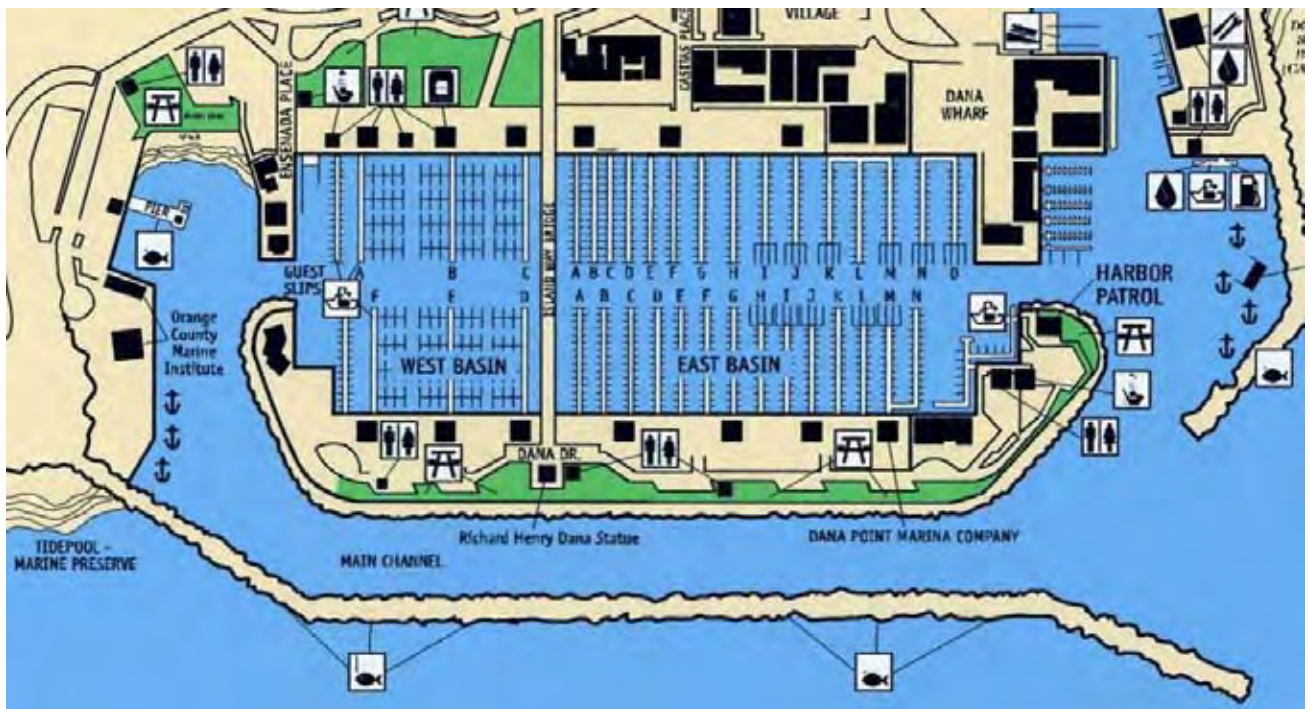


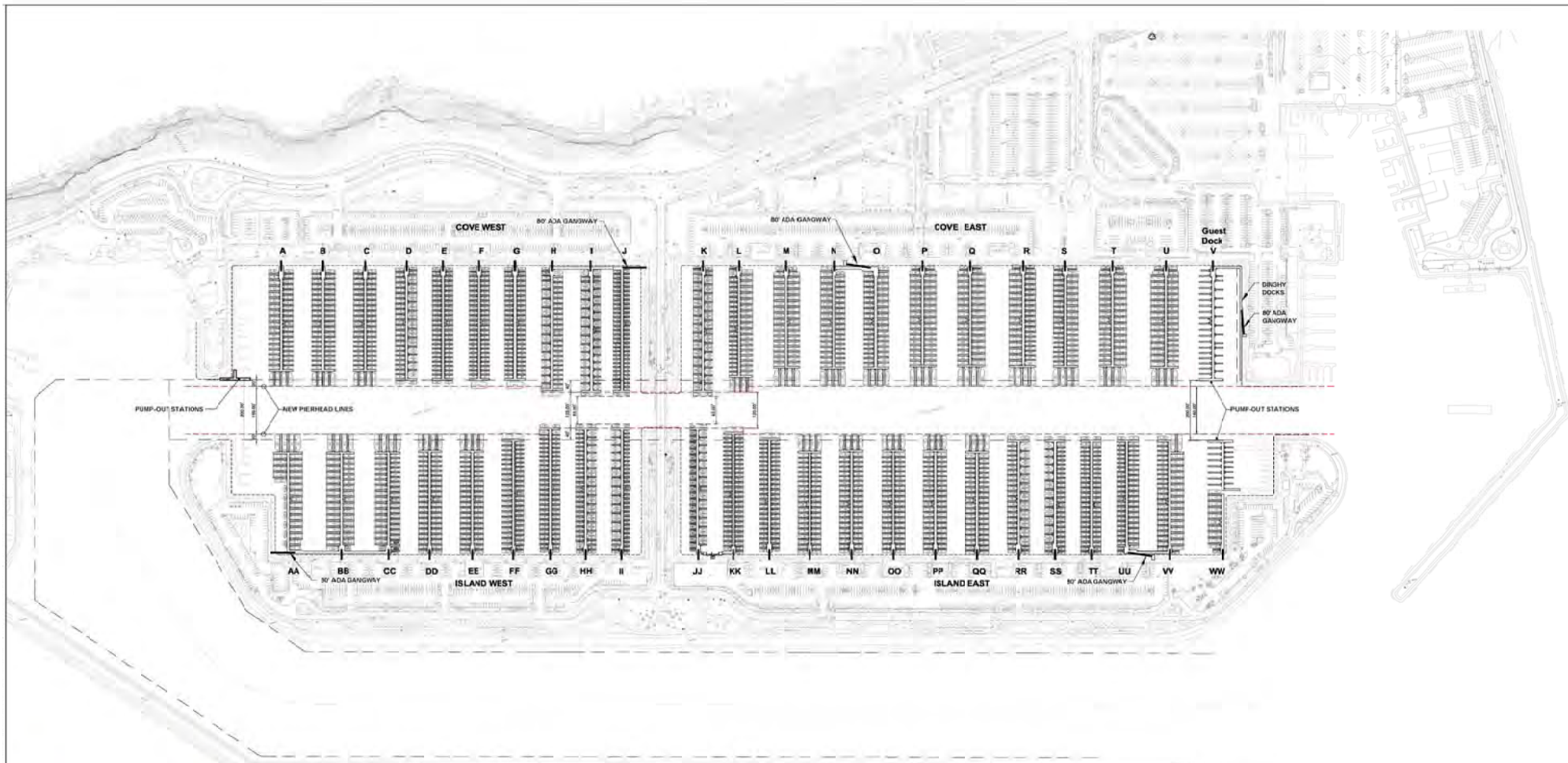
Figure 2-1 – Dana Point Harbor General Layout



**Figure 2-2 – Dana Point Harbor Aerial (2004)**



**Figure 2-3 – East Basin Inner Channel – Navigational and Recreational Uses**



SLIP LENGTH	BASIN				Total	Length	
	Cove West	Cove East	Island West	Island East			
29	2	2	1	4	45	900	
22	0	0	4	2	4	88	
24	3	2	3	6	4	536	
25	30	1	30	0	133	3300	
25	10	0	20	2	57	1422	
28	0	35	0	1	36	983	
29	5	2	5	7	17	433	
30	210	54	160	207	631	20193	67% @ 2035 = 47.9% @ 50' and under
32	13	9	19	23	31	1632	
34	0	6	1	0	7	264	
35	128	70	108	258	544	19040	
38	3	13	6	0	19	743	
38	0	0	1	0	1	36	6.6% @ 2035 = 30.7% @ 31' thru 38'
39	0	2	1	1	4	168	
48	10	175	35	1	221	3030	
45	0	58	12	23	113	5082	
48	0	0	0	13	13	501	
58	13	4	0	13	29	1400	34% @ 2035 = 16.7% @ 39' thru 49'
55	0	8	8	6	24	1300	
60	0	18	2	20	39	1860	
65	0	12	0	2	14	780	
68	2	0	0	2	4	272	
73	1	0	1	1	3	144	
77	1	0	0	2	3	144	
1064	503	470	420	642	2035	88114	100% @ 2035 = 4.9% @ 50' and up
Average Slip Length (ft.)						33.99	

# DANA POINT HARBOR MARINAS

## LAYOUT 2C.2 w/ Channel Encroachment

### (34' Avg.)

# PROPOSED LAYOUT

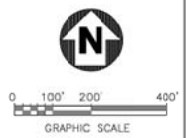


Figure 2-4 - Proposed Layout 2C.2

### 3.0 BOAT TRAFFIC GENERATION

Historical boat traffic data and usage patterns from similar Southern California marinas were applied to the existing and proposed marina development in order to generate a reasonable expectation of traffic to assess potential project impacts. Detailed boat count data from Marina Del Rey<sup>1</sup>, Newport Harbor, Channel Islands Harbor<sup>2,3</sup> and Huntington Harbor<sup>4</sup> were analyzed to select appropriate boat traffic generation factors. The applicability of this historical data to the Dana Point Harbor was verified by on-site observations, which were then used to calibrate the traffic model. Sensitivity to the assumed usage patterns is addressed in Section 6.

#### 3.1 Historical Boat Traffic Information

Summer Weekends are typically the most popular days (excluding Holidays), with up to 25% of berthed vessels in use. This ratio is termed the “daily use factor.” Patterns of use during the day are a function of boat type. Power boats typically leave early in the morning and their usage is relatively spread out over the day. Sail boats typically go out for an afternoon sail when these winds pick up. Mean hourly usage as a fraction of the daily total for sail boats and power boats are shown in Figure 3-1 and 3-2, respectively.

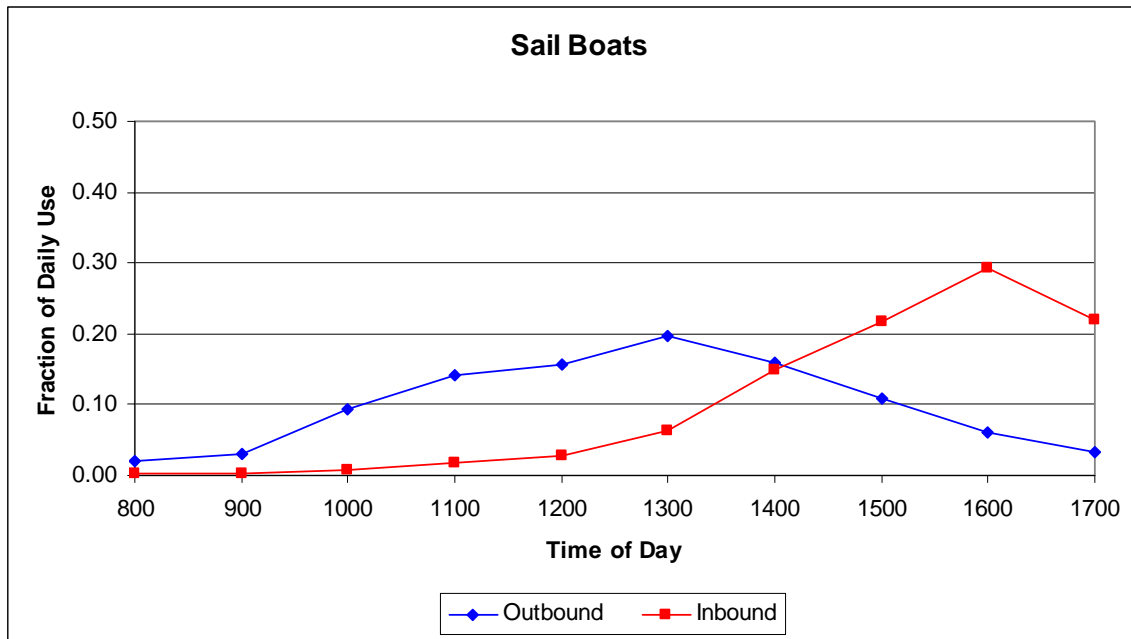


Figure 3-1 – Hourly Usage Factors – Sail boats

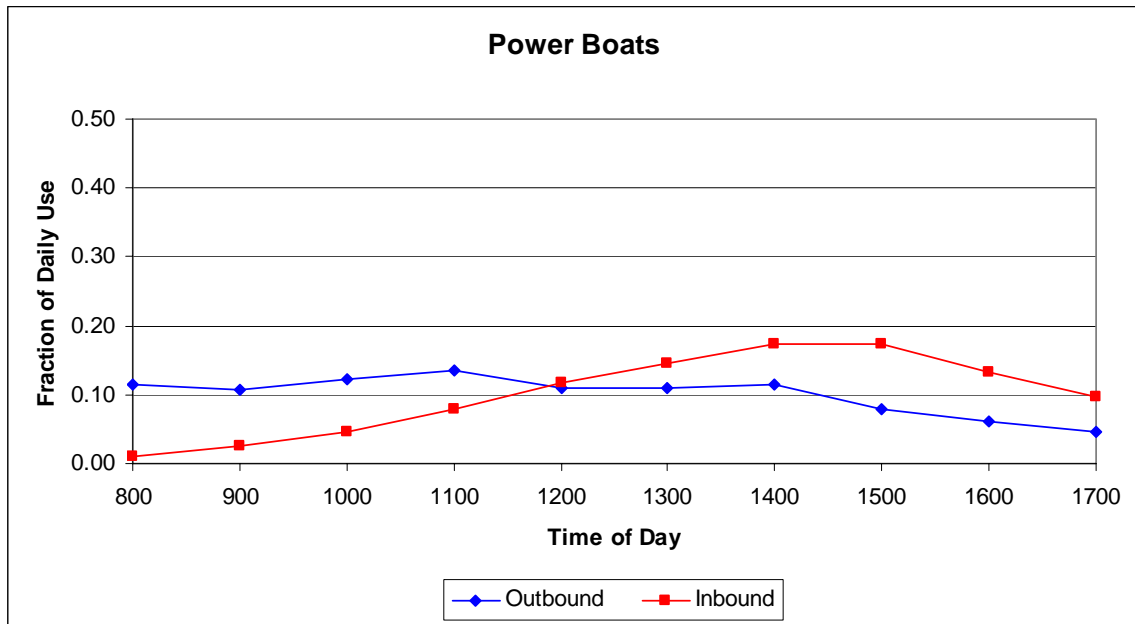
<sup>1</sup> Williams-Kuebelbeck and Associates, Inc., *Analysis of Boat Traffic Conditions for Marina del Rey*, prepared for Summa Corporation, 1981.

<sup>2</sup> Moffatt & Nichol, *Channel Islands Harbor Entrance Congestion Study*, prepared for Voss Construction Company, 1980.

<sup>3</sup> Moffatt & Nichol, *A Study of the Effects of Waterway Expansion – Channel Islands Harbor*, prepared for County of Ventura, Department of Public Works, 1970

<sup>4</sup> Moffatt & Nichol, *Ordnance Pier, Naval Weapons Station Seal Beach – Functional Analysis Concept Development (Small Boat Traffic Appendix)*, prepared for Southwest Division Naval Facilities Engineering Command, 2004.

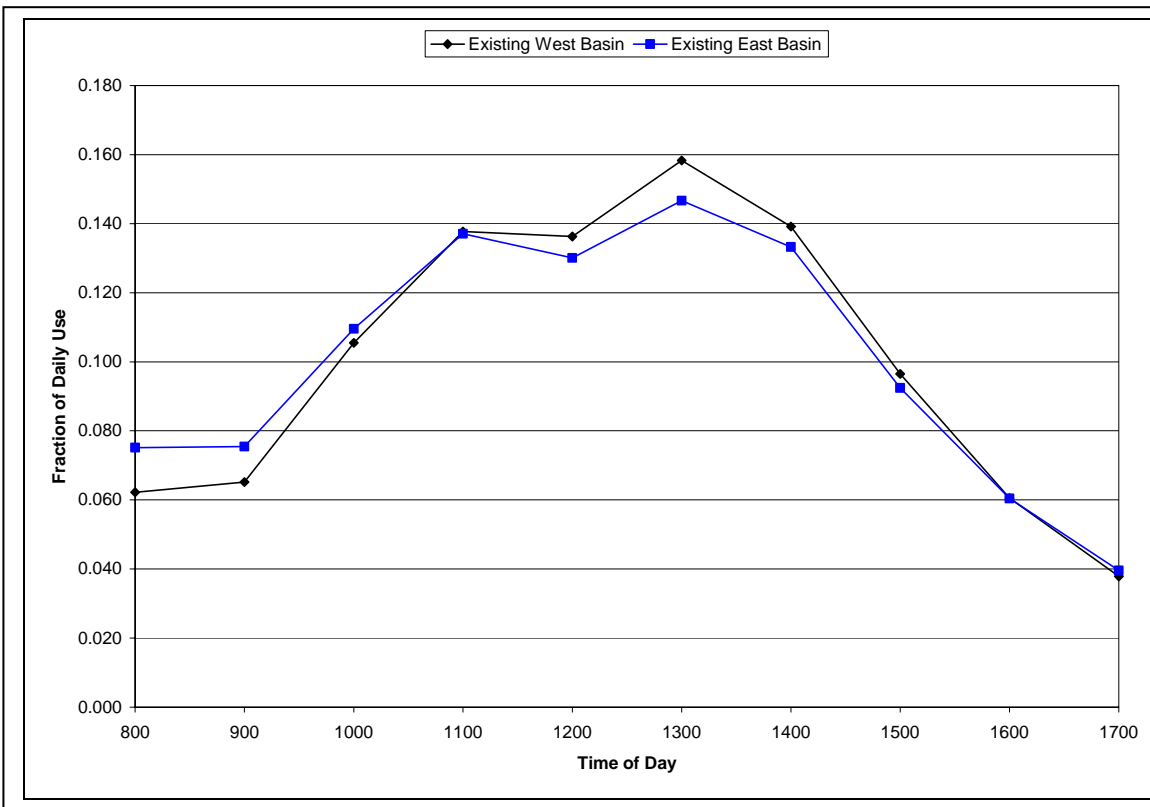
These hourly usage factors are applied to the existing and proposed layouts and slip mixes for each basin, (Table 3-1 presents the existing slip counts) creating unique sets of usage factors for both outbound and inbound directions. Figures 3-3 and 3-4 present these factors by basin and direction



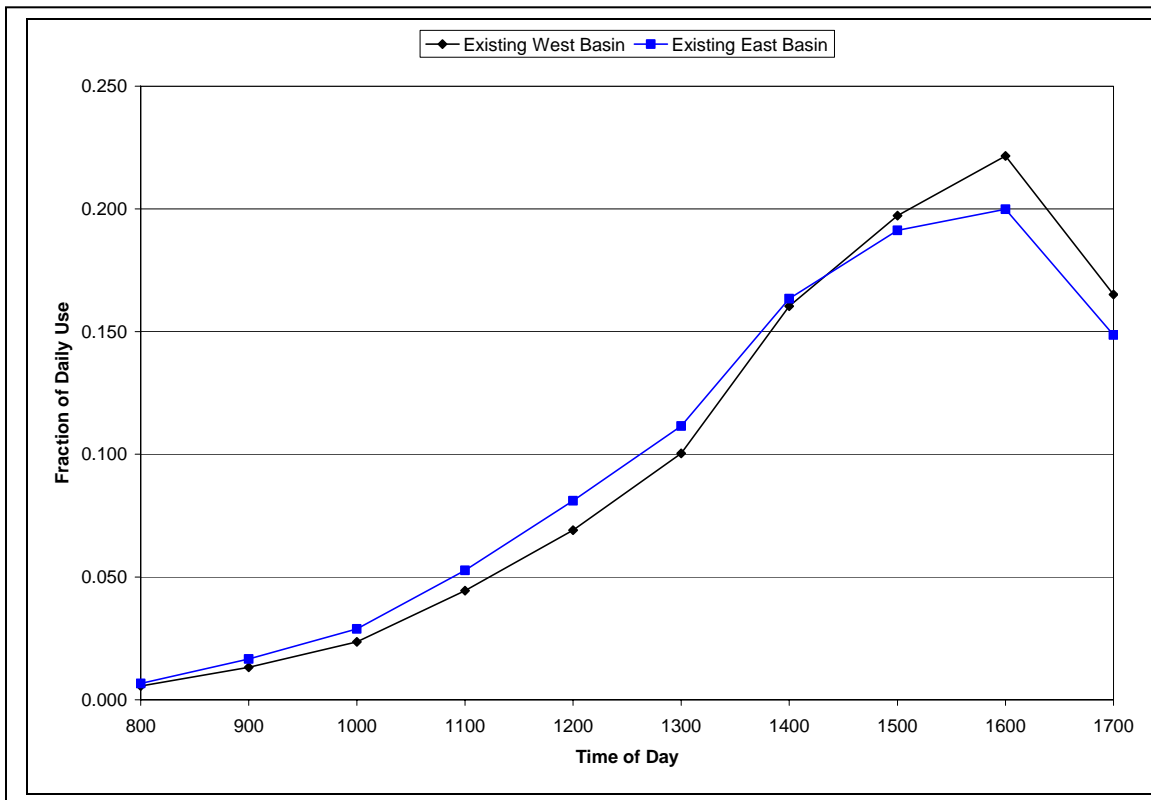
**Figure 3-2 – Hourly Usage Factors – Power Boats**

**Table 3-1 – Existing Slip Counts**

<b>SLIP LENGTH</b>	<b>EXISTING</b>
30 and under	1795
31-38	273
39-49	236
50 & Over	105
Total	2409
Average Slip Length	29.85



**Figure 3-3 – Combined Sail and Power Outbound Usage Factors**



**Figure 3-4 – Combined Sail and Power Inbound Usage Factors**

To this point, traffic generation rates have been presented as boats per hour. In order to account for potential variations in flow rate within an hour of interest, the concept of "peak-hour factor" (PHF) is utilized. The peak hour factor relates peak rates of flow to hourly volumes. For example, 100 boats may have been observed to pass a point in a channel over a given hour. Thus the hourly flow rate is 100 boats per hour. However, 35 boats may have passed within a fifteen minute period, representing significantly greater traffic than the hourly flow volume indicates. The equivalent hourly flow over the peak 15-minute period is 140 boats per hour. The PHF is defined as the ratio of total hourly volume to the maximum 15-minute rate of flow within the hour. For this example, the PHF is 0.71. Recreational boat traffic is typically evenly distributed. A PHF of 0.67 has been calculated based on analysis of historic data and is considered appropriate for peak traffic generation associated with the proposed marina development.

The traffic flows with each basin, by configuration, and direction, are a function of the number and type of boats, daily usage factor, hourly usage factor, and peak hour factor. The actual traffic rates are presented in the subsequent sections for the various configurations. These patterns represent typical summer weekend boat traffic based on the historical information.



### 3.2 On-Site Observations

On-sites observations of boat traffic were made by a four person team on Saturday July 14, 2007. Observers were located at the western end of the West Basin, at the eastern end of the East Basin, and at the Bridge. Traffic observations included boat type and direction as well as Small Day-Use Vessel\* traffic by direction. Observations were made from 8:00 am until 6:00 pm.

This data has been analyzed and compared to the original boat traffic modeling effort from the preliminary report for the existing conditions. The following table summarizes the results of the observations as they apply to the modeling.

**Table 3-2 – Traffic Observation Results and Impacts**

OBSERVATION	IMPACT ON ANALYSIS
Total number of boats significantly less than modeled.	Reduce Daily Use Factor from 25% to 18%.
Daily use of power boats is significantly higher than modeled, daily use of sailboats is significantly less than modeled.	Little influence on model due to averaging on a total boat basis. The increased maneuverability of the power boats makes the modeling conservative.
~50 Boat Sailboat race from Seal Beach Yacht Club to Dana Point Yacht Club.	Unknown influence on observed lack of sailboat usage. No change in model.
Channel-Perpendicular slip orientation had little influence on channel traffic.	Reduce influence in model. See Pitchfork Influence in Section 6.3.4.
Number of power boats passing from west basin through the bridge more than modeled.	Increase modeled bridge traffic from 10% to 20% of the total number of powerboats in the West Basin.
Number of sail boats under sail <1% of total traffic.	Reduced influence of tacking sailboat interferences.
Outbound and Inbound traffic patterns by hour were similar to the model.	No change to model. This serves as a verification of the Hourly Use Factors.
Small Day-Use Vessel traffic comprises 44% of total watercraft observed. Many Personal Watercraft (PWC) pulled over by Harbor Patrol/Police.	Add information to Small Day-Use boating section and update estimated influence.
Fishermen casting from under bridge causing boats to move to center of channel.	Add recommendation for increased enforcement of No Fishing rules.

\* *Small Day-Use Vessel* traffic refers to kayaks, paddleboards, small sail boats, dinghies, personal watercraft, and all other similar vessels with out slips.

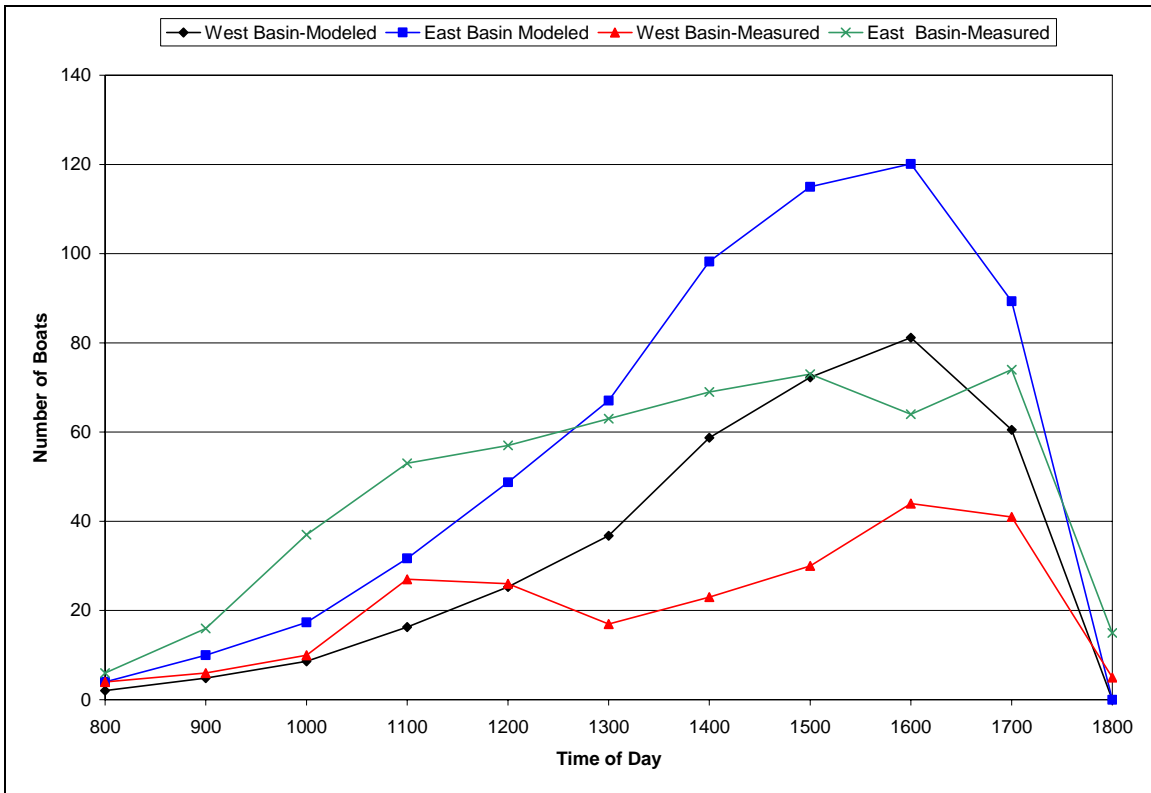
Table 3-3 and Figures 3-5 and 3-6 present a comparison of the measured (observed) traffic vs. the modeled traffic, using a daily use factor of 25%, a PHF of 0.67, and assuming 10% of the power boats in the West Basin pass through the bridge and East Basin on their way in and out of the Harbor. The results of this comparison indicate that the original modeling effort was conservative, and could be calibrated to better match the observations.

**Table 3-3 – Measured vs. Modeled Comparison**

	<b>Total Boats                      Daily Use 25%                      Peak Factor 0.67                      Bridge - 10% of West Basin Power Boats</b>		
	Measured	Modeled	Difference
West Basin	461	733	59%
East Basin	948	1202	27%
Total Traffic	1409	1935	37%



**Figure 3-5 – Measured vs. Modeled Outbound Traffic**



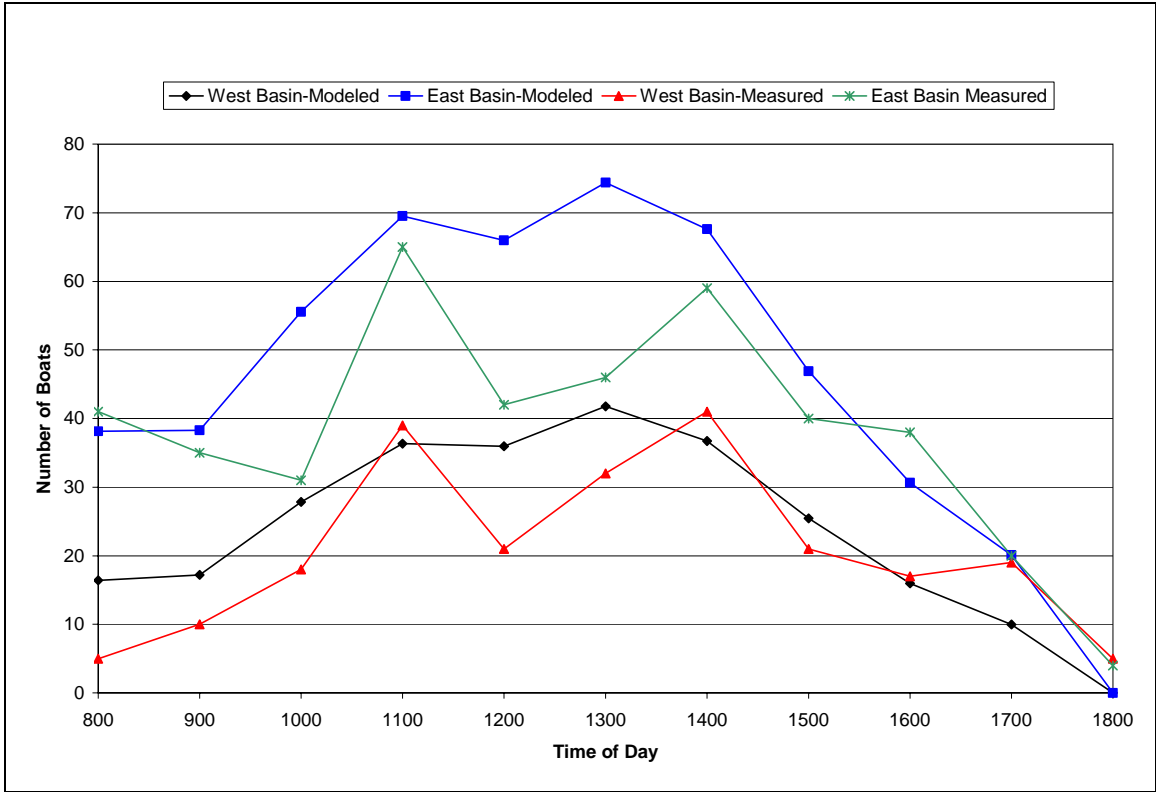
**Figure 3-6 – Measured vs. Modeled Inbound Traffic**

### 3.3 Model Calibration

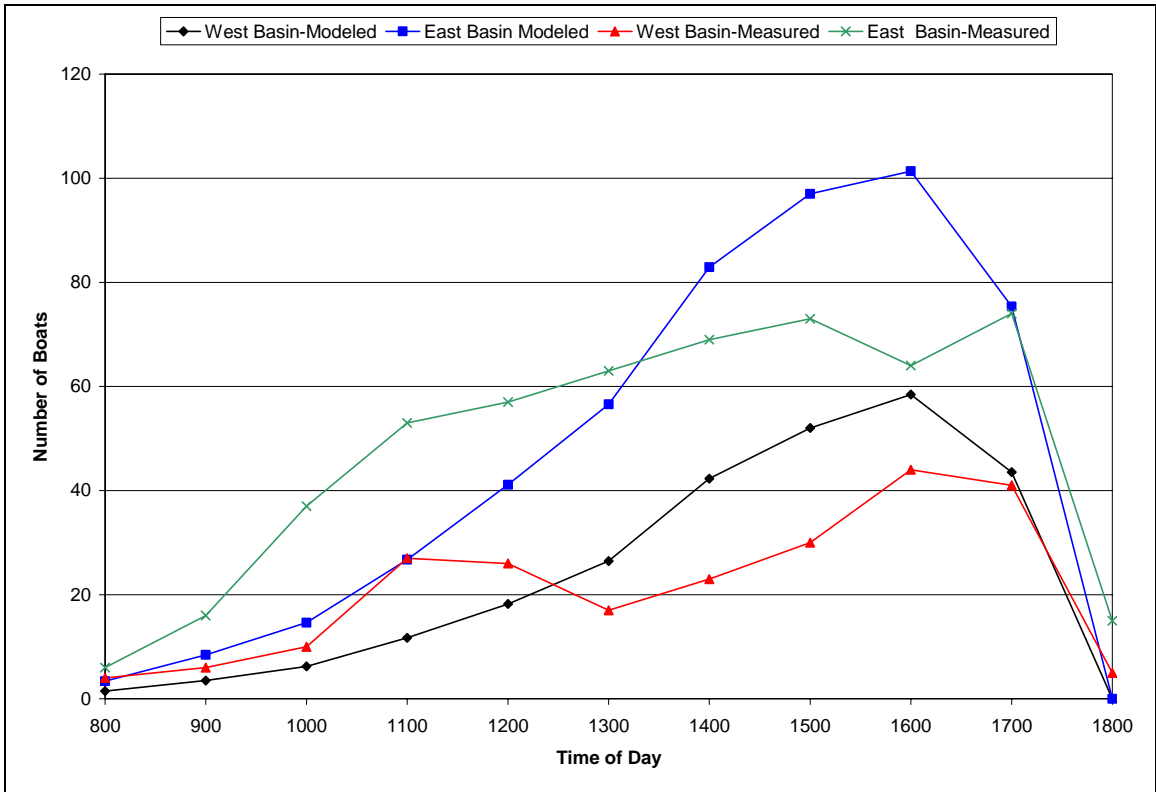
Based on the observations, the daily use factor was reduced to 18% and the bridge traffic from the West Basin was increased to 20% of the number of powerboats in the West Basin. The results appear in Table 3-4 and Figures 3-7 and 3-8. Since this calibration is based on a single data set, the modeled values remain slightly conservative in the total traffic count is approximately 9% more than observed.

**Table 3-4 – Measured vs. Modeled Calibration**

	<b>Total Boats</b> <b>Daily Use 18%</b> <b>Peak Factor 0.67</b> <b>Bridge 20% of West Basin Power Boats</b>		
	Measured	Modeled	Difference
West Basin	461	528	14%
East Basin	948	1015	7%
Total Traffic	1409	1542	9%



**Figure 3-7 – Measured vs. Modeled Outbound Traffic Calibration**



**Figure 3-8 – Measured vs. Modeled Inbound Traffic Calibration**

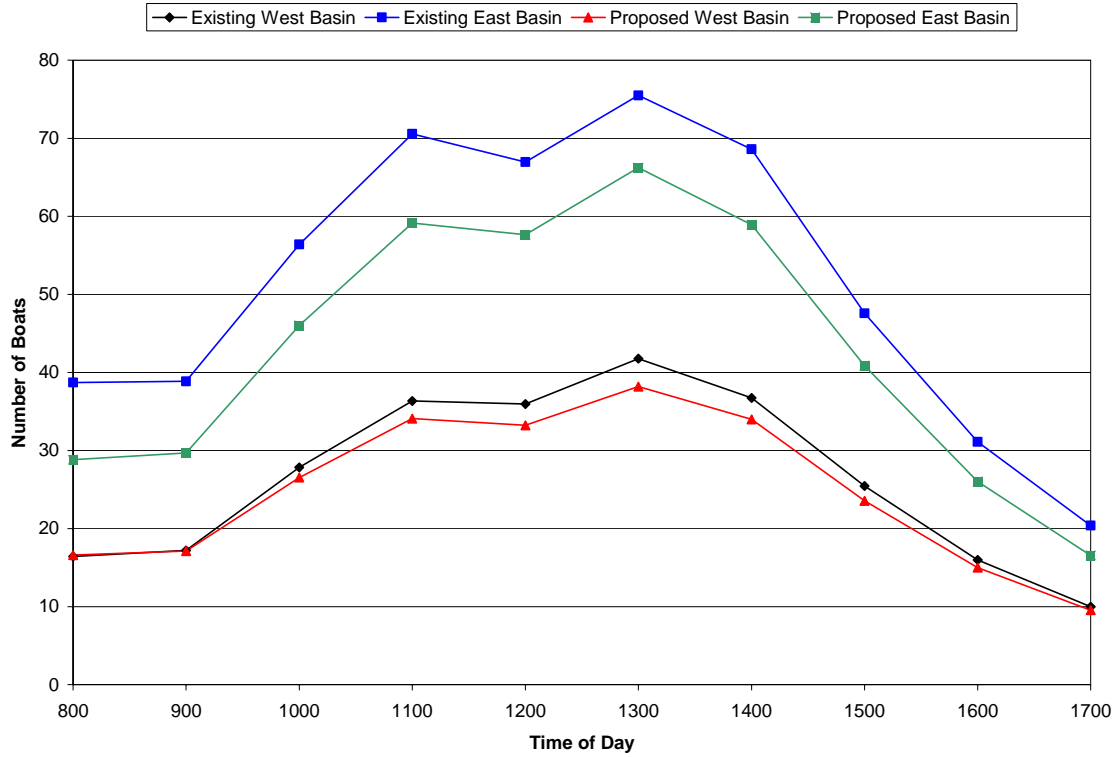
### 3.4 Configuration 2C.2 Traffic Generation

The proposed layout of configuration 2C.2 decreases the total number of boats, but increases the average boat length as shown in Table 3-5.

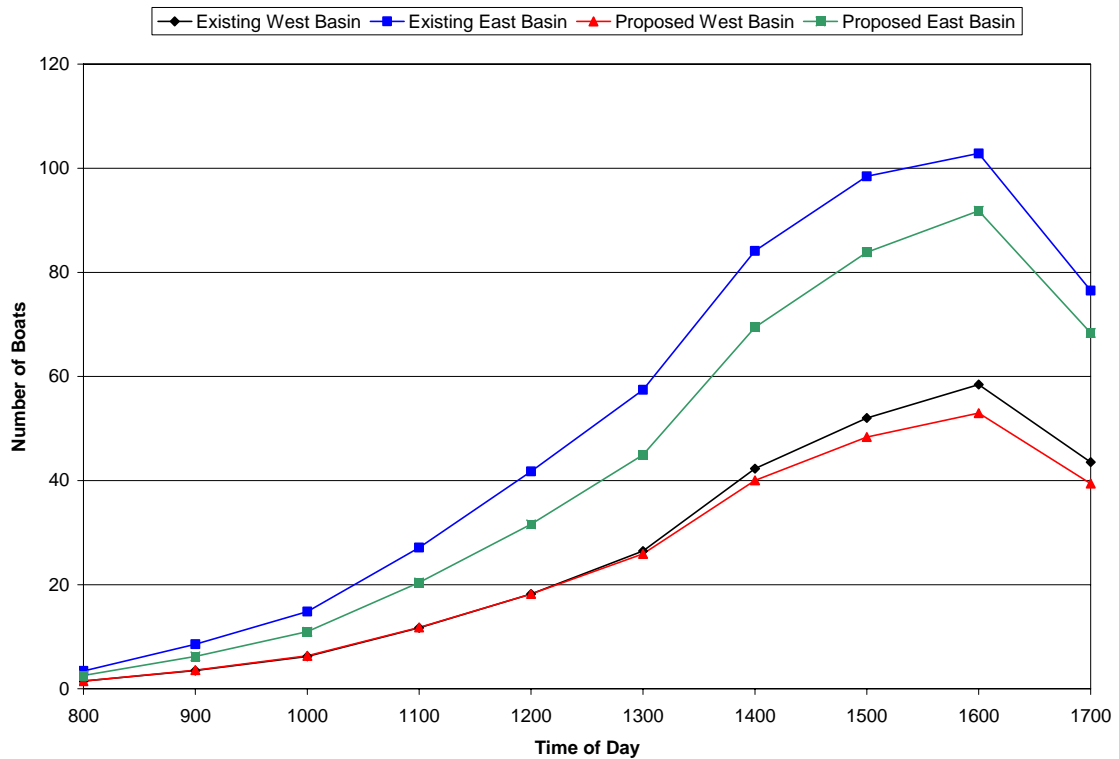
**Table 3-5 – Existing and Proposed Slip Counts**

<b>SLIP LENGTH</b>	<b>EXISTING</b>	<b>PROPOSED LAYOUT 2C.2</b>
30' and under	1795	975
31'-38'	273	616
39'-49'	236	344
50' & Over	105	100
Total	2409	2035
West Basin Sailboats	540	462
West Basin Power Boats	442	462
East Basin Sailboats	592	556
East Basin Power Boats	835	556
Average Slip Length	29.85'	34.00'

The calibration values - daily use factor, peak hourly factor, and % of boats passing through the bridge from the West Basin to the East Basin (determined from the on-site observations) were applied to the proposed Layout 2C.2 to generate the boat traffic as shown in Figures 3-9 and 3-10. The existing boat traffic is shown for comparison.



**Figure 3-9 – Existing and Proposed (2C.2) Outbound Boat Traffic**



**Figure 3-10 – Existing and Proposed (2C.2) Inbound Boat Traffic**

## **4.0 INTERVIEWS**

Boat traffic congestion can be a subjective topic. The degree of congestion and its impact on the Harbor function depends on the vessel operator skill and tolerance, vessel type, frequency of congested conditions and impacts of the vessel operator's use of the waterway. Interviews with both Harbor administrators and long time users provide critical information regarding workings of the Harbor including traffic patterns, coordination of multiple uses, and any existing problems related to boat traffic congestion. They also provide valuable insight regarding planning for the future marina layout and operations changes.

### **4.1 Harbor User Interviews**

The following lists the individuals that were either interviewed or participated in meetings held as part of the boat traffic study. The intent was to contact individuals representing the various user groups as well as administrative and enforcement personnel.

- Morrie Wilkie – Dana Point Yacht Club member, long time tenant; active sailor
- Dan Streech – Broker, longtime businessman in the Harbor; brokers power and sail
- Ed Gomez – Long time live-aboard; fireman
- Dan Brown – Has worked on boats in the Harbor for years; small boat owner
- Norma Lococo, United States Coast Guard Auxiliary
- Barry Senescu, boater, husband of former Dana Point Yacht Club Commodore
- Donna Kalez, Dana Wharf Sportfishing
- Adam Himelson, Ocean Institute and former Youth and Group sail instructor
- Dick Davidson, boater
- Dana Point Boaters Association Directors – Bruce Heyman, Ted Olson, Rodger Beard
- Sue Senescu – Former Dana Point Yacht Club Commodore
- Doug Heim, Boater
- Vaughn Morand, Dana West Yacht Club member, boater
- Dave Drenick, Boater
- Suzanne Jones, Dana Point Yacht Club Commodore
- Dave Dempsey, Boater
- Dana Point Harbor Patrol (See Pages 18-19)

### ***Questions Posed to the Group***

1. *Do you feel there is presently congestion in the West Basin Inner Channel and/or East Basin Inner Channel*
2. *If so, how would you describe congested conditions – mild, moderate or severe*
3. *How often do congested congestions occur?*
4. *What are the primary and secondary causes, for example...?*
  - *Too many boats*
  - *Tacking sailboats*
  - *Novice boaters / rental craft*
  - *Harbor cruisers*
  - *Sailing schools*
  - *Small Day-Use craft such as kayakers, PWCs, etc.*
  - *Excessive speed*
  - *Other activities such as boat parades*
5. *Any suggestions to offset either existing or potential future congestion?*

### ***User Input***

The following summarizes the input from the Harbor users.

- Concern was expressed regarding additional large boats with regards to interaction with dinghies and kayaks.
- The boat traffic study should be based on peak summer weekend traffic patterns.
- Raft-Up Parties in the Main Navigation Channel cause congestion. There is an average of 10 planned and 5 renegade events per year.
- Tacking sailboats have a 50° tacking angle (mainsail only) and presently make 12 tacks. With the reduction they will need to make 18. On race days and busy weekends, there are about 25 boats in from 14 to 30 feet long.
- On average, 2-3 tacking sailboats hit stationary boats per year.
- Visibility at the intersections is a safety issue. The perception is that it could become more of an issue with the large-boat pitchfork design.
- The bridge already effectively narrows the Inner Channels locally because boats only pass through the center set of piles. This implies that the reduction of channel width planned near the bridge will not cause adverse impacts.
- The total number of slips is the primary issue. Boat traffic should be secondary. The encroachment is an adaptation that people should be able to make. Safety is a primary concern and the responsibility of the boater – a reduced width should not increase the danger.
- The annual Holiday Boat Parade has approximately 100 boats from 60' to 15' with one 95' boat. The parade happens on two weekends. Presently, the larger boats must turn around well before the bridge due to lack of adequate depth and bridge clearance.
- The Inner Channels should be primarily used for navigation, not recreation.
- More boater education required, particularly for the smaller boats and rental kayaks.
- Large majority of the attendees favored encroachment for more slips.
- Presently there are no speed issues in the Harbor. It is well regulated by the Harbor Patrol.
- The corner near the silted area of the Main Navigation Channel can get congested at peak usage times. (This is out of the project boundary area.)
- USCG auxiliary offered to help with education programs and collateral to help educate boaters regarding the “Rules of the Road”.



## *User Input Summary*

Major traffic/safety issues:

- Small Day-Use Vessel operation and visibility.
- Boater education and lack of knowledge regarding the California Harbors and Navigation code (“Rules of the Road”).
- Novice boaters.
- High winds

### Recommendations

- Inner Channel encroachment is acceptable if it allows for more slips.
- More boater education is required.
- Possible limitations on recreation within the Inner Channels may have to be imposed and enforced.

## **4.2 Harbor Patrol Interview**

In addition to the public meeting and interviews, a separate discussion was held with the Sgt. John Whitman of the Harbor Patrol. The following summarizes the discussion.

- There are 20’ “channels” on each side of the Inner Channels that are used as “bike lanes” for kayaks, dinghies, personal watercraft (PWC) and paddle surfboards. There can be visibility issues at the intersections. These lanes might be lost if encroachment is allowed.
- There is a County statute (2-204B) in place that designates the Inner Channels as a “special use area” and restricts recreational uses. It is not presently enforced, but it is available for the Harbor Patrol to use if required. The Harbor Patrol notes that they may need to increase their enforcement of the statute if crowding is an issue.
- There is only one group licensed to operate kayak rentals at Baby Beach, but there are other kayak rentals in other areas of the Harbor.
- Smaller boats move more often than larger boats. I.e. 2-twenty five foot boats move much more than one-fifty foot boat, therefore a reduced slip count that has a higher average slip length may reduce total traffic.
- The existing East Basin Inner Channel may already be 160’ due to existing side ties.
- The present design does not address catamarans and other specialty boats with oversized beams. These boats should not be allowed to encroach further into the Inner Channel.
- Could locate smaller, tacking sailboats closer to the entrance to reduce conflicts.
- Outrigger canoes usually go in outer Main Navigation Channel. They are typically not in the water at peak times.
- Power boaters on the eastern end of the West Basin that can fit under the bridge travel from the West Basin through the East Basin to get out.

- The pump-out area at Harbor Patrol Dock can get slightly crowded, but it is not a frequent or significant problem.

Major Traffic/Safety Issues (In order)

1. Total number of boats.
2. Tacking sailboats.
3. Novice boaters in confined areas.

## 5.0 CHANNEL DESIGN CRITERIA

This section addresses channel width and overall navigability criteria based on published guidelines. Although the guidelines are typically applied to entrance channels without intersections, they can be used as a rough guideline for the Dana Point Inner Channels. These provisional criteria are highly variable with little consensus on required channel width as a function of marina size, and none include the combined effects of boat size, speed, travel distance, intersections, and environmental conditions. They do, however represent relationships that have been used in the design of similar marina channels.

The existing Inner Channels have a design width of approximately 200' from dock to dock, but an effective navigable width of approximately 180' feet due to the side-tie boats at the ends of the docks. In certain areas, it appears that the navigable width of the East Basin Inner Channel is approximately 160' due to a side-tied catamaran. (Scaled from Google aerial image). The proposed layout would reduce the existing design width of the channel to 160' (150' with the inclusion of a 5ft boat overhang on both sides of the channel) over the majority of both basins and would reduce it to just under 95' near the bridge.

A rational design approach is necessary to determine whether safe and efficient navigation of the Inner Channel will be achievable with a reduction in the design width and an increase in average boat size. Factors that must be considered are:

- Vessel size;
- Vessel maneuverability;
- Vessel speed;
- Effects of wind, waves and currents; and
- Traffic congestion.

Tobiasson and Kollmeyer<sup>5</sup> recommend a minimum fairway width of 1.5 times the longest boat length. They further recommend an increase to 1.75 times the longest boat length in conditions that reduce maneuverability - i.e. wind, sail boats under sail, novice boaters, etc. They also recommend an absolute minimum width of 75', with 100' being preferred. For Dana Point, the largest "designed" slip is 65 feet. This relationship would result in an Inner Channel width of 115 feet based on the reduced maneuverability due to traffic. However, there are several 60-75 foot boats planned for side-tie slips, which would result in channel width requirements as much as 130 feet. This standard also appears in the California Department of Boating and Waterways<sup>6</sup> design guidelines, along with a minimum recommended width of 75' at the bottom of the channel.

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<sup>5</sup> Marinas and Small Craft Harbors, Van Nostrand Reinhold, 2000

<sup>6</sup> Layout and Design Guidelines for Marina Berthing Facilities, CDBW 2005

The American Society of Civil Engineers (ASCE)<sup>7</sup> recommends a minimum width of five times the beam of the widest vessel to be berthed in the Harbor. Assuming a 20-foot beam for the maximum design vessel results in a width of 100 feet.

“Observations in Small Boat Harbors – Harbor Design Concepts”<sup>8</sup>, presents a relationship for interior channels based on Southern California Harbor observations and the total number of boats present in the basin. The relationship is:

$$W_{INT} = (50' \text{ to } 90') + \frac{N}{10}$$

Where

$W_{INT}$  - Width of the interior channel in feet.

50' to 90' – Suggested minimum width regardless of boat count.

N – Number of boats in basin.

The following table presents the Inner Channel width ranges for the various configurations, based on the number of wet slips.

**Table 5-1 – Channel Capacity Estimates**

BASIN CONFIGURATION	CHANNEL WIDTH RANGE (Feet)
Existing West	155 – 195
Existing East	185 – 225
Proposed West	142 – 182
Proposed East	161 - 211

Note that since this particular relationship is independent of boat size, type, and speed, the proposed configurations require reduced channel widths even though the average boat size increases.

A review of the proposed Layout 2C.2 indicates that the channel widths near the bridge will be limited by the sidetie location of some of the larger vessels, although the State minimum recommended channel width would be maintained at all times; i.e., 75ft with a 15 foot buffer. This channel width limitation is not anticipated to be a problem because there is limited reason for these larger vessels to enter this area due to their inability to pass under the bridge (~ 16 feet of clearance at high water) and depth limitations.

<sup>7</sup> Planning and Design Guidelines for Small Craft Harbors, American Society of Civil Engineers, 2000

<sup>8</sup> Nichol, J.M. 1985. “Observations in Small Boat Harbors – Harbor Design Concepts,” Proceedings West Coastal Regional Coastal Design Conference. American Society of Civil Engineers. Oakland, CA.,

## 6.0 BOAT TRAFFIC ANALYSIS

As previously discussed, boat traffic analysis and congestion can be a subjective and relative subject. It is recognized that a single, poorly operated vessel, speeding boats, loss of power/steering, or an unorganized group of kayakers can crowd a channel and reduce maneuverability, however, these are discrete events that can not be quantified in a numerical model, nor is it the purpose of this analysis. The intent of this analysis is to evaluate the over-all, long term statistical traffic and potential congestion issues for the Harbor and to focus on the change in Level-of-Service (LOS) between the existing and proposed layouts.

Roadway traffic models provide a framework for this statistical approach. Observations of boat traffic patterns in small craft harbors indicate similarities to roadway traffic with some modifications to account for lack of discrete channelization in boat channels and more general freedom of movement. Boat traffic also differs from highway traffic in that boats must make headway to maneuver and boat operator proficiency is more widely varied. The following sections summarize the LOS approach to boat traffic analysis and present comparisons of the existing and proposed marina plans.

### 6.1 *Level-of-Service Concept*

Model results are presented in terms of *Level-of-Service* (LOS) which is a concept widely used by traffic engineers to describe prevailing conditions and their effect on traffic. Level-of-Service is a qualitative measure of the effect of traffic flow factors, such as speed and travel time, interruptions, freedom to maneuver, driver comfort and convenience, and safety. The Level-of-Service of channels is analogous to the traffic engineering concept and is a direct function of usage. The levels are set based on factors including numbers and sizes of boats, their speed and maneuverability, and channel size and geometry.

This boat traffic study evaluates the existing and proposed marina layouts in the Dana Point Harbor Inner Channels. Analysis of the boat traffic capacity within these areas is analogous to roadway traffic capacity. Roadway capacity is defined as the maximum number of vehicles that can pass over a given section of a lane or roadway during a given time period under prevailing roadway and traffic conditions. It is the maximum rate of flow that has a reasonable expectation of occurring. Capacity is typically reported as an hourly volume. Level-of-Service for a roadway is related to speed and the volume/capacity ratio. Levels-of-Service for a roadway are defined in Table 5-1.

The Level-of-Service for the channels was estimated by first calculating the capacity of the channel as a function of its navigable width. Channel usage was simulated based upon statistics presented in Section 3. The usage simulation was then used to determine volume/capacity ratios within the Inner Channels throughout a typical and peak weekend day. The correlation between volume/capacity ratio and Level-of-Service developed in past boat traffic studies was assumed and evaluated for applicability.

**Table 6-1 – Levels-of-Service for Roadway and Traffic Conditions**

<b>SERVICE LEVEL</b>	<b>DESCRIPTION</b>
Level A - Free Flow	Low volumes and densities, high speeds. Drivers can maintain their desired speeds with little or no delay.
Level B - Stable Flow	Stable flow with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed. Suitable for rural design standards.
Level C - Stable Flow	Stable flow but speeds and maneuverability are more closely controlled by higher volumes. Suitable for urban design standards.
Level D - High Density Flow	Approaches unstable flow, tolerable operating speeds which are, however, considerably affected by operating conditions. Drivers have little freedom to maneuver.
Level E - Unstable Flow	Unstable flow with yet lower operating speeds and, perhaps, stoppages of momentary duration. Volumes at or near capacity.
Level F - Forced Flow	Forced flow, low volumes. Both speed and volumes can drop to zero. Stoppages may occur for short or long periods. These conditions usually result from queues of vehicles backing up from a restriction downstream.

## **6.2 Analysis of Harbor Traffic**

### **6.2.1 Channel Capacity**

The first step in estimating the current Levels-of-Service encountered in the Inner Channels was to estimate the capacity of the channel. For boat traffic analysis purposes, boat channel capacity is defined in analogous terms to roadway capacity. It is the maximum number of boats that can pass through a given segment of channel during a given time period under prevailing traffic conditions. It is the maximum rate of flow that has a reasonable expectation of occurring.

Approximation of one-way channel capacity must consider the following parameters:

1. Equivalent lane width – Since typical channels are not separated into individual “lanes” as on the highway, assumptions must be made regarding “equivalent lane width” and the fact that boats tend to follow the rules of the road and travel in lanes. Observations and review of other channel capacity studies indicate typical vessels will navigate in equivalent lanes approximately 50 feet wide. For the Dana Point Inner Channels, the design width changes from 200’ in the existing configuration to 160’ in the proposed configuration, excluding side-ties. This

results in the theoretical reduction of one lane of traffic. In practice, however, boaters will tend to adjust their lateral spacing to accommodate such changes up to the point that they must start making avoidance maneuvers.



**Figure 6-1 – Boats Traveling in Lanes Regardless of Width**

2. Average boat spacing – An average clear spacing between boats of 2.5 boat-lengths has been observed and corroborated with other boat channel capacity studies.
3. Average boat length and boat speed – Channel capacity, expressed in terms of boats per hour, is controlled by the average boat length and its speed. The larger the average vessel length, the lower the number of vessels that can traverse a given reach of channel for a given speed. Similarly, increased vessel velocity increases channel capacity. Table 6-2 tabulates the estimated one-way channel capacity in the channel for a range of average boat lengths and speeds.

**Table 6-2 – Channel Capacity Estimates**

AVG BOAT SPEED [KTS]	CHANNEL CAPACITY [BPH] AS FUNCTION OF AVERAGE BOAT LENGTH [FT]							
	25	30	35	40	45	50	55	60
3	209	174	149	130	116	104	95	87
4	278	232	199	174	155	139	126	116
5	348	290	248	217	193	174	158	145
6	417	348	298	261	232	209	190	174
7	487	406	348	304	270	243	221	203
8	556	464	397	348	309	278	253	232

As described, one-way traffic in the channels is based on a typical 50-foot wide equivalent lane and a minimum clear spacing between vessels of 2.5 vessel lengths. The average vessel length in the existing Harbor is 30 feet, and the average vessel length in the proposed layout is 34 feet. The average velocity is 5 knots. This results in a maximum traffic capacity per lane that ranges from 248 to 290 boats per hour.

**6.2.2 Level-of-Service Criteria**

Level-of-Service (LOS) criteria for boat channels are defined in terms of density, analogous to LOS analyses for two-lane and multilane highways. Density is a measure that quantifies the proximity to other boats in the channel. It expresses the degree of maneuverability within the channel.

LOS criteria for one-way channel traffic were approximated by using the same ratio of service level density to the density at flow capacity for multilane highway traffic and are summarized in Table 6-3. This assumption has been generally verified through model applications for a number of small craft harbors including Marina Del Rey, Channel Islands Harbor, and Huntington Harbor.

**Table 6-3 – Level-of-Service Criteria for One-Way Entrance Channel Traffic**

Level-of-Service (LOS)	Volume/Capacity Ratio
A	0 – 0.18
B	0.18 – 0.30
C	0.30 – 0.45
D	0.45 – 0.60
E	0.60 – 1.0

Table 6-3 gives the maximum volume/capacity (V/C) ratios that are expected to exist in traffic streams operating at the densities defined for each Level-of-Service under ideal conditions.

Level-of-Service A describes completely free flow conditions. Boat operations are virtually unaffected by the presence of other boats, and operations are constrained only by the geometric features of the channel and boater preferences. Boats are spaced at an average of 19 boat-lengths. The ability to maneuver within the traffic stream is high.



Minor disruptions to flow such as channel berthing operations are easily absorbed at this level without causing significant delays or queuing.

Level-of-Service B is also indicative of free flow, although the presence of other boats begins to be noticeable. Boats are spaced at an average of 12 boat-lengths. Minor disruptions are still easily absorbed at this level, although local deterioration in LOS will be more obvious.

Level-of-Service C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver within the channel is clearly affected by the presence of other boats. The average boat spacing is 8 boat-lengths. Minor disruptions may be expected to cause significant local deterioration in services, and queues may form behind any significant traffic disruption. Severe long-term disruptions may cause the channel to operate at LOS F.

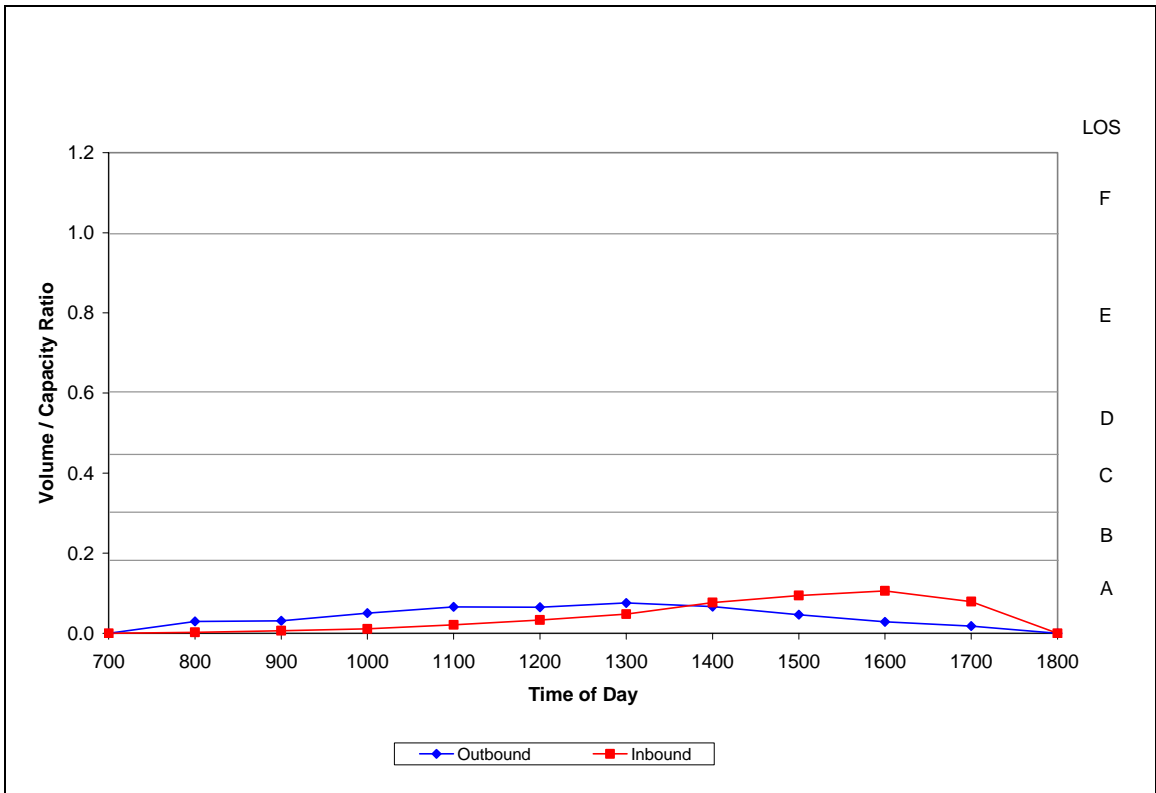
Level-of-Service D borders on unstable flow. Ability to maneuver is severely restricted due to traffic congestion. Average boat spacing is 6 boat-lengths. Only minor disruptions can be absorbed without the formation of queues and deterioration of service to LOS F.

Level-of-Service E represents operations at or near capacity, and is quite unstable. At capacity, boats are spaced at only 3.5 boat-lengths. This is the minimum spacing at which uniform flow can be maintained, and effectively defines a traffic stream with no usable gaps. Thus, disruptions cannot be damped or dissipated, and any disruption, no matter how minor, will cause queues to form and service to deteriorate to LOS F.

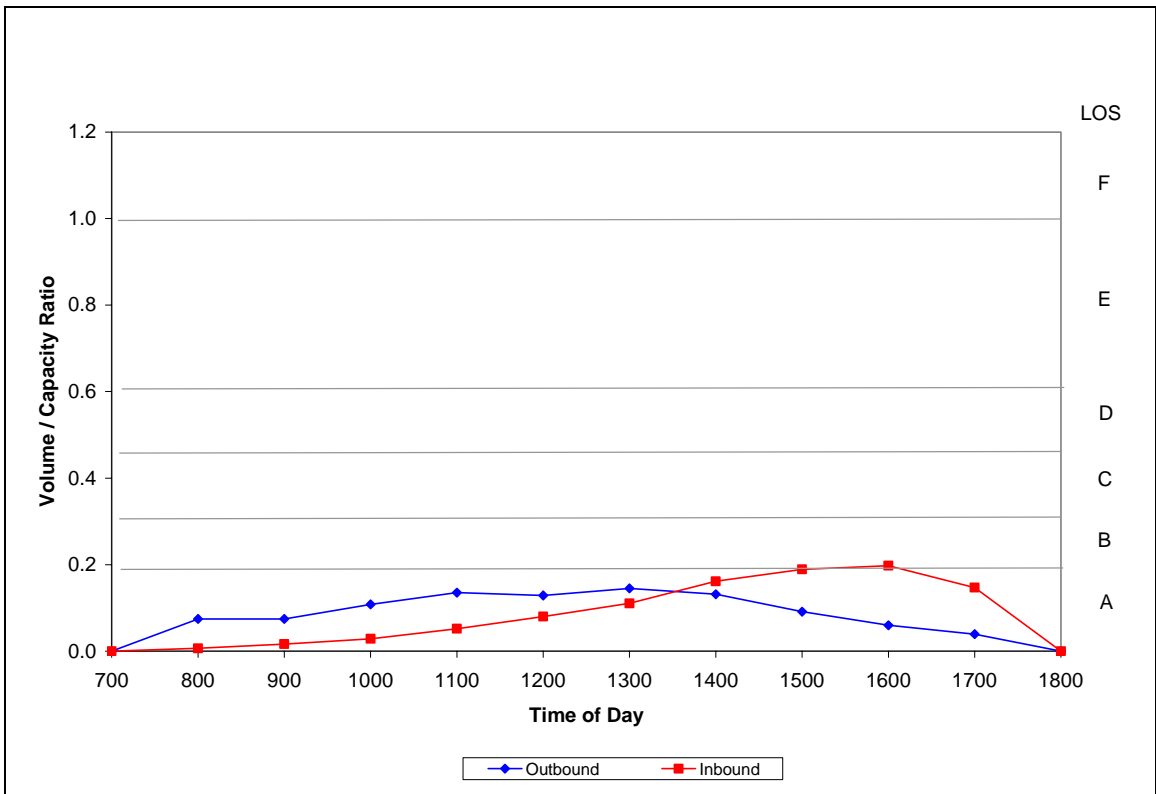
Level-of-Service F represents forced or breakdown flow. It occurs at a point where boats arrive at a rate greater than at which they are discharged. While operations at such points and on immediately downstream sections will appear to be at or above capacity, queues will form behind these breakdowns. Maximum boat spacing will be less than 3.5 boat-lengths.

### **6.2.3 Level-of-Service Base Results**

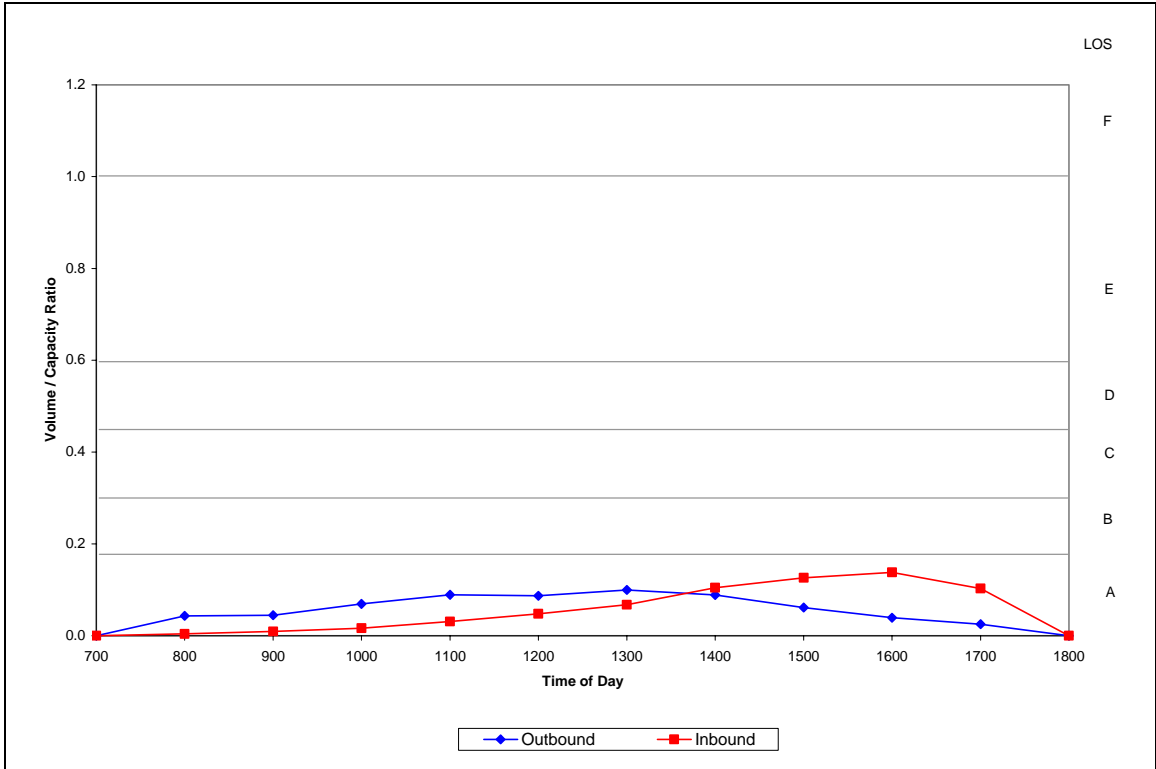
The boat traffic LOS model was run for existing traffic as well as the proposed Layout 2C.2 based on the traffic generated from Section 3 that represent normal summer weekend boating patterns. Figures 6-2 through 6-6 present graphical depictions of the results. The traffic for the East Basin has been increased by 20% of the West Basin powerboat traffic to reflect boats that pass under the bridge as opposed to going around to the Main Navigation Channel.



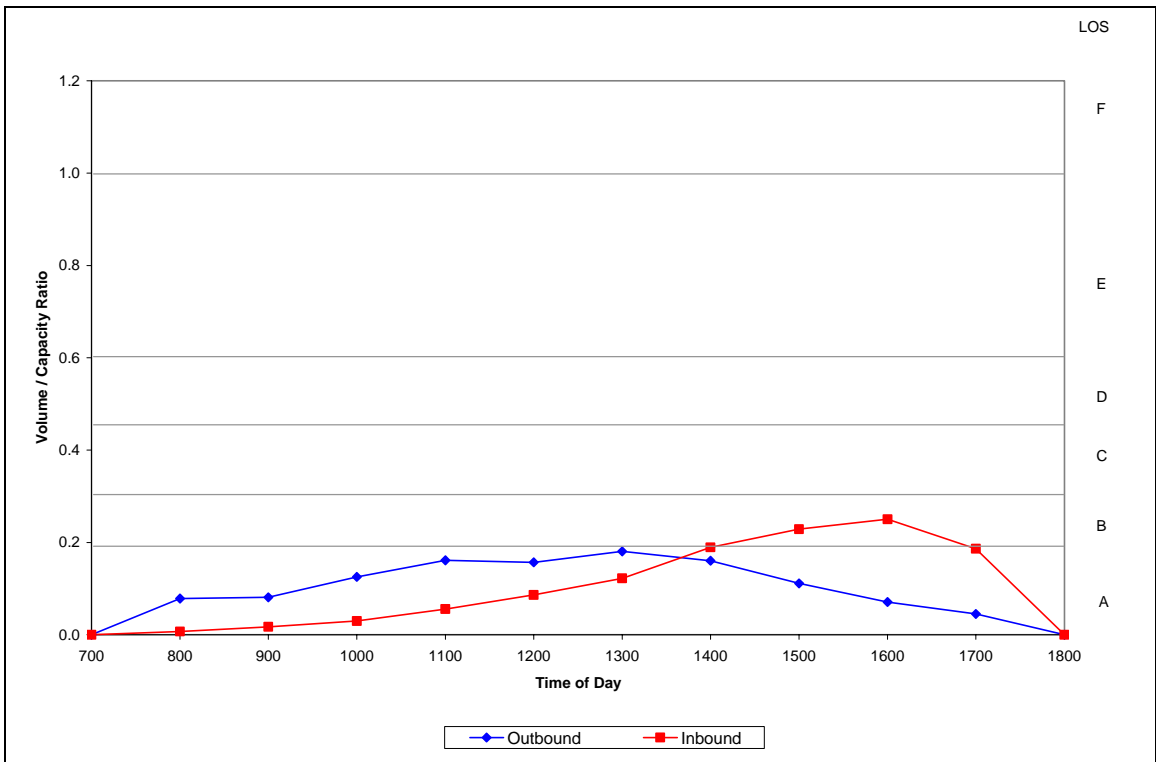
**Figure 6-2 – West Basin Existing Base Level-of-Service**



**Figure 6-3 – East Basin Existing Base Level-of-Service**



**Figure 6-4 – West Basin Proposed (2C.2) Base Level-of-Service**



**Figure 6-5 – East Basin Proposed (2C.2) Base Level-of-Service**

Table 6-4 presents a numerical look at the Volume to Capacity Ratio (V/C) and LOS for each basin, in each configuration, for the peak hour of traffic. In each case, the peak hour of traffic corresponds to the inbound flow at 1500-1600 hours, and lasts for one to two hours.

**Table 6-4 – Peak Hour Level-of-Service for Typical Summer Traffic Conditions**

FIGURE	DESCRIPTION	V/C	LOS	Duration (Hr)
6-2	West Basin - Existing	0.09	A	10
6-3	East Basin - Existing	0.20	B A	2 8
6-4	West Basin – Proposed Layout 2C.2	0.14	A	10
6-5	East Basin – Proposed Layout 2C.2	0.25	B A	4 6

These results indicate slight declines in the LOS for both the West and East Basins. The magnitude of these changes, however are considered to be inconsequential, so the net result would be considered “no change.”

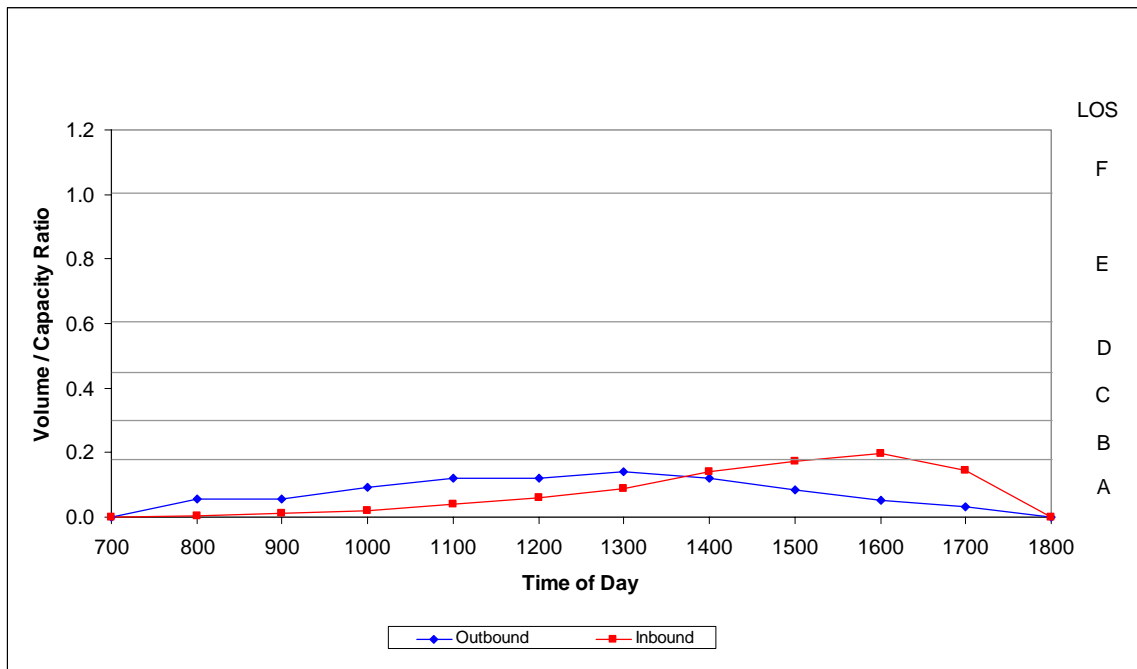
#### 6.2.4 Pitchfork Design

“Pitchfork” is the term used to describe finger piers that have their outboard docks aligned perpendicular to the Inner Channel direction. They play a significant role in traffic flow because boats are required to back in/out perpendicular to the Inner Channel flow, which requires more time and space than a boat transiting the same space and/or turning in to a fairway. Pitchfork boats modeled as the equivalent of two regular boats – one boat length for backing out/turning, and one boat length entering the main flow. This effectively doubles the number of boats from pitchfork docks in the traffic generation model. Table 6-5 presents the normalized (total length of pitchfork slips divided by the average length) number of pitchfork slips per basin, by configuration. (For example, in Layout 2C.2, the West Basin has 12 x 50’, 8 x 55’, and 12 x 60’ slips, for a total length of 1760’. This is the equivalent of  $1760/34 = 52$  “average boats”.)

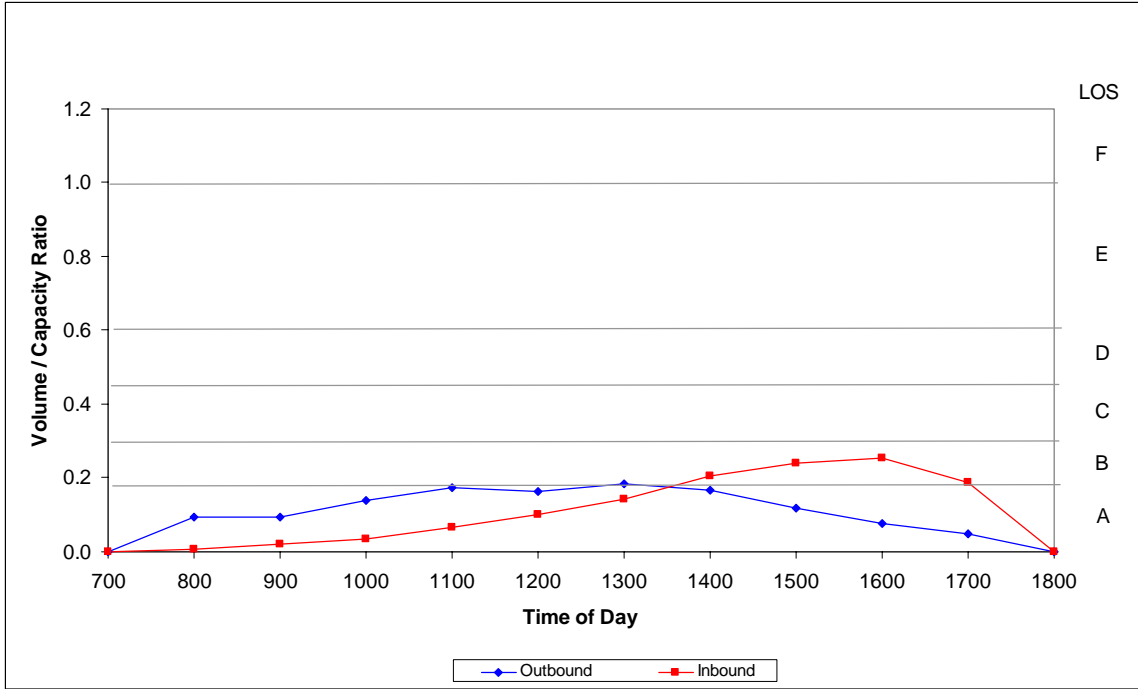
Figures 6-6 through 6-9 present the hourly V/C ratios and LOS results, and Table 6-9 presents a summary of the analysis. The results indicate that the LOS is inversely proportional to the number of pitchfork slips in the design. For the West Basin, the number of slips is decreased, resulting in a decreased V/C ratio and a corresponding increase in LOS. For the East Basin, the number of slips is increased, resulting in an increased V/C ratio and a corresponding decrease in LOS.

**Table 6-5 – Normalized Number of Pitchfork Slips**

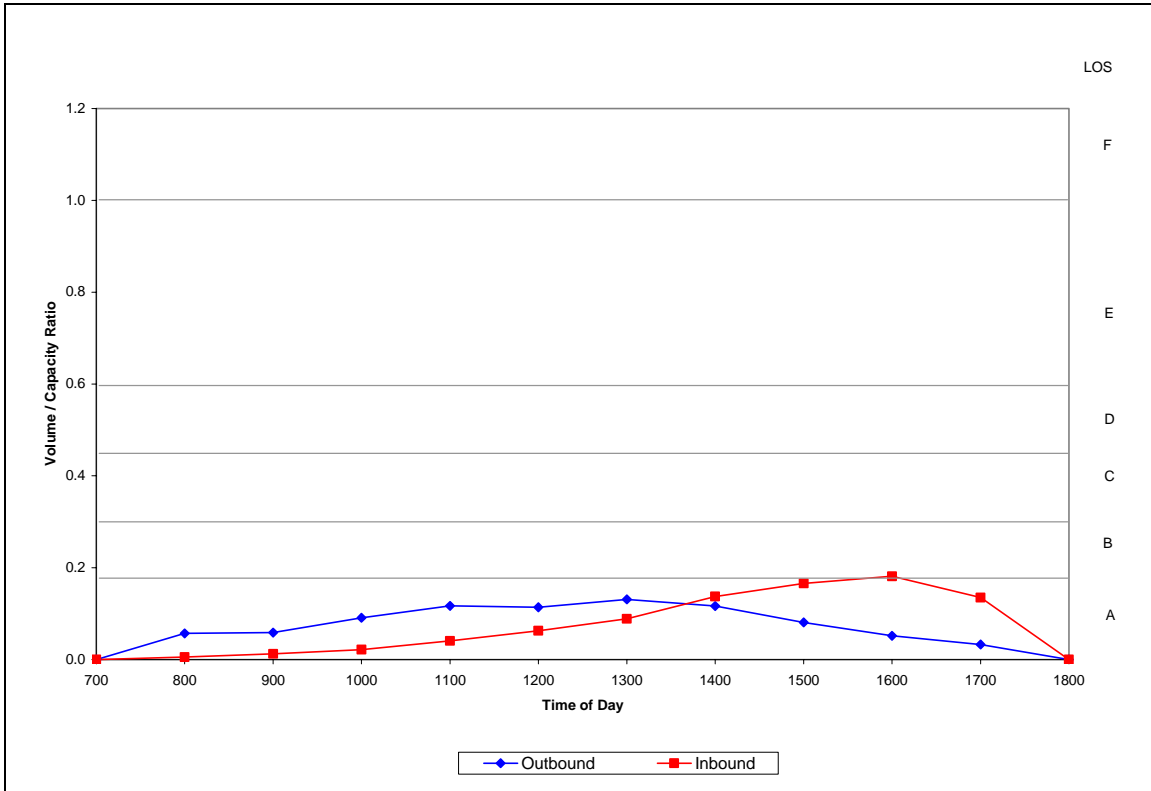
DESCRIPTION	# of PITCHFORK SLIPS
West Basin - Existing	148
East Basin - Existing	96
West Basin – Proposed Layout 2C.2	52
East Basin – Proposed Layout 2C.2	104



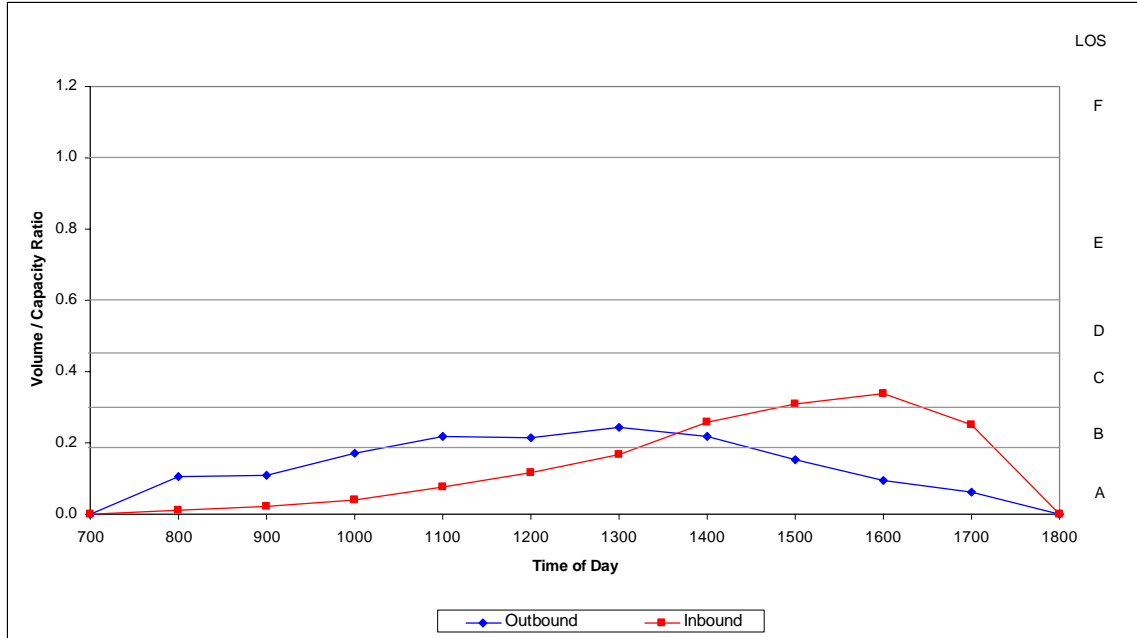
**Figure 6-6 – West Basin Existing Level-of-Service with Pitchfork Influence**



**Figure 6-7 – East Basin Existing Level-of-Service with Pitchfork Influence**



**Figure 6-8 – West Basin Proposed Level-of-Service with Pitchfork Influence**



**Figure 6-9 – East Basin Proposed Level-of-Service with Pitchfork Influence**

**Table 6-6 – Peak Hour Level-of-Service with Influence of Pitchfork Design**

DESCRIPTION	TYPICAL TRAFFIC			PITCHFORK INCREASE			
	V/C	LOS	Duration (Hr)	V/C	LOS	Duration (Hr)	
West Basin - Existing	0.09	A	10	0.20	B	1	
					A	2	
East Basin - Existing	0.20	B	2	0.25	B	5	
		A			8	A	5
West Basin – Proposed Layout 2C.2	0.14	A	10	0.18	B	1	
					A	9	
East Basin – Proposed Layout 2C.2	0.25	B	4	0.34	C	2	
		A			6	B	5
						A	3

### 6.3 Boat Traffic Impacts – Sensitivity Analyses

The following sections summarize impacts to Inner Channel boat traffic associated with variations in key traffic generation assumptions including:

- Peak holiday weekend traffic;
- Average vessel speed and length;
- Influence of kayaks, PWCs and other small Day-Use vessels.

The impacts are evaluated based on the peak hour Level-of-Service with pitchfork influence as presented in Table 6-6.

#### 6.3.1 Sensitivity to Peak Holiday Weekend Traffic

Sensitivity of traffic conditions for the proposed marina to a 25 percent increase above typical summer weekend levels to represent peak summer Holiday weekend conditions was also investigated. Holiday traffic conditions are known causes of surges in boat traffic conditions, and users tend to be more tolerant of congestion during these few peak summer Holiday weekends. The results are also summarized in Table 6-7.

The results indicate that the proposed 2C.2 Layout improves the peak holiday traffic LOS in the West Basin, but decreases the peak holiday traffic LOS in the East Basin. A LOS level “C”, for 5 hours on a holiday weekend is very acceptable because a majority of boaters recognize that there is going to be holiday traffic and either modify their schedule or increase their tolerance level for slow-downs.

**Table 6-7 – Peak Hour Level-of-Service for Peak Holiday Traffic Conditions**

DESCRIPTION	PEAK HOLIDAY		
	V/C	LOS	Duration (Hr)
West Basin - Existing	0.24	B	3
		A	7
East Basin - Existing	0.32	C	3
		B	5
		A	3
West Basin – Proposed Layout 2C.2	0.23	B	2
		A	8
East Basin – Proposed Layout 2C.2	0.42	C	5
		B	3
		A	2



### 6.3.2 Sensitivity to Average Boat Speed and Spacing

As discussed in Section 6.3.1, assumptions are also required in the traffic model for average boat length and speed, since these directly affect the channel traffic capacity. Table 6-8 summarizes the impacts to volume capacity ratio and LOS associated with increasing the average spacing from 2.5 to 3 boat lengths, reducing the average boat speed from 5 knots to 4 knots, and combining the spacing increase and speed decrease for the proposed East Basin (highest V/C). The results indicate sensitivity to the spacing and speed length assumptions that would be noticeable to the average boater if combined. The impact of these assumptions for the comparison of configurations can be minimized by using the same criteria for the existing and proposed layouts.

**Table 6-8 – Sensitivity to Average Boat Speed and Length Peak Hour Level-of-Service**

DESCRIPTION	TYPICAL TRAFFIC			LENGTH/SPEED IMPACT		
	V/C	LOS	Duration (Hr)	V/C	LOS	Duration (Hr)
East Basin – Proposed 3.0 Boat Length Spacing	0.34	C	2	0.39	C	2
		B	5		B	6
		A	3		A	2
East Basin – Proposed 4 Knot Average Speed	0.34	C	2	0.42	C	5
		B	5		B	2
		A	3		A	2
East Basin – Proposed 3.0 Boat Length Spacing & 4 Knot Average Speed	0.34	C	2	0.48	D	1
		B	5		C	6
		A	3		B	1
					A	2

## 6.4 Boat Traffic Impacts – Additional Issues

There are several additional factors that influence the boat traffic in the Dana Point Harbor. The most significant of which is the frequent use of the Harbor by small Day-Use Vessels.

### 6.4.1 Small Day-Use Vessel Influences

From conversations with the Harbor Patrol and other users, these small Day-Use vessels tend to stay to the edges of the Inner Channels when there are significant boats present. This situation can be simulated with the model by assuming that the small Day-Use vessels take up half of a potential traffic lane on each side of the channel, effectively reducing the total number of traffic lanes by one. The results indicate that the presence of small Day-Use Vessels within the Harbor has a significant influence on the modeled traffic patterns, and that the proposed Layout 2C.2 is better able to absorb the lane reduction and maintain the LOS in the West Basin but not in the East Basin. This is consistent with the results of the interviews with the Harbor users. Figure 6-10 presents an example of congestion caused by small Day-Use vessels in the channel.

**Table 6-9 – Peak Hour Level-of-Service with Small Day-Use Vessels Occupying One Lane of Traffic**

DESCRIPTION	TYPICAL TRAFFIC			LOSS OF ONE LANE		
	V/C	LOS	Duration (Hr)	V/C	LOS	Duration (Hr)
West Basin - Existing	0.20	B	1	0.27	B	5
		A	2		A	5
East Basin - Existing	0.25	B	5	0.35	C	2
		A	5		B	6
					A	2
West Basin – Proposed Layout 2C.2	0.18	B	1	0.27	B	5
		A	9		A	5
East Basin – Proposed Layout 2C.2	0.34	C	2	0.51	D	2
		B	5		C	5
		A	3		B	1
					A	2



**Figure 6-10 – East Basin Crowding**

### 6.4.2 Bridge Area

There is an additional area of encroachment on the channel planned for the area near the bridge. This additional encroachment results in a reduction of the channel width; however this is offset by the reduced traffic generation near the bridge. (This is due to the fact that there are only 5-6 finger channels in each basin adjacent to the reduced area, there is limited bridge through traffic and there are limited numbers of “cruising boats” that circulate through the bridge.) The results appear in Table 6-10 and indicate that this area has a low V/C ratio and a very high LOS, equal to or better than the typical traffic case for the rest of the channel.

**Table 6-10 – Peak Hour Level-of-Service with Influence of Channel Narrowing at Bridge**

DESCRIPTION	CHANNEL NARROWING		
	V/C	LOS	Duration (Hr)
West Basin – Existing	0.20	B	1
		A	2
East Basin – Existing	0.25	B	5
		A	5
West Basin – Proposed Layout 2C.2	0.19	B	1
		A	9
East Basin – Proposed Layout 2C.2	0.19	B	1
		A	9

### 6.4.3 Boat Parades, Etc.

During the Holiday season, there are several boat parades that utilize the main channels with an unusually high number of boats. It is understood that this is a special occasion where the speeds are probably reduced and the navigation proceeds in an orderly, linear manner with no cross-traffic. The reduction in the navigable width of the channels near the bridge may require that the larger boats turn around before reaching the constriction, however this is not considered to be a significant impact since the channel is shallower in this area and it would be prudent for the larger boats to be turning anyway.

## 7.0 MITIGATION MEASURES

The findings of this boat traffic study indicate that in general, there are presently very limited boat traffic issues in the Dana Point Harbor, and that the new “2C.2 Layout with Channel Encroachment” configuration will not cause significant changes. The following provides a list of potential mitigation measures that could effectively reduce or eliminate any perceived negative impacts of Inner Channel encroachment.

1. As seen from the results of the interviews and the traffic sensitivity study, small Day-Use vessels operations within the Harbor can be one of the larger influences on traffic flow. It should be recalled that a harbor is designed as a safe haven to “park” and store boats in the water. The design intent never included using the Inner Channels as recreational areas, as evidenced by the existing (albeit not enforced) statute that prohibits using the Inner Channels for recreational activities. If the Harbor Patrol recognizes that these recreational uses are interfering with the primary function of the Harbor, then they may need to start enforcing this statute. Individual education for day rental kayakers may be required as they tend to be less aware of typical boating considerations than more experienced operators.
2. The Harbor Patrol is presently enforcing and maintaining a “slow speed/no wake” environment within the Harbor, which should continue for safety reasons. However; the speeds in the Inner Channel need to be maintained at a steady rate of 4-5 knots to maintain flow and steerage. There should be no stopping in the main channel in high traffic conditions except to back into a pitchfork slip. An active harbor patrol is the most effective tool for traffic control in a harbor.
3. In addition to enforcement activities, an effective mitigation measure for potential traffic congestion is to educate new and existing boaters on rules of the road and boating etiquette. Educating boaters about the wide range of harbor users and their usage patterns and characteristics should be an important element of the program. In addition, all boats leaving the fairways and entering the Inner Channel should be instructed to come to a stop before proceeding to merge in to the channel. This is especially important at the locations with “pitchfork” docks where visibility, especially of kayaks, may be reduced.
4. Signage can also be an effective educational tool, cautioning boaters to be aware of both traffic and ocean conditions before leaving the Harbor.
5. If multi-hull vessels are allowed to occupy end ties within the Harbor, their location and width should be carefully considered in order to minimize impacts to boat traffic through the Inner Channel.
6. Larger boats in the boat parades should be skippered by professional crew and there may be a need to buoy the areas near the bridge to direct and allow the vessel turn-around area to be placed at the maximum width of the channel, some distance from the bridge. The boat speed in the parade should be reduced from

the assumed daily average of 5 knots and the parades should be overseen by the Harbor Patrol.

## 8.0 SUMMARY AND CONCLUSIONS

This study presents an evaluation of the existing and proposed future boat traffic issues at the Dana Point Harbor. The following summarizes the general findings and study conclusions.

1. The existing Inner Channel has a design width of approximately 200' from dock to dock, but an effective navigable width of approximately 180' feet due to the side-tie boats at the ends of many of the docks.
2. In certain areas, the navigable width of the East Basin Inner Channel is approximately 160' due to a side-tied catamaran.
3. On-site observations of boat traffic on a typical summer weekend indicate that:
  - Daily usage levels were less than historical trends.
  - Hourly usage patterns were similar to historical trends.
  - Power boat usage is double sailboat usage.
  - Sailboats under sail represent <1% of the total traffic.
  - 20% of the powerboats in the West Basin pass through the bridge and East Basin.
  - Small Day-Use vessels represent 44% of the total watercraft observed.
4. The proposed layout would reduce the existing design width of the channel to 160' (150' with the inclusion of a 5ft boat overhang on both sides of the channel) over the majority of both basins and would reduce it to just under 95' near the bridge.
5. The highest rate of traffic is typically inbound in the late afternoon.
6. Interviews with Harbor users do not indicate traffic congestion problems and there is little change anticipated if the layout is changed and the Inner Channels are narrowed. The major factors that influence congestion are kayakers, PWCs, uneducated boaters, and total boat count.
7. Perceptions of boat traffic and congestion can be influenced by isolated events such as a poorly operated vessel, speeding boats, loss of power/steering, or an unorganized group of kayakers or PWCs, which can crowd a channel and reduce maneuverability. The intent of the modeling is not to try and quantify discrete events but to evaluate the over-all, long term statistical traffic and potential congestion issues relative to the change in marina slip count and configuration.
8. Presently the Dana Point Harbor Inner Channels have no significant traffic congestion problems.

9. A Level-of-Service (LOS) boat traffic analysis was applied to help quantify the impacts of the proposed change to Layout 2C.2. The model corroborates the general consensus that there is no present Inner Channel congestion, and there will be no significant change in the new configuration on a regular basis. Typical LOS values ranged from A to B, and none exceed a LOS of more than C for a few hours on a weekend day. This is considered to be a very high service level average for typical marinas.
10. The influence of the “pitchfork” slips at the end of the docks is significant. In the West Basin, there is a reduction in the equivalent number of slips and an increase in service level with the proposed configuration. In the East Basin there is an increase in the number of equivalent slips, and a small decrease in the LOS in the new configuration.
11. The results indicate that the proposed 2C.2 Layout improves the peak holiday traffic LOS in the West Basin, but decreases the peak holiday traffic LOS in the East Basin. A LOS value of “C”, for 5 hours on a holiday weekend is very acceptable because a majority of boaters recognize that there is going to be holiday traffic and either modify their schedule or increase their tolerance for slow-downs.
12. Average boat spacing and length assumptions in the model have the potential to influence the ultimate LOS for the basins. The results indicate sensitivity to the spacing and speed length assumptions that would be noticeable to the average boater if combined. The impact of these assumptions for the comparison of configurations can be minimized by using the same criteria for the existing and proposed layouts.
13. Small Day-Use vessels have the potential for reducing the LOS and causing congestion for the existing and proposed marina layouts. The results indicate that the presence of small Day-Use vessels within the Harbor has a significant influence on the modeled traffic patterns, and that the proposed 2C.2 Layout is better able to absorb the lane reduction and maintain the LOS in the West Basin but not in the East Basin. Managing this traffic should be a priority for the Harbor Patrol to maintain an acceptable LOS.
14. The reduction of navigable width at the bridge has little impact on the channel LOS.
15. Boat Parades represent special events and should be monitored by the Harbor Patrol for speed and maintenance of linear traffic. Larger boats may need to turn around before the channel constriction area due to turning radius and depth considerations.
16. The findings of the modeling study are consistent with the on-site observations and those of the Harbor users and Harbor Patrol.

17. Mitigation measures for potential impacts include increased enforcement of present statues as required and additional boater education.



**APPENDIX D**  
**AIR QUALITY ANALYSIS**

# AIR QUALITY ANALYSIS

DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

DANA POINT, CALIFORNIA

LSA

June 2010

# AIR QUALITY ANALYSIS

DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

DANA POINT, CALIFORNIA

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LSA

June 2010

## TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY .....	1
2.0 PROJECT DESCRIPTION .....	2
PROJECT LOCATION .....	2
PROPOSED PROJECT COMPONENTS .....	2
3.0 SETTING .....	6
3.1 EXISTING ENVIRONMENTAL SETTING .....	6
3.2 LOCAL AIR QUALITY .....	15
3.3 REGULATORY SETTINGS .....	15
3.4 REGIONAL AIR QUALITY PLANNING FRAMEWORK .....	20
4.0 METHODOLOGY .....	22
4.1 THRESHOLDS OF SIGNIFICANCE .....	22
5.0 IMPACTS .....	30
5.1 CONSTRUCTION IMPACTS .....	30
5.2 LONG-TERM PROJECT-RELATED EMISSIONS IMPACTS .....	31
5.3 LOCALIZED SIGNIFICANCE .....	31
5.4 AIR QUALITY MANAGEMENT PLAN CONSISTENCY .....	32
5.5 AIR QUALITY CUMULATIVE IMPACTS .....	32
5.6 STANDARD CONDITIONS .....	35
5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION .....	37
6.0 REFERENCES .....	38

## APPENDIX

A: CONSTRUCTION EMISSIONS WORKSHEETS

## FIGURES AND TABLES

### FIGURES

Figure 1: Project Location .....	3
Figure 2: Existing Harbor Layout.....	4
Figure 3: Proposed Harbor Layout.....	5

### TABLES

Table A: Ambient Air Quality Standards.....	7
Table B: Summary of Health Effects of the Major Criteria Air Pollutants.....	9
Table C: California GHG Emissions – Current and Projected (MMTCO <sub>2</sub> E).....	13
Table D: Attainment Status of Criteria Pollutants in the South Coast Air Basin.....	13
Table E: Ambient Air Quality in the Project Vicinity.....	16
Table F: Peak Day Construction Emissions by Sub-Phase.....	31
Table G: Summary of Construction Emissions Localized Significance.....	32

## 1.0 EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained to prepare an air quality study for the proposed Dana Point Harbor Marina Improvement Project, located in the City of Dana Point (City) in Orange County (County), California.

The air quality study provides a discussion of the proposed Project, the physical setting of the Project area, and the regulatory framework for air quality. The report provides data on existing air quality, evaluates potential air quality impacts associated with the proposed Project, and identifies mitigation measures recommended for potentially significant impacts.

Emissions generated during construction of the proposed Project would exceed the South Coast Air Quality Management District's (SCAQMD) reactive organic compounds (ROC) and oxides of nitrogen (NO<sub>x</sub>) thresholds. Compliance with the SCAQMD Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions. However, these emissions would remain significant and unavoidable.

The proposed Project would not result in any long-term on-site stationary sources and would have a minimal change in the off-site vehicle trips. The Project's air quality impact would be less than significant because there would be no increase in stationary or mobile source emissions. Historical air quality data show that existing carbon monoxide (CO) levels for the Project area and the general vicinity do not exceed either the State or federal ambient air quality standards. Because the proposed Project would have a minimal change in off-site vehicle trips, no significant CO contributions would occur in the Project vicinity.

The localized significance analysis shows no significant impacts during construction or operations.

The potential of the project to affect global climate change are also included. Short-term construction and long-term operational emissions of the principal greenhouse gases, including carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>), are quantified, and significance relative to Assembly Bill (AB) 32 is discussed.

The evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SCAQMD CEQA Air Quality Handbook.

## 2.0 PROJECT DESCRIPTION

### PROJECT LOCATION

Dana Point Harbor, constructed between 1966 and 1970, is located in the City of Dana Point, Orange County, California about 40 miles south of Long Beach/Los Angeles Harbors (Figure 1). It lies in the lee (protected side) of Dana Point Headlands within Capistrano Bay and is also protected by a 1.7 mile long and 14 to 18 feet high breakwater. Harbor channel widths vary from 350 feet in the anchorage areas to 600 feet at the Harbor entrance (Wiegel, 1993). The Harbor is subject to in-filling of sands that migrate through the quarry rock-breakwater requiring periodic maintenance dredging to maintain safe water depths. The Marina within Dana Point Harbor is divided into two basins, the East Basin and West Basin (Figure 2). Each basin operates as a separate Marina, with a total capacity of about 2,400 shallow-draft vessels. The boat launch ramp at the northeast corner of the Harbor is newly upgraded as of July 2007. Other facilities within the Harbor include the Dana Point Marine Institute, a dry boat storage hoist, fishing pier, shipyard, marine fuel dock, three yacht clubs, and a commercial sports fishing operation. Swimming is allowed at the west end of the Harbor at Baby Beach.<sup>1</sup>

### PROPOSED PROJECT COMPONENTS

The proposed Dana Point Harbor Marina Improvement Project includes replacement of docks and slip facilities in the West and East Marinas, connection of dock gangways with the quay wall and bulkheads within those basins, and replacement of gangways and security gates to both Marina areas. Additionally, new Dry Stack Storage Staging docks and dinghy docks, along with renovations to the Marine Services docks, Orange County Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. In order to accommodate displaced boats during Project implementation a temporary dock near the breakwater next to Doheny State Beach is included in the Project (Figure 3). The number of boat slips will decrease from 2,409 to 2,293. In addition, the proposed Marina Improvement Project includes the addition of Americans with Disabilities Act (ADA) access at gangways where it currently is not available. This report specifically addresses waterside, or Marina, improvements to the Dana Point Harbor.

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<sup>1</sup> <http://www.ocparks.com/danapointharbor>.

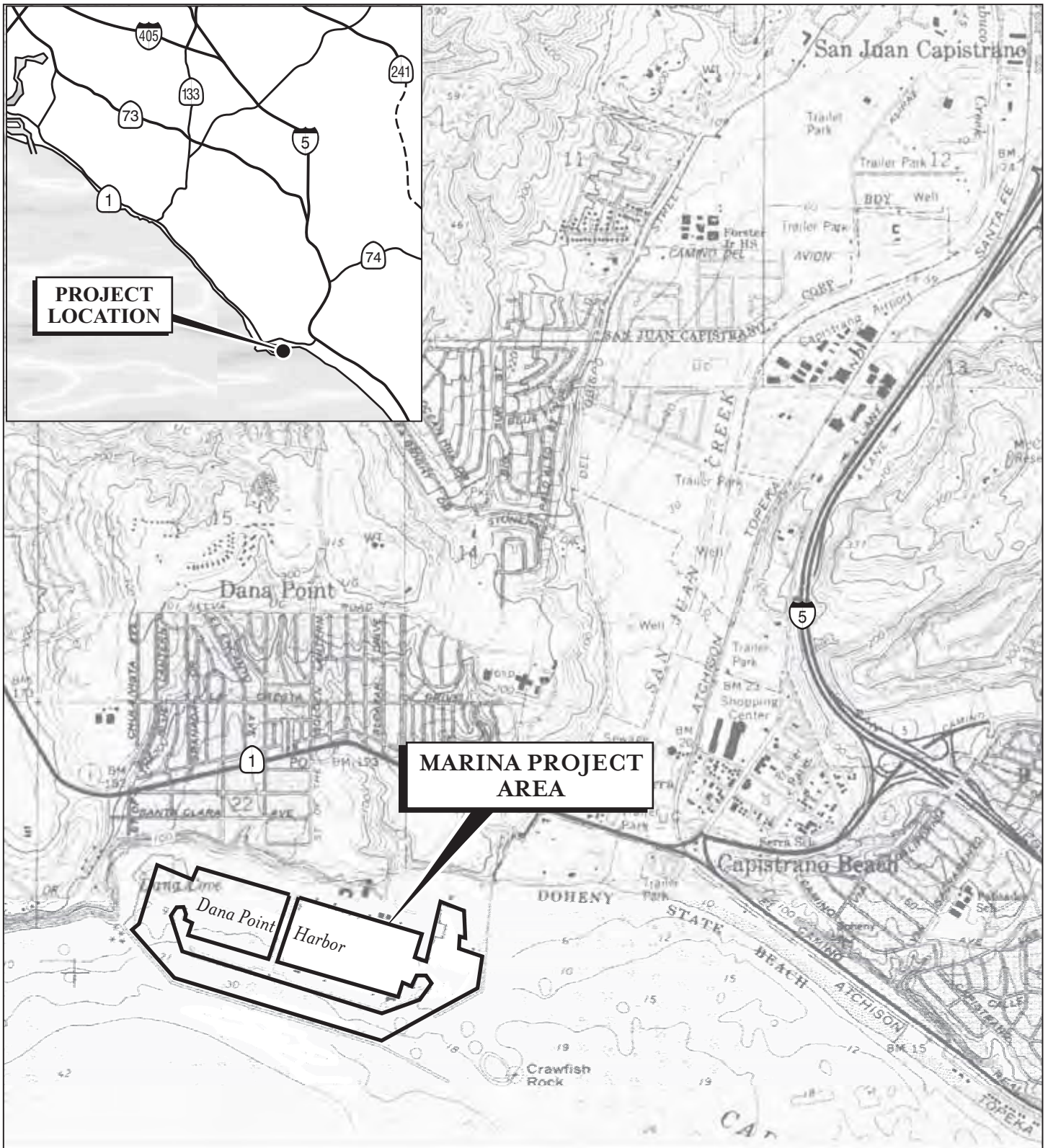
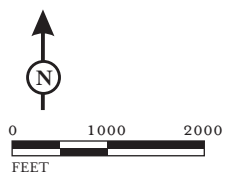


FIGURE 1

LSA



SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif."

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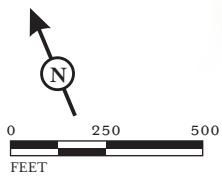
Dana Point Harbor Marina Improvement Project  
Project Location





FIGURE 2

LSA



LEGEND

- Boundary
- Planning Areas
- Commercial Core Project Area  
(Construction-Level Analysis Analyzed in Certified Final EIR 591)
- Marina Improvement Project Area  
(Proposed Project Construction-Level Analysis)

Dana Point Harbor Marina Improvement Project

Existing Harbor Layout

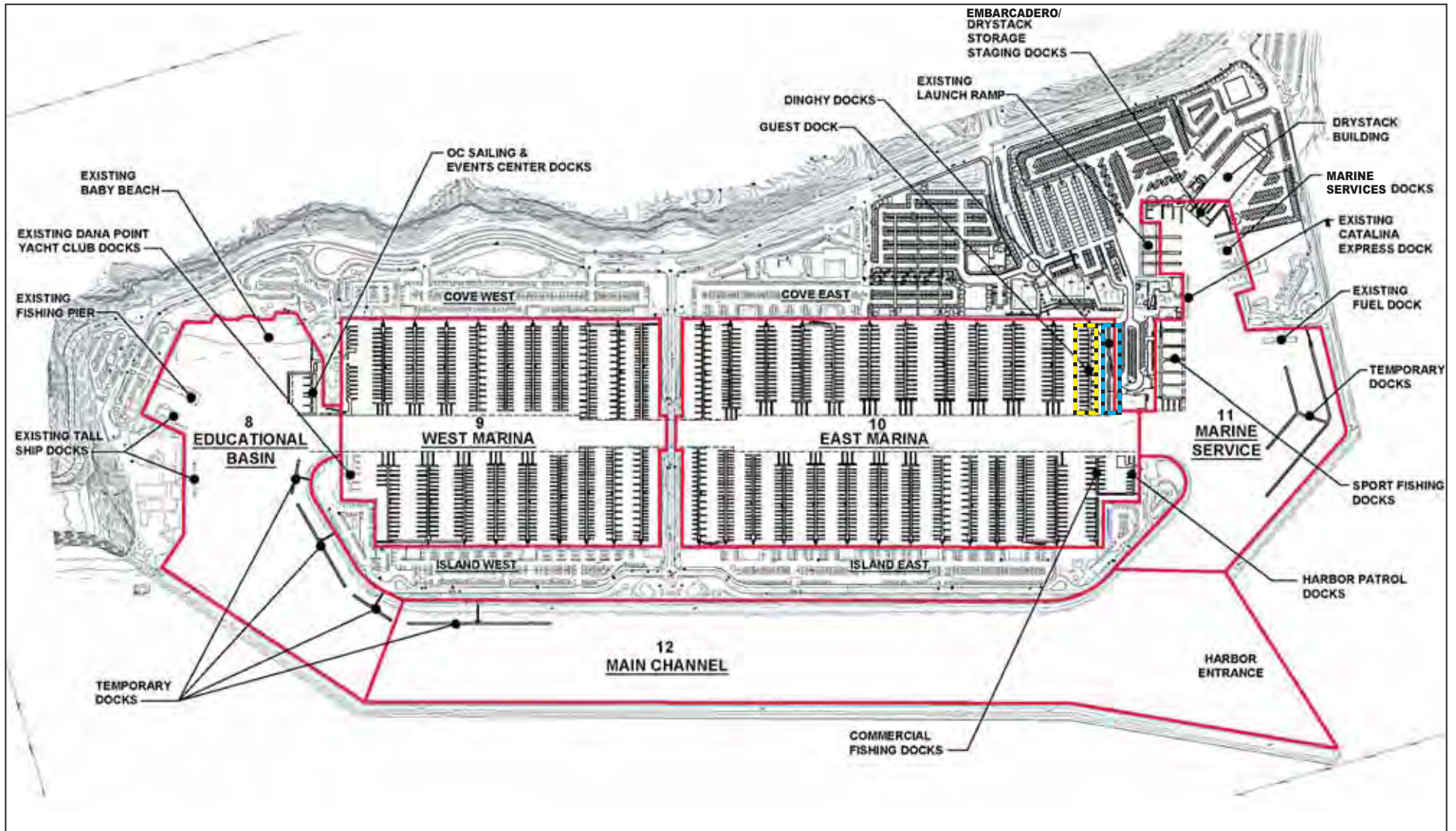
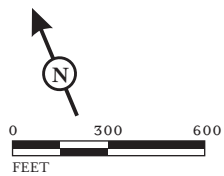


FIGURE 3

LSA



**LEGEND**

- Marina Improvement Project Area
- - - Dinghy Docks
- - - Guest Dock

**NOTE:** Landslide areas are shown in accordance with the Dana Point Harbor Revitalization Plan and District Regulations Land Use Plan.

*Dana Point Harbor Marina Improvement Project*

*Proposed Harbor Layout*

SOURCE: URS Corp.

I:\CAE0601\G\Technical Report Figures\FIG-3.cdr (06/12/08)

## 3.0 SETTING

### 3.1 EXISTING ENVIRONMENTAL SETTING

The Project site is located within Orange County, which is part of the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The air quality assessment for the proposed Project includes estimating emissions associated with short-term construction and long-term operation of the proposed Project.

A number of air quality modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analyses. The SCAQMD's current guidelines, CEQA Air Quality Handbook, 1993, were adhered to in the assessment of air quality impacts for the proposed Project.

#### 3.1.1 Regional Air Quality

Both the State of California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. As shown in Table A, these pollutants include ozone (O<sub>3</sub>), CO, nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to setting out primary and secondary AAQS, the State has established a set of episode criteria for O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. An alert level is that concentration of pollutants at which initial stage control actions are to begin. For this Project area, SCAQMD Rule 701 applies. An alert will be declared when any one of the pollutant alert levels is reached at any monitoring site and meteorological conditions are such that the pollutant concentrations can be expected to remain at these levels for 12 or more hours or to increase; or, in the case of oxidants, the situation is likely to recur within the next 24 hours unless control actions are taken.

**Table A: Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>1</sup>		Federal Standards <sup>2</sup>			
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>	
Ozone (O <sub>3</sub> )	1-Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry	
	8-Hour	0.07 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )			
Respirable Particulate Matter (PM <sub>10</sub> )	24-Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		--			
Fine Particulate Matter (PM <sub>2.5</sub> )	24-Hour	No Separate State Standard		35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	15 µg/m <sup>3</sup>			
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m <sup>3</sup> )	None	Non-Dispersive Infrared Photometry (NDIR)	
	1-Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm(40 mg/m <sup>3</sup> )			
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—			—
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>8</sup>	Annual Arithmetic Mean	0.030 ppm (56 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence	
	1-Hour	0.18 ppm (338 µg/m <sup>3</sup> )		0.100 ppm			None
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m <sup>3</sup> )	—	Spectrophotometry (Pararosaniline Method)	
	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (365 µg/m <sup>3</sup> )			
	3-Hour	—		—			0.5 ppm (1300 µg/m <sup>3</sup> )
	1-Hour	0.25 ppm (655 µg/m <sup>3</sup> )		—			—
Lead <sup>9</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	Same as Primary Standard	High-Volume Sampler and Atomic Absorption	
	Calendar Quarter	—		1.5 µg/m <sup>3</sup>			
	Rolling 3- Month Average <sup>10</sup>	—		0.15 µg/m <sup>3</sup>			
Visibility- Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		<b>No Federal Standards</b>			
Sulfates	24-Hour	25 µg/m <sup>3</sup>	Ion Chromatography				
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence				
Vinyl Chloride <sup>9</sup>	24-Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography				

Source: California Air Resources Board, February 16, 2010.

Table footnotes are provided on the following page.

Footnotes:

- <sup>1</sup> California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1- and 24-hour); nitrogen dioxide; suspended particulate matter - PM<sub>10</sub>, PM<sub>2.5</sub> and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- <sup>2</sup> National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.
- <sup>3</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- <sup>4</sup> Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- <sup>5</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- <sup>6</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- <sup>7</sup> Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
- <sup>8</sup> To attain this standard, the 3-year average of the 98<sup>th</sup> percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).
- <sup>9</sup> The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- <sup>10</sup> National lead standard, rolling 3-month average: final rule signed October 15, 2008.

°C = degrees Celsius

EPA = United States Environmental Protection Agency

µg/m<sup>3</sup> = micrograms per cubic meter

mg/m<sup>3</sup> = milligrams per cubic meter

ppm = parts per million

Pollutant alert levels:<sup>1</sup>

- O<sub>3</sub>: 392 micrograms per cubic meter (µg/m<sup>3</sup>) (0.20 part per million [ppm]), 1-hour average
- CO: 45 milligrams per cubic meter (mg/m<sup>3</sup>) (40 ppm), 1-hour average; 17 mg/m<sup>3</sup> (15 ppm), 8-hour average
- NO<sub>2</sub>: 1,130 µg/m<sup>3</sup> (0.6 ppm), 1-hour average; 282 µg/m<sup>3</sup> (0.15 ppm), 24-hour average
- SO<sub>2</sub>: 1,310 µg/m<sup>3</sup> (0.5 ppm), 1-hour average; 525 µg/m<sup>3</sup> (0.2 ppm), 24-hour average
- Particulates, measured as PM<sub>10</sub>: 350 µg/m<sup>3</sup>, 24-hour average

Table B lists the primary health effects and sources of common air pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these health effects will not occur unless the standards are exceeded by a large margin or for a prolonged period of time. State AAQS are more stringent than federal AAQS. Among the pollutants, O<sub>3</sub> and particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) are considered regional pollutants, while the others have more localized effects.

**Table B: Summary of Health Effects of the Major Criteria Air Pollutants**

Pollutant	Health Effects	Examples of Sources
Particulate matter (PM <sub>2.5</sub> and PM <sub>10</sub> – less than or equal to 2.5 or 10 microns, respectively)	<ul style="list-style-type: none"> <li>• Hospitalizations for worsened heart diseases</li> <li>• Emergency room visits for asthma</li> <li>• Premature death</li> </ul>	<ul style="list-style-type: none"> <li>• Cars and trucks (especially diesels)</li> <li>• Fireplaces, woodstoves</li> <li>• Windblown dust from roadways, agriculture and construction</li> </ul>
Ozone (O <sub>3</sub> )	<ul style="list-style-type: none"> <li>• Cough, chest tightness</li> <li>• Difficulty taking a deep breath</li> <li>• Worsened asthma symptoms</li> <li>• Lung inflammation</li> </ul>	<ul style="list-style-type: none"> <li>• Precursor sources<sup>1</sup>: motor vehicles, industrial emissions, and consumer products</li> </ul>
Carbon monoxide (CO)	<ul style="list-style-type: none"> <li>• Chest pain in heart patients<sup>2</sup></li> <li>• Headaches, nausea<sup>2</sup></li> <li>• Reduced mental alertness<sup>2</sup></li> <li>• Death at very high levels<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves</li> </ul>
Nitrogen dioxide (NO <sub>2</sub> )	<ul style="list-style-type: none"> <li>• Increased response to allergens</li> </ul>	<ul style="list-style-type: none"> <li>• See carbon monoxide sources</li> </ul>
Toxic air contaminants	<ul style="list-style-type: none"> <li>• Cancer</li> <li>• Chronic eye, lung or skin irritation</li> <li>• Neurological and reproductive disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Cars and trucks (especially diesels)</li> <li>• Industrial sources, such as chrome platers</li> <li>• Neighborhood businesses, such as dry cleaners and service stations</li> <li>• Building materials and products</li> </ul>

Source: California Air Resources Board, 2010, website: <http://www.arb.ca.gov/research/health/fs/fs1/fs1.htm>.

<sup>1</sup> Ozone is not generated directly by these sources. Rather, chemicals emitted by these precursor sources react with sunlight to form ozone in the atmosphere.

<sup>2</sup> Health effects from CO exposures occur at levels considerably higher than ambient.

<sup>1</sup> SCAQMD Rule 701, Attachment 2.

The California Clean Air Act (CCAA) provides the SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. Examples of this would be the motor vehicles at an intersection, a mall, and on highways. The SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by ARB.

**Climate/Meteorology.** Air quality in the planning area is not only affected by various emission sources (mobile, industry, etc.), but is also affected by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the SCAB the worst air pollution problem in the nation.

Climate in the SCAB is determined by its terrain and geographical location. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the SCAB. The SCAB lies in the semipermanent high pressure zone of the eastern Pacific; the resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, or Santa Ana wind conditions do occur.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site is the Laguna Beach Station.<sup>1</sup> The monthly average maximum temperature recorded at this station from March 1928 until April 2007 ranged from 65.1°F in January to 78.0°F in August, with an annual average maximum of 71.2°F. The monthly average minimum temperature recorded at this station ranged from 43.0°F in January to 59.6°F in August, with an annual average minimum of 51.0°F.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. At the Laguna Beach Station the average monthly rainfall varied from 2.80 inches in February to 0.49 inch or less between May and October, with an annual total of 12.72 inches.

Although the SCAB has a semiarid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern is an onshore 8 to 12 miles per hour (mph) daytime breeze and an offshore 3 to 5 mph nighttime breeze. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly (Santa Ana) winds from the mountains and deserts northeast of the SCAB. Summer wind flow patterns represent worst case conditions, because this is the period of higher temperatures and more sunlight, which results in ozone formation.

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<sup>1</sup> Western Regional Climate Center, [www.wrcc.dri.edu](http://www.wrcc.dri.edu).

During spring and early summer, pollution produced during any one day is typically blown out of the SCAB through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. Air contaminants can be transported 60 miles or more from the SCAB by ocean air during the afternoons. From early fall to winter, the transport is less pronounced because of slower average wind speed and the appearance of drainage winds earlier in the day. During stagnant wind conditions, offshore drainage winds may begin by late afternoon. Pollutants remaining in the SCAB are trapped and begin to accumulate during the night and the following morning. A low morning wind speed in pollutant source areas is an important indicator of air stagnation and the potential for buildup of primary air contaminants.

Temperature normally decreases with altitude, and a reversal of this atmospheric state, where temperature increases with altitude, is called an inversion. The height from the earth to the inversion base is known as the mixing height. Persistent low inversions and cool coastal air tend to create morning fog and low stratus clouds. Cloudy days are less likely in the eastern portions of the SCAB and are about 25 percent more likely along the coast. The vertical dispersion of air pollutants in the SCAB is limited by temperature inversions in the atmosphere close to the earth's surface.

Inversions are generally lower in the nighttime when the ground is cool, than during daylight hours when the sun warms the ground and, in turn, the surface air layer. As this heating process continues, the temperature of the surface air layer approaches the temperature of the inversion base, causing heating along its lower edge. If enough warming takes place, the inversion layer becomes weak and opens up to allow the surface air layers to mix upward. This can be seen in the middle to late afternoon on a hot summer day when the smog appears to clear up suddenly. Winter inversions typically break earlier in the day, preventing excessive contaminant buildup.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problem is accumulation of carbon monoxide and oxides of nitrogen due to extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen to form photochemical smog.

**Global Climate Change.** Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose  $0.6 \pm 0.2$  degrees Celsius ( $^{\circ}\text{C}$ ) ( $1.1 \pm 0.4^{\circ}\text{F}$ ) in the 20th century. The prevailing scientific opinion on climate change is that "most of the warming observed over the last 50 years is attributable to human activities."<sup>1</sup> The increased amounts of  $\text{CO}_2$  and other GHGs are the primary causes of the human-induced component of warming. They are released by the burning of fossil fuels, land clearing, agriculture, etc., and lead to an increase in the GHG effect.

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<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: The Physical Science Basis*, <http://www.ipcc.ch>.



GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. They include CO<sub>2</sub>, CH<sub>4</sub>, nitrous oxide (N<sub>2</sub>O), and O<sub>3</sub>. In the last 200 years, substantial quantities of GHGs have been released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, enhancing the natural greenhouse effect, which is believed to be causing global warming. While human-made GHGs include CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, some (like chlorofluorocarbons [CFCs]) are completely new to the atmosphere.

Natural sources of CO<sub>2</sub> include the respiration (breathing) of humans, animals and plants and evaporation from the oceans. Together, these natural sources release approximately 150 billion tonnes<sup>1</sup> of CO<sub>2</sub> each year, far outweighing the 7 billion tonnes of human-made emissions from fossil fuel burning, waste incineration, deforestation, and cement manufacture. Nevertheless, natural removal processes such as photosynthesis by land- and ocean-dwelling plant species cannot keep pace with this extra input of human-made CO<sub>2</sub>, and consequently the gas is building up in the atmosphere.<sup>2</sup>

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Human-made sources include the mining and burning of fossil fuels; digestive processes in ruminant animals such as cattle; rice paddies; and the burying of waste in landfills. Total annual emissions of CH<sub>4</sub> are approximately 500 million tonnes, with human-made emissions accounting for the majority. As for CO<sub>2</sub>, the major removal process of atmospheric CH<sub>4</sub>—chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH<sub>4</sub> concentrations in the atmosphere are increasing.

California is the fifteenth largest emitter of GHGs on the planet, representing about 2 percent of the worldwide emissions. In December 2007, ARB approved a GHG target for 2020 equivalent to the State's calculated GHG level in 1990. ARB developed the 2020 target after extensive technical work and a series of stakeholder meetings. The 2020 target of 427 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>E) requires the reduction of 169 MMTCO<sub>2</sub>E, or approximately 30 percent, from the State's projected 2020 emissions of 596 MMTCO<sub>2</sub>E (business as usual) and the reduction of 42 MMTCO<sub>2</sub>E, or almost 10 percent, from 2002–2004 average emissions. Table C shows the current emissions and projected 2020 emissions of GHGs for the State.<sup>3</sup>

**Air Pollution Constituents and Attainment Status.** The ARB coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. The ARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by ARB and EPA to classify air basins as attainment, nonattainment, nonattainment-transitional, or unclassified, based on air quality data for the most recent 3 calendar years compared with the AAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. Table D lists the attainment status for the criteria pollutants in the Basin.

<sup>1</sup> A tonne means a ton in the metric unit system; it is also called a metric ton. A tonne is 1,000 kilograms, or approximately 2,204 pounds.

<sup>2</sup> Enviropedia, [http://www.enviropedia.org.uk/Global\\_Warming/Emissions.php](http://www.enviropedia.org.uk/Global_Warming/Emissions.php).

<sup>3</sup> ARB Climate Change Scoping Plan, December 2008.

**Table C: California GHG Emissions – Current and Projected (MMTCO<sub>2</sub>E)**

Sector	2002–2004 Average Emissions	Projected 2020 Emissions (BAU)
Transportation	179.3	225.4
Electricity	109.0	139.2
Commercial and Residential	41.0	46.7
Industry	95.9	100.5
Recycling and Waste	5.6	7.7
High GWP	14.8	46.9
Agriculture	27.7	29.8
Forest Net Emissions	-4.7	0.0
<b>Emissions Total</b>	<b>469</b>	<b>596</b>

Source: ARB. Greenhouse Gas Inventory. <http://www.arb.ca.gov/cc/inventory/inventory.htm>  
BAU = Business as Usual  
GWP = Global Warming Potential

**Table D: Attainment Status of Criteria Pollutants in the South Coast Air Basin**

Pollutant	State	Federal
O <sub>3</sub> 1-hour	Nonattainment	N/A
O <sub>3</sub> 8-hour	Nonattainment	Severe-17 Nonattainment
PM <sub>10</sub>	Nonattainment	Serious Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO <sub>2</sub>	Attainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board, 2010, <http://www.arb.ca.gov/desig/desig.htm>.  
CO = carbon monoxide  
N/A = not applicable  
NO<sub>2</sub> = nitrogen dioxide  
O<sub>3</sub> = ozone  
PM<sub>10</sub> = particulate matter less than 10 microns in diameter  
PM<sub>2.5</sub> = particulate matter less than 2.5 microns in diameter  
SO<sub>2</sub> = sulfur dioxide

**Ozone.** O<sub>3</sub> (smog) is formed by photochemical reactions between oxides of nitrogen and reactive organic gases (ROGs) rather than being directly emitted. O<sub>3</sub> is a pungent, colorless gas typical of Southern California smog. Elevated O<sub>3</sub> concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. O<sub>3</sub> levels peak during summer and early fall. The entire Basin is designated as a nonattainment area for the State 1-hour and 8-hour O<sub>3</sub> standards. The EPA has officially designated the status for most of the Basin regarding the 8-hour O<sub>3</sub> standard as “Severe

17,” which means the Basin has until 2021 to attain the federal 8-hour O<sub>3</sub> standard. The SCAQMD has requested that the Basin’s federal designation be changed from severe to extreme nonattainment. This change would extend the attainment deadline to 2023.

**Carbon Monoxide.** CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire Basin is in attainment for the State standards for CO. The Basin is designated as a “Severe Maintenance” area under the federal CO standards.

**Nitrogen Oxides.** NO<sub>2</sub>, a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO<sub>x</sub>. NO<sub>x</sub> is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO<sub>2</sub> decreases lung function and may reduce resistance to infection. The entire Basin has not exceeded both federal and State standards for NO<sub>2</sub> in the past 5 years with published monitoring data. It is designated as a maintenance area under the federal standards and an attainment area under the State standards.

**Sulfur Dioxide.** SO<sub>2</sub> is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO<sub>2</sub> levels. SO<sub>2</sub> irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is in attainment with both federal and State SO<sub>2</sub> standards.

**Lead.** Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The entire SCAB is in attainment for the federal and State standards for lead.

**Particulate Matter.** Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (PM<sub>10</sub>) derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particulate matter (PM<sub>2.5</sub>) levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM<sub>10</sub> can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA’s scientific review concluded that PM<sub>2.5</sub>, which penetrate deeply into the lungs, are more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM<sub>10</sub> standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and

structure and in respiratory tract defense mechanisms. Most of the Basin is designated nonattainment for the federal and State PM<sub>10</sub> and PM<sub>2.5</sub> standards.

**Reactive Organic Compounds.** Reactive organic compounds (ROCs; also known as ROGs) and volatile organic compounds (VOCs) are formed from the combustion of fuels and the evaporation of organic solvents. ROCs are not defined as criteria pollutants, but are a prime component of the photochemical smog reaction. Consequently, ROCs accumulate in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower.

## 3.2 LOCAL AIR QUALITY

The SCAQMD, together with the ARB, maintain ambient air quality monitoring stations in the SCAB. The air quality monitoring station closest to the Project site is the Mission Viejo Station and its air quality trends are representative of the ambient air quality in the Project area. The pollutants monitored at this station are CO, O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.<sup>1</sup> The closest air quality monitoring site monitoring NO<sub>2</sub> and SO<sub>2</sub> is the Costa Mesa Station, and its air quality trends are also representative of the ambient air quality in the Project area.

The ambient air quality data in Table E show that NO<sub>2</sub>, SO<sub>2</sub>, and CO levels are below the relevant State and federal standards. The State one-hour O<sub>3</sub> standard was exceeded 5 to 9 times per year in the last three years. The federal eight-hour O<sub>3</sub> standard was exceeded 5 to 15 times per year in the last three years. The State 24-hour PM<sub>10</sub> standard was exceeded three times in 2007 but has not exceeded the federal 24-hour standard since 1999. The federal 24-hour PM<sub>2.5</sub> standard was exceeded twice in 2007 and once in 2009 in the last three years.

## 3.3 REGULATORY SETTINGS

### 3.3.1 Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the EPA established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations in order to protect public health.

Data collected at permanent monitoring stations are used by the EPA to classify regions as “attainment” or “nonattainment,” depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA.

The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the SCAB.

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<sup>1</sup> Air quality data, 2004–2006; EPA and ARB Web sites.

**Table E: Ambient Air Quality in the Project Vicinity**

Pollutant	Standard	2007	2008	2009
<b>Carbon Monoxide</b>				
Max 1-hr concentration (ppm)		2.9	1.5	ND
No. days exceeded: State	> 20 ppm/1-hr	0	0	ND
Federal	> 35 ppm/1-hr	0	0	ND
Max 8-hr concentration (ppm)		2.2	1.1	1.0
No. days exceeded: State	9.0 ppm/8-hr	0	0	0
Federal	9 ppm/8-hr	0	0	0
<b>Ozone</b>				
Max 1-hr concentration (ppm)		0.108	0.118	0.121
No. days exceeded: State	> 0.09 ppm/1-hr	5	9	7
Max 8-hr concentration (ppm)		0.090	0.104	0.095
No. days exceeded: State	> 0.07 ppm/8-hr	10	25	14
Federal	> 0.075 ppm/8-hr	5	15	10
<b>Particulates (PM<sub>10</sub>)</b>				
Max 24-hr concentration ( µg/m <sup>3</sup> )		74	42	41
No. days exceeded: State	> 50 µg/m <sup>3</sup> /24-hr	1	0	0
Federal	> 150 µg/m <sup>3</sup> /24-hr	0	0	0
Annual Arithmetic Average ( µg/m <sup>3</sup> )		23.0	22.6	ND
Exceeded: State	> 20 µg/m <sup>3</sup> ann. arth. avg.	Yes	Yes	ND
<b>Particulates (PM<sub>2.5</sub>)</b>				
Max 24-hr concentration ( µg/m <sup>3</sup> )		46.8	32.6	39.2
No. days exceeded: Federal	> 35 µg/m <sup>3</sup> /24-hr	2	0	1
Annual Arithmetic Average ( µg/m <sup>3</sup> )		11.1	8.3	ND
Exceeded: State	> 12 µg/m <sup>3</sup> ann. arth. avg.	No	No	ND
Federal	> 15 µg/m <sup>3</sup> ann. arth. avg.	No	No	ND
<b>Nitrogen Dioxide<sup>2</sup></b>				
Max 1-hr concentration (ppm)		0.074	0.081	0.065
No. days exceeded: State	> 0.25 ppm/1-hr	0	0	0
Annual arithmetic average concentration (ppm)		0.013	0.013	0.013
Exceeded: Federal	> 0.053 ppm ann. arth. avg.	No	No	No
<b>Sulfur Dioxide<sup>2</sup></b>				
Max 24-hr concentration (ppm)		0.004	0.003	0.004
No. days exceeded: State	> 0.04 ppm/24-hr	0	0	0
Federal	> 0.14 ppm/24-hr	0	0	0
Annual arithmetic average concentration (ppm)		0.000	0.001	0.001
Exceeded: Federal	> 0.030 ppm ann. arth. avg.	No	No	No

Sources: EPA and ARB, 2010.

<sup>1</sup> ND: No Data. There was insufficient or no data available to determine the value.

<sup>2</sup> Monitored at the Costa Mesa-Mesa Verde Drive Air Monitoring Station.

ppm = parts per million

µg/m<sup>3</sup> = microgram of pollutant per cubic meter of air

The EPA established new national air quality standards for ground level ozone and fine particulate matter in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for ozone and particulate matter, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001, the U.S. Supreme Court upheld the way the government sets air quality standards under the CAA. The court unanimously rejected industry arguments that the EPA must consider financial cost as well as health benefits in writing standards. The justices also rejected arguments that the EPA took too much lawmaking power from Congress when it set tougher standards for ozone and soot in 1997. Nevertheless, the court threw out the EPA's policy for implementing new ozone rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the eight-hour ground-level ozone standard. The EPA issued the proposed rule implementing the eight-hour ozone standard in April 2003. The EPA completed final eight-hour nonattainment status on April 15, 2004. The EPA revoked the one-hour ozone standard on June 15, 2005.

The EPA issued the final PM<sub>2.5</sub> implementation rule in fall 2004 and made final designations on December 15, 2004. The EPA lowered the 24-hour PM<sub>2.5</sub> standard from 65 to 35 µg/m<sup>3</sup> and revoked the annual average PM<sub>10</sub> standard in December 2006.

### **3.3.2 State Regulations/Standards**

The State of California began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. These standards are also listed in Table A.

Originally, there were no attainment deadlines for CAAQS. However, the CCAA of 1988 provided a time frame and a planning structure to promote their attainment. The CCAA required nonattainment areas in the State to prepare attainment plans and proposed to classify each such area on the basis of the submitted plan, as follows: moderate, if CAAQS attainment could not occur before December 31, 1994; serious, if CAAQS attainment could not occur before December 31, 1997; and severe, if CAAQS attainment could not be conclusively demonstrated at all.

The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented. The SCAB is currently classified as a nonattainment area for three criteria pollutants.

### **3.3.3 Global Climate Change Regulations**

California has recently adopted a series of laws to reduce both the level of GHGs in the atmosphere and to reduce emissions of GHGs from commercial and private activities within the State. In a response to the transportation sector's significant contribution to California's CO<sub>2</sub> emissions, AB

1493 (Pavley) was enacted on July 22, 2002. AB 1493 requires ARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. In setting these standards, ARB considered cost effectiveness, technological feasibility, and economic impacts. ARB adopted the standards in September 2004. When fully phased-in, the near-term (2009 to 2012) standards would result in a reduction in GHG emissions of approximately 22 percent compared to the emissions from the 2002 fleet, while the midterm (2013 to 2016) standards would result in a reduction of approximately 30 percent. To set its own GHG emissions limits on motor vehicles, California must receive a waiver from the EPA. However, in December 2007, the EPA denied the request from California for the waiver. In January 2008, the California Attorney General filed a petition for review of the EPA's decision in the Ninth Circuit Court of Appeals; however, no decision on that petition has been published as of January 2009. On January 26, 2009, the President issued an Executive Memorandum directing the EPA to reassess its decision to deny the waiver and to initiate any appropriate action.<sup>1</sup> On May 18, 2009, the President announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will begin to take effect in 2012. This standard is approximately the same standard that was proposed by California, and so the California waiver request has been shelved as a result.

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The ARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of carbon dioxide equivalent (CO<sub>2</sub>eq). The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires ARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.<sup>2</sup> Emission reductions that are projected to result from the recommended measures in the Scoping Plan are expected to total 174 MMT of CO<sub>2</sub>eq, which would allow California to attain the emissions goal of 427 MMT of CO<sub>2</sub>eq by 2020. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The ARB rulemaking process includes

<sup>1</sup> Obama, President Barack. 2009. Memorandum for the Administrator of the Environmental Protection Agency. State of California Request for Waiver Under 42 U.S.C. 7543(b), the Clean Air Act. January 26.

<sup>2</sup> California Air Resources Board. 2008. *Climate Change Proposed Scoping Plan: a framework for change*. October.

preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by an ARB Board hearing and rule adoption.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB and the newly created Climate Action Team (CAT)<sup>1</sup> to identify a list of “discrete early action GHG reduction measures” that can be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed Executive Order S-1-07, further solidifying California’s dedication to reducing GHGs by setting a new Low Carbon Fuel Standard. The Executive Order sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs ARB to consider the Low Carbon Fuel Standard as a discrete early action measure.

In June 2007, ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture).<sup>2</sup> Discrete early action measures are measures that are required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The ARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of perfluorocarbons from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and sulfur hexafluoride (SF<sub>6</sub>) reductions from the non-electricity sector. The combination of early action measures is estimated to reduce State-wide GHG emissions by nearly 16 MMT.<sup>3</sup>

To assist public agencies in the mitigation of GHG emissions or analyzing the effects of GHGs under CEQA, including the effects associated with transportation and energy consumption, Senate Bill (SB) 97 (Chapter 185, 2007) requires the Governor’s Office of Planning and Research (OPR) to develop CEQA Guidelines on how to minimize and mitigate a project’s GHG emissions. OPR is required to prepare, develop, and transmit these guidelines on or before July 1, 2009 and the Resources Agency is required to certify and adopt them by January 1, 2010. Preliminary guidance released by OPR in June 2008 suggests that global climate change analyses in CEQA documents should be conducted for all projects that release GHGs, and that mitigation measures to reduce emissions should be incorporated into projects, to the extent feasible. On January 8, 2009, OPR released preliminary draft CEQA guideline amendments, which may be refined through a public process currently underway at the time this document was drafted. The preliminary amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations.

SB 375, signed into law on October 1, 2008, is intended to enhance ARB’s ability to reach AB 32 goals by directing ARB to develop regional GHG emissions reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. ARB will work with California’s 18 metropolitan planning organizations to align their regional transportation, housing, and land use plans

<sup>1</sup> CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of ARB’s jurisdiction.

<sup>2</sup> California Air Resources Board. 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October.

<sup>3</sup> California Air Resources Board. 2007. “ARB approves tripling of early action measures required under AB 32.” News Release 07-46. <http://www.arb.ca.gov/newsrel/nr102507.htm>. October 25.



and prepare a “Sustainable Communities Strategy” to reduce the number of vehicle miles traveled in their respective regions and demonstrate the region’s ability to attain its GHG reduction targets.

Additionally, SB 375 provides incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The bill exempts home builders from certain CEQA requirements if they build projects consistent with the new sustainable community strategies. It will also encourage the development of more alternative transportation options, to promote healthy lifestyles and reduce traffic congestion.

### **3.4 REGIONAL AIR QUALITY PLANNING FRAMEWORK**

The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

The ARB coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for the EPA approval. The ARB maintains air quality monitoring stations throughout the State in conjunction with local air districts. Data collected at these stations are used by the ARB to classify air basins as “attainment” or “nonattainment” with respect to each pollutant and to monitor progress in attaining air quality standards. The ARB has divided the State into 15 air basins. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

#### **3.4.1 Regional Air Quality Management Plan (AQMP)**

The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the SCAB. Every three years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. The SCAQMD adopted the 2003 AQMP in August 2003 and forwarded it to ARB for review and approval. The ARB approved a modified version of the 2003 AQMP and forwarded it to the EPA in October 2003 for review and approval.

The 2003 AQMP updates the attainment demonstration for the federal standards for O<sub>3</sub> and PM<sub>10</sub>; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO<sub>2</sub> standard that the SCAB has met since 1992. The 2003 AQMP proposes policies and measures to achieve federal and State standards for healthful air quality in the SCAB.

This revision to the AQMP also addresses several State and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. This AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the ozone SIP for the SCAB for the attainment of the federal ozone air quality standard. However, this revision points to the urgent need for additional emission reductions (beyond

those incorporated in the 1997/1999 Plan) to offset increased emission estimates from mobile sources and meet all federal criteria pollutant standards within the time frames allowed under the federal Clean Air Act.

The SCAQMD adopted the 2007 AQMP on June 1, 2007, which it describes as a regional and multiagency effort (i.e., the SCAQMD Governing Board, ARB, SCAG, and EPA). State and federal planning requirements will include developing control strategies, attainment demonstration, reasonable further progress, and maintenance plans. The 2007 AQMP also incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The ARB approved the 2007 AQMP on September 27, 2007, and adopted it as part of the 2007 SIP. The SCAQMD has forwarded the 2007 AQMP to the EPA for its review and approval.

## 4.0 METHODOLOGY

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, CEQA Air Quality Handbook, April, 1993, were adhered to in the assessment of air quality impacts for the proposed Project.

The air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed Project. Criteria pollutants with regional impacts would be emitted by Project related vehicular trips, as well as by emissions associated with stationary sources used on site.

The net increase in pollutant emissions determine the significance and impact on regional air quality as a result of the proposed Project. The results also allow the local government to determine whether the proposed Project will deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with federal and State ambient air quality standards.

SCAQMD has developed localized significance threshold (LST) methodology that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area. SCAQMD's current guidelines, *Final Localized Significance Threshold Methodology* (June 2003), were adhered to in the assessment of air quality impacts for the proposed Project.

The LST mass rate look-up tables are used to determine whether the daily emissions for the proposed construction and operational activities could result in significant localized air quality impacts. The emissions of concern from construction activities are NO<sub>x</sub> and CO combustion emissions from construction equipment and fugitive PM<sub>10</sub> dust from construction site preparation activities. The primary emissions from operational activities include but are not limited to NO<sub>x</sub> and CO combustion emissions from stationary sources and/or on-site mobile equipment. Off-site mobile emissions from the Project are not included in the emissions compared to the LSTs.

### 4.1 THRESHOLDS OF SIGNIFICANCE

A Project would normally be considered to have a significant effect on air quality if the Project would violate any ambient air quality standards, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

In addition to the federal and State AAQS, there are daily and quarterly emissions thresholds for construction and operation of a proposed Project in the SCAB. The SCAB is administered by the SCAQMD, and guidelines and emissions thresholds established by the SCAQMD in its *CEQA Air*

*Quality Handbook* (SCAQMD, April 1993) are used in this analysis. It should be noted that the emission thresholds were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with adequate margin of safety (EPA), these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

#### **4.1.1 Thresholds for Construction Emissions**

The following California Environmental Quality Act (CEQA) significance thresholds for construction emissions have been established for the SCAB:

- 75 pounds per day (lbs/day) of reactive organic compounds (ROC)
- 100 lbs/day of NO<sub>x</sub>
- 550 lbs/day of CO
- 150 lbs/day of PM<sub>10</sub>
- 55 lbs/day of PM<sub>2.5</sub>
- 150 lbs/day of sulfur oxides (SO<sub>x</sub>)

Projects in the SCAB with construction related emissions that exceed any of the emission thresholds are considered to be significant under the SCAQMD guidelines.

#### **4.1.2 Thresholds for Operational Emissions**

The daily operational emissions "significance" thresholds for the SCAB are as follows.

**Emission Thresholds for Pollutants with Regional Effects.** Projects with operation related emissions that exceed any of the emission thresholds listed below are considered significant under the SCAQMD guidelines.

- 55 lbs/day of ROC
- 55 lbs/day of NO<sub>x</sub>
- 550 lbs/day of CO
- 150 lbs/day of PM<sub>10</sub>
- 55 lbs/day of PM<sub>2.5</sub>
- 150 lbs/day of SO<sub>x</sub>

**Local Microscale Concentration Standards.** The significance of localized Project impacts under CEQA depends on whether ambient CO levels in the vicinity of the Project are above or below State and federal CO standards. If ambient levels are below the standards, a Project is considered to have a significant impact if Project emissions result in an exceedance of one or more of these standards. If

ambient levels already exceed a State or federal standard, Project emissions are considered significant if they increase one-hour CO concentrations by 1.0 part per million (ppm) or more or eight-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for carbon monoxide.

- California State one-hour CO standard of 20.0 ppm
- California State eight-hour CO standard of 9.0 ppm

#### **4.1.3 Thresholds for Localized Significance**

For this Project, the appropriate Source Receptor Area (SRA) for LST is the Capistrano Valley area, according to the SRA/City Table on the SCAQMD LST Web site.<sup>1</sup> The site is larger than five acres, however, it is expected that construction operations will not exceed five acres in any one day, so the five acre thresholds were used. The nearest sensitive receptor is the Marina Inn located north of the proposed Project site at a distance of approximately 50 meters (m). The following thresholds apply for this Project.

Construction thresholds for a 5 ac site:

- 330 lbs/day of NO<sub>x</sub> at 50 m
- 2,102 lbs/day of CO at 50 m
- 37 lbs/day of PM<sub>10</sub> at 50 m
- 11 lbs/day of PM<sub>2.5</sub> at 50 m

Operational thresholds for a 2 ac site:

- 330 lbs/day of NO<sub>x</sub> at 50 m
- 2,102 lbs/day of CO at 50 m
- 9 lbs/day of PM<sub>10</sub> at 50 m
- 3 lbs/day of PM<sub>2.5</sub> at 50 m

#### **4.1.4 Global Climate Change**

As the SCAQMD has recognized, the analysis of GHGs is much different than the analysis of criteria pollutants for the following reasons. For criteria pollutants, significance thresholds are based on daily emissions because attainment or nonattainment is based on daily exceedances of applicable AAQS. Further, several ambient AAQS are based on relatively short-term exposure effects on human health (e.g., 1-hour and 8-hour). Since the half-life of CO<sub>2</sub> is approximately 100 years, for example, the effects of GHGs are longer-term, affecting global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate GHG effects over a longer time frame than a single day.

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<sup>1</sup> [www.aqmd.gov/ceqa/handbook/LST/LST.html](http://www.aqmd.gov/ceqa/handbook/LST/LST.html).

The recommended approach for GHG analysis included in OPR's June 2008 release is to: (1) identify and quantify GHG emissions, (2) assess the significance of the impact on climate change, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance.<sup>1</sup> The June 2008 OPR guidance provides some additional direction regarding planning documents as follows: "CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation.... For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews."

Pursuant to SB 97, OPR submitted to the Secretary for Natural Resources its proposed amendments to the State CEQA Guidelines for GHG emissions on April 13, 2009. These proposed CEQA Guidelines amendments would provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The Natural Resources Agency will conduct formal rulemaking in 2009, prior to certifying and adopting the amendments, as required by SB 97. The Natural Resources Agency must certify and adopt the guidelines on or before January 1, 2010.

On December 30, 2009, the California Natural Resources Agency adopted CEQA Guidelines Amendments related to climate change. The amendments became effective on March 18, 2010, and state:

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the Lead Agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or
- (2) Rely on a qualitative analysis or performance based standards.

(b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

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<sup>1</sup> State of California, 2008. Governor's Office of Planning and Research. *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review*. June 19.

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Individual projects incrementally contribute toward the potential for global climate change on a cumulative basis in concert with all other past, present, and probable future projects. While individual projects are unlikely to measurably affect global climate change, each project incrementally contributes toward the potential for global climate change on a cumulative basis, in concert with all other past, present, and probable future projects.

Revisions to Appendix G of the CEQA Guidelines suggest that the project be evaluated for the following impacts:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

However, despite this, the CEQA statutes, OPR Guidelines, and the draft proposed changes to the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency.

In this vacuum, on December 5, 2008, the SCAQMD adopted an interim GHG threshold of significance for projects where it is the Lead Agency using a tiered approach for determining significance.<sup>1</sup> The objective of the SCAQMD's interim GHG threshold of significance proposal is to achieve a GHG emission capture rate of 90 percent of all new or modified stationary source projects. SCAQMD asserts that a GHG threshold of significance based on a 90 percent emission capture rate is considered more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. SCAQMD

<sup>1</sup> SCAQMD Draft Guidance Document – *Interim CEQA Greenhouse Gas Significance Threshold*. October 2008.

further asserts that a 90 percent GHG emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. The following bullet points describe the basic structure of SCAQMD's tiered interim GHG significance threshold for stationary sources:

- **Tier 1** consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. For example, SB 97 specifically exempts a limited number of projects until it expires in 2010. If the project qualifies for an exemption, no further action is required. If the project does not qualify for an exemption, then it would move to the next tier.
- **Tier 2** consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing consistency determination requirements in CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at a minimum, comply with AB 32 GHG reduction goals; include an emissions inventory agreed upon by either ARB or the SCAQMD, have been analyzed under CEQA and have a certified Final CEQA document, and have monitoring and enforcement components. If the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If the project is not consistent with a local GHG reduction plan, there is no approved plan, or the GHG reduction plan does not include all of the components described above, the project would move to Tier 3.
- **Tier 3** establishes a screening significance threshold level to determine significance using a 90 percent GHG emission capture rate. The 90 percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the following methodology. Using the SCAQMD's Annual Emission Reporting (AER) Program, the reported annual natural gas consumption for 1,297 permitted facilities for 2006 through 2007 was compiled and the facilities were rank-ordered to estimate the 90th percentile of the cumulative natural gas usage for all permitted facilities. Approximately 10 percent of facilities evaluated comprise more than 90 percent of the total natural gas consumption, which corresponds to 10,000 metric tons of CO<sub>2</sub> equivalent emissions per year (MTCO<sub>2</sub>e/yr) (the majority of combustion emissions comprise CO<sub>2</sub>). At the November 5, 2009 Board meeting Staff recommended the following GHG screening thresholds: Residential: 3500 tons per year (tpy) CO<sub>2</sub>e, Commercial: 1400 tpy CO<sub>2</sub>e, Mixed use: 3000 tpy CO<sub>2</sub>e. If a project's GHG emissions exceed the GHG screening threshold, the project would move to Tier 4.
- **Tier 4** establishes a decision tree approach that includes compliance options for projects that have incorporated design features into the project and/or implement GHG mitigation measures.
  - Option No. 1: Reduction Target (percentage)
    - Max percentage reduction (land use sector reduction-23.9 percent, Scoping Plan overall reduction-28 percent)
    - Target updated as AB 32 Scoping Plan revised
    - Residual emissions not to exceed 25,000 MT CO<sub>2</sub>e/yr
    - Base case scenario to be defined
  - Option No. 2: Efficiency Target



- 4.6 MT CO<sub>2</sub>e per scoping plan for project level threshold (land use emissions only) and total residual emissions not to exceed 25,000 MT CO<sub>2</sub>e/yr
- 6.6 MT CO<sub>2</sub>e per scoping plan for plan level threshold (all sectors)

If a project fails to meet any of these emissions reduction targets and efficiency targets, the project would move to Tier 5.

- **Tier 5** would require projects that implement off-site GHG mitigation that includes purchasing offsets to reduce GHG emission impacts to purchase sufficient offsets for the life of the project (30 years) to reduce GHG emissions to less than the applicable GHG screening threshold level.

The interim GHG significance threshold that was adopted by the SCAQMD Governing Board only applies to stationary source/industrial projects where the SCAQMD is the Lead Agency under CEQA. The types of projects that the significance threshold applies to include: SCAQMD rules, rule amendments, and plans (e.g., AQMPs). In addition, the SCAQMD may be the Lead Agency under CEQA for projects that require discretionary approval (i.e., projects that require air quality permits from the SCAQMD and that allow the SCAQMD to exercise discretion with regard to imposing permit conditions). However, for the purposes of this analysis and because the project is an industrial use with stationary sources, the County will use the Tier 3 threshold.

In addition to analyzing the project's GHG impacts consistent with the above SCAQMD approach, this air quality analysis analyzes whether the project's GHG emissions should be considered cumulatively significant based on the following:

- It would hinder attainment of the State's goals of reducing GHG emissions to 1990 levels by 2020, as stated in the Global Warming Solutions Act of 2006. A project may be considered to help attainment of the State's goals by being consistent with an adopted Statewide 2020 GHG emissions limit or the plans, programs, and regulations adopted to implement the Global Warming Solutions Act of 2006.
- It would fail to achieve increased energy efficiency or reduce overall GHG emissions from an existing facility.
- It would significantly increase the consumption of fuels or other energy resources, especially fossil fuels that contribute to GHG emissions when consumed.

The analysis uses compliance with AB 32, considered a "previously approved mitigation program," as set forth in the CEQA Guidelines §15064(h)(3), to determine if the project's incremental contribution of GHGs is a cumulatively considerable contribution to global climate change. OPR's proposed draft amendment to Section 15064.7 of the CEQA Guidelines reinforces the use of this approach. CEQA Guideline Section 15064(h)(3) states three main conditions that a plan must meet to be sufficient for use as a basis for determining significance of GHG emissions. The plan must:

- 1) Be "a previously approved plan or mitigation program";
- 2) Provide "specific requirements that will avoid or substantially lessen the cumulative problem";  
and

- 3) “Be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.”

AB 32 meets conditions one and three provided above. Accordingly, in addition to determining whether the project’s GHG emissions exceed the SCAQMD’s interim industrial section stationary source threshold, In order to determine the significance of the project GHG emission impact on climate change, consistency or inconsistency with the reduction targets in AB 32 is also evaluated. To do so, project features that implement specific reduction measures identified in the rules and regulations that implement AB 32 were evaluated.

## 5.0 IMPACTS

Air pollutant emissions associated with the Project would occur over the short term from construction activities, such as fugitive dust from site preparation and grading, and emissions from equipment exhaust. Implementation of the proposed Project is not expected to alter the long-term operation of the Dana Point Harbor Marinas. Therefore, no changes to the long-term emissions are anticipated.

### 5.1 CONSTRUCTION IMPACTS

Construction activities produce combustion emissions from various sources such as utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

**Equipment Exhaust and Related Construction Activities.** Construction of the Marina Improvement Project is planned to occur in multiple phases over approximately eight years. Each of these phases has been further divided into multiple sub phases, such as the removal of the existing piles and slips, the installation of new piles, and the installation of new slips. The maximum exhaust emissions generated within each of the construction sub-phases are listed in Table F and detailed in Appendix A. This table shows that construction equipment/vehicle emissions during slip and pile removal and installation periods for construction of the proposed Project would exceed the SCAQMD established daily emissions threshold for NO<sub>x</sub> and ROC.

**Fugitive Dust.** Fugitive dust emissions are generally associated with land clearing, exposure, and cut-and-fill operations. Because all construction operations related to the Marina Improvement Project will be conducted on or underwater, no fugitive dust is expected to be generated by these operations. However, fugitive dust could be generated as construction equipment or trucks travel on and off the Harbor property, or from the excavation and pile installation for the ADA gangways and foundations. These emissions will be relatively small and are included in Table F.

### Odors

Heavy-duty equipment in the Project area during construction would potentially emit odors, primarily from diesel engine sources and pile driving. However, the construction activity would be short-term and construction odors would cease to occur after individual construction is completed. In addition, on-shore wind conditions at the Harbor are fairly consistent and will function to quickly disperse and dilute any odorous emissions. No other sources of objectionable odors have been identified for the proposed Project and no mitigation measures are required.

**Table F: Peak Day Construction Emissions by Sub-Phase<sup>1</sup>**

Sub-Phase	CO (lbs/day)	ROC (lbs/day)	NO <sub>x</sub> (lbs/day)	Sox (lbs/day)	PM <sub>10</sub> (lbs/day)	PM <sub>2.5</sub> (lbs/day)	CO <sub>2</sub> (lbs/day)
Removal of Existing Slips and Piles	441.8	<b>179.9</b>	<b>121.4</b>	0.5	7.7	6.7	10,733.6
Installation of New Piles	319.2	<b>135.3</b>	31.9	0.3	2.6	2.2	2,901.6
Installation of New Slips	340.3	<b>140.5</b>	70.9	0.4	4.6	4.0	6,343.5
SCAQMD Emissions Threshold	<b>550</b>	<b>75</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>55</b>	<b>n/a</b>
Exceed Significance?	NO	YES	YES	NO	NO	NO	n/a

Source: LSA Associates, Inc., June 2008.

<sup>1</sup> It is assumed that there is no overlap of these construction phases.

## 5.2 LONG-TERM PROJECT-RELATED EMISSIONS IMPACTS

Long-term air emission impacts are associated with any change in permanent use of the Project site by on-site stationary and off-site mobile sources that substantially increase emissions. Stationary source emissions include emissions associated with electricity consumption and natural gas usage. Mobile source emissions would result from vehicle trips associated with the proposed Project. The proposed Project would not result in any long-term on-site stationary sources and would have a minimal change in the off-site vehicle trips. Therefore, no emissions were calculated for the proposed Project from long-term mobile source or long-term stationary sources. The Project's air quality impact would be less than significant because there would be no increase in stationary or mobile source emissions.

**CO Hotspots Analysis.** The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time caused by traffic conditions. CO transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. Under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthy levels affecting local sensitive receptors (residents, schoolchildren, the elderly, hospital patients, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient CO concentrations, modeling of CO concentrations is recommended in determining a Project's effect on local CO levels. Because the proposed Project does not increase or expand capacity, it would have either no change or only a minimal change in off-site vehicle trips, and no significant CO contributions would occur in the Project vicinity. Therefore, no CO "hot spots" are expected, and modeling of CO emissions is not necessary.

## 5.3 LOCALIZED SIGNIFICANCE

The following analysis was performed per SCAQMD *Final Localized Significance Threshold Methodology* (June 2003). The closest sensitive receptor (The Marina Inn) to this proposed site is located to the north at a distance of approximately 50 m. Thus, LST values for 50 m were used.

Table G shows the construction-related emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> (see Appendix A) compared to the LSTs for the Capistrano Valley Area.

Table G shows that the calculated emissions rates for the proposed construction activities are below the localized significance thresholds for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> for all sensitive receptors. Therefore, the proposed construction activities would not cause any short-term, localized, significant air quality impacts.

**Table G: Summary of Construction Emissions Localized Significance**

Construction Phase	Emission Rates (lbs/day)			
	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Removal of Existing Slips and Piles	441.8	121.4	7.7	6.7
Installation of New Piles	319.2	31.9	2.6	2.2
Installation of New Slips	340.3	70.9	4.6	4.0
<b>Localized Significance Threshold (at 50 m)</b>	<b>2,102</b>	<b>330</b>	<b>37</b>	<b>11</b>
<b>Exceed Significance?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: LSA Associates, Inc., June 2008

## 5.4 AIR QUALITY MANAGEMENT PLAN CONSISTENCY

An AQMP describes air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. CEQA requires that certain proposed projects be analyzed for consistency with the AQMP. For a project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projection. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP. The AQMP uses the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Since the AQMP is based on local General Plans, projects that are deemed consistent with the General Plan are found to be consistent with the AQMP. The proposed project would not result in any population growth and is consistent with the City's General Plan. In addition, the proposed Project is not expected to result in any increase in long-term regional air quality emissions. Therefore, the Project will not conflict with the AQMP, and no significant impact will result with respect to implementation of the AQMP.

## 5.5 AIR QUALITY CUMULATIVE IMPACTS

Construction of the Project would contribute cumulatively to the local and regional air pollutants, together with other projects under construction. As detailed previously, the Project would result in significant construction-related air quality impacts pertaining to NO<sub>x</sub> and ROC [precursors to O<sub>3</sub>] emissions. Thus, it is anticipated that these additional NO<sub>x</sub> and ROC emissions would result in significant cumulative air quality impacts.

The proposed Project would also contribute to adverse cumulative air quality impacts because construction activity would result in additional emissions of pollutants, which may exacerbate ambient levels currently in excess of applicable NAAQS or CAAQS for PM<sub>10</sub> and O<sub>3</sub> (because NO<sub>x</sub> and ROC are precursors to O<sub>3</sub>). The proposed Project, in conjunction with other planned projects, would contribute to the existing nonattainment status. Therefore, the Project-level and cumulative short-term construction impacts of the proposed Project would remain significant and unavoidable.

### 5.5.1 Global Climate Change

This section evaluates potential significant impacts to global climate change that could result from implementation of the proposed project. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. Mitigation measures are identified as appropriate.

**GHG Emissions Background.** Emissions estimates for the proposed project are discussed below. GHG emissions estimates are provided herein for informational purposes only, as there is no established quantified GHG emissions threshold. Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis below is based on methodologies and information available to the County at the time this analysis was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered (after energy-efficient technologies have been implemented). While information is presented below to assist the public and the County's decision-makers in understanding the project's potential contribution to global climate change impacts, the information available to the County is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts, nor between any particular proposed mitigation measure and any reduction in climate change impacts.

Construction and operation of project development would generate GHG emissions. Typically, more than 80 percent of the total energy consumption takes place during the use of buildings, and less than 20 percent is consumed during construction.<sup>1</sup> However, as the proposed project is replacing an existing use with a similar facility, the long-term impact on energy consumption would be negligible.

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment.
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and

<sup>1</sup> United Nations Environment Programme (UNEP), 2007. *Buildings and Climate Change: Status, Challenges and Opportunities*, Paris, France.

managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH<sub>4</sub> from the anaerobic decomposition of organic materials. CH<sub>4</sub> is 25 times more potent a GHG than CO<sub>2</sub>. However, landfill CH<sub>4</sub> can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Preliminary guidance from OPR and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities. The calculation presented below includes construction emissions in terms of CO<sub>2</sub>.

GHG emissions generated by the proposed project would predominantly consist of CO<sub>2</sub>. In comparison to criteria air pollutants such as O<sub>3</sub> and PM<sub>10</sub>, CO<sub>2</sub> emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs, such as CH<sub>4</sub>, are important with respect to global climate change, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO<sub>2</sub>.

Construction activities produce combustion emissions from various sources such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The actual details of the future construction schedule are not known. The only GHG with well-studied emissions characteristics and published emissions factors for construction equipment is CO<sub>2</sub>. The construction modeling (Table F) lists a peak daily emissions rate of 10,734 lbs/day of CO<sub>2</sub> during the removal of the existing piles and slips. The removal of the existing slips and piles will require up to 80 days to complete. The installation of the new piles and slips will require 320 days and 40 days, respectively. The total CO<sub>2</sub> generated during the project construction will be 2,041,000 lbs or 925 metric tons.

The project would be required to implement the construction exhaust control measures listed in Section 5.6 including minimization of construction equipment idling and implementation of proper engine tuning and exhaust controls. Both of these measures would reduce GHG emissions during the construction period (but other measures would be required to reduce GHG emissions to a less than significant level).

Due to the global nature of this phenomenon and the scale of the emissions, total emissions are expressed in units of teragrams (a trillion [10<sup>12</sup>] grams or one million metric tons [tonnes]) per year (Tg/year). This is the standard metric unit used worldwide. As described above, the project will produce 925 metric tonnes of CO<sub>2</sub>, which is approximately 0.0093 Tg/year of CO<sub>2</sub>. As a comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 million

metric tonnes of CO<sub>2</sub> per year and approximately 496.95 million metric tonnes of CO<sub>2</sub> per year for the entire State.

As described above, project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Consequently, it is difficult to determine how project-related GHG emissions would contribute to global climate change and how global climate change may impact California. Therefore, project-related GHG emissions are not project-specific impacts to global warming but are instead the project's contribution to this cumulative impact.

Implementation of the project would result in GHG emission levels that would not substantially conflict with implementation of the GHG reduction goals under AB 32 or other State regulations. However, in order to ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, the Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Mitigation Measure GCC-1 shall be implemented.

## 5.6 STANDARD CONDITIONS

The Project must comply with the following standard conditions. Therefore, implementation of these measures was included in the analysis above.

- A. The Project is required to comply with regional rules that assist in reducing short-term air pollutant emissions generated during construction. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques would reduce the fugitive dust generation (and thus the PM<sub>10</sub> and PM<sub>2.5</sub> components). Compliance with these rules would reduce the short-term Project air quality impacts on nearby sensitive receptors.

Applicable Rule 403 Measures:

- Water active landside construction areas at least twice daily. Locations where equipment operations are to occur will be thoroughly watered prior to use.
  - All trucks hauling dirt, sand, soil, or other loose materials are to be covered, or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
  - Use low-sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.
- B. The following additional dust suppression measures in the SCAQMD *CEQA Air Quality Handbook* are included to further reduce the likelihood of air quality impacts:



- Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
  - Pave, water, or chemically stabilize all on-site roads as soon as feasible.
  - Minimize at all times the area disturbed by earthmoving or excavation operations.
- C. The construction contractor will select the construction equipment used on site based on low-emission factors and high energy efficiency. The Construction Contractor will ensure that construction plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.
- D. The construction contractor will time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.
- E. The construction contractor will support and encourage ridesharing and transit incentives for the construction crew.

### 5.6.1 Global Climate Change Impacts

**Minimization Measure GCC-1.** To the extent feasible and to the satisfaction of the County, the following measures shall be incorporated into the design and construction of the project (including specific building projects):

#### **Energy Efficiency Measures.**

- Install efficient lighting and lighting control systems.
- Install solar or light-emitting diodes (LEDs) for outdoor lighting.

#### **Solid Waste Measures.**

- Reuse and recycle construction waste (including, but not limited to, concrete, lumber, metal, and cardboard);
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas; and

In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. After implementation of Minimization Measure GCC-1 and application of regulatory requirements, the project would implement appropriate GHG reduction strategies and would not conflict with or impede implementation of reduction goals identified in AB 32, the Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. Therefore, the project's contribution to cumulative GHG emissions would be reduced to a less than significant level.

## **5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed Project would result in significant unavoidable short-term construction air quality impacts (ROC and NO<sub>x</sub> emissions [precursors to O<sub>3</sub>]) after implementation of standard conditions and SCAQMD rules and regulations. While the adherence to SCAQMD rules and regulations would reduce this impact, it would remain significant and adverse because the SCAQMD daily threshold would be exceeded. No feasible mitigation measures beyond compliance with SCAQMD rules and regulations are available to offset this significant impact.

The Project construction activities would also contribute to construction-related adverse cumulative air quality impacts because the Basin is presently in nonattainment for O<sub>3</sub>, and the Project, in conjunction with other planned projects, would contribute to the existing nonattainment status for O<sub>3</sub>.

## 6.0 REFERENCES

California Air Resources Board Web site: <http://www.arb.ca.gov>.

California Air Resources Board. *Climate Change Scoping Plan*, December 2008.

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# **APPENDIX A**

## **CONSTRUCTION EMISSIONS WORKSHEETS**

## Dana Point Harbor

## ENGINE EXHAUST EMISSIONS

Source [1]	Parameter 1	Parameter 2	CO		ROC		NOx		SOx		PM10		PM2.5		CO2	
			Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)
<b>Phase 1a: Remove Existing Slips and Piles</b>																
Diesel Crane	8 hours/day	2 unit	0.637 lb/hr	10.2	0.188 lb/hr	3.0	1.695 lb/hr	27.1	0.001 lb/hr	0.0	0.076 lb/hr	1.2	0.067 lb/hr	1.1	95.080 lb/hr	1,521.3
Backhoe	8 hours/day	2 unit	0.414 lb/hr	6.6	0.131 lb/hr	2.1	0.830 lb/hr	13.3	0.001 lb/hr	0.0	0.064 lb/hr	1.0	0.057 lb/hr	0.9	51.820 lb/hr	829.1
Loader	8 hours/day	1 unit	0.555 lb/hr	4.4	0.173 lb/hr	1.4	1.382 lb/hr	11.1	0.001 lb/hr	0.0	0.077 lb/hr	0.6	0.069 lb/hr	0.5	86.290 lb/hr	690.3
Bobcat	8 hours/day	1 unit	0.399 lb/hr	3.2	0.168 lb/hr	1.3	0.329 lb/hr	2.6	0.000 lb/hr	0.0	0.039 lb/hr	0.3	0.035 lb/hr	0.3	20.540 lb/hr	164.3
1200HP Tugboats	1 hours/day	2 unit	1.024 lb/hr	2.0	0.339 lb/hr	0.7	5.000 lb/hr	10.0	0.115 lb/hr	0.2	0.155 lb/hr	0.3	0.138 lb/hr	0.3	316.930 lb/hr	633.9
Diesel Generator	8 hours/day	1 unit	0.322 lb/hr	2.6	0.094 lb/hr	0.8	0.656 lb/hr	5.2	0.001 lb/hr	0.0	0.048 lb/hr	0.4	0.043 lb/hr	0.3	40.250 lb/hr	322.0
Air Compressors	8 hours/day	2 unit	0.293 lb/hr	4.7	0.131 lb/hr	2.1	0.247 lb/hr	3.9	0.000 lb/hr	0.0	0.029 lb/hr	0.5	0.026 lb/hr	0.4	15.660 lb/hr	250.6
Gas Skiffs	5 hours/day	2 unit	37.667 lb/hr	376.7	16.521 lb/hr	165.2	0.011 lb/hr	0.1	0.011 lb/hr	0.1	0.156 lb/hr	1.6	0.139 lb/hr	1.4	30.320 lb/hr	303.2
Heavy Duty Trucks	40 miles	40 trips per day	6.733 gr/VMT	23.7	0.867 gr/VMT	3.1	13.366 gr/VMT	47.1	0.014 gr/VMT	0.0	0.481 gr/VMT	1.7	0.416 gr/VMT	1.5	1500.110 gr/VMT	5,291.4
Worker Commute (Light Duty Auto)	40 miles	25 trips per day	3.430 gr/VMT	7.6	0.150 gr/VMT	0.3	0.420 gr/VMT	0.9	0.003 gr/VMT	0.0	0.032 gr/VMT	0.1	0.017 gr/VMT	0.0	330.290 gr/VMT	727.5
<TOTAL>				441.8		179.9		121.4		0.5		7.7		6.7		10,733.6

<b>Phase 1b: Install New Piles</b>																
Diesel Crane	4	2	0.637	5.1	0.188	1.5	1.695	13.6	0.001	0.0	0.076	0.6	0.067	0.5	95.080	760.6
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Pile Driver	4	1	0.475	1.9	0.131	0.5	1.241	5.0	0.001	0.0	0.054	0.2	0.048	0.2	68.120	272.5
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
1200HP Tugboats	1	2	1.024	2.0	0.339	0.7	5.000	10.0	0.115	0.2	0.155	0.3	0.138	0.3	316.930	633.9
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Gas Skiffs	4	2	37.667	301.3	16.521	132.2	0.011	0.1	0.011	0.1	0.156	1.2	0.139	1.1	30.320	242.6
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Heavy Duty Trucks	40	2	6.733	1.2	0.867	0.2	13.366	2.4	0.014	0.0	0.481	0.1	0.416	0.1	1500.110	264.6
	miles	trips per day	gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT	
Worker Commute (Light Duty Auto)	40	25	3.430	7.6	0.150	0.3	0.420	0.9	0.003	0.0	0.032	0.1	0.017	0.0	330.290	727.5
	miles	trips per day	gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT	
<TOTAL>				319.2		135.3		31.9		0.3		2.6		2.2		2,901.6
<b>Phase 1c: Install New Slips</b>																
Diesel Crane	8	2	0.637	10.2	0.188	3.0	1.695	27.1	0.001	0.0	0.076	1.2	0.067	1.1	95.080	1,521.3
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Gas Skiffs	4	2	37.667	301.3	16.521	132.2	0.011	0.1	0.011	0.1	0.156	1.2	0.139	1.1	30.320	242.6
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
1200HP Tugboats	1	2	1.024	2.0	0.339	0.7	5.000	10.0	0.115	0.2	0.155	0.3	0.138	0.3	316.930	633.9
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Diesel Generator	8	1	0.322	2.6	0.094	0.8	0.656	5.2	0.001	0.0	0.048	0.4	0.043	0.3	40.250	322.0
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Air Compressors	8	2	0.293	4.7	0.131	2.1	0.247	3.9	0.000	0.0	0.029	0.5	0.026	0.4	15.660	250.6
	hours/day	unit	lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr		lb/hr	
Heavy Duty Trucks	40	20	6.733	11.9	0.867	1.5	13.366	23.6	0.014	0.0	0.481	0.8	0.416	0.7	1500.110	2,645.7
	miles	trips per day	gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT	
Worker Commute (Light Duty Auto)	40	25	3.430	7.6	0.150	0.3	0.420	0.9	0.003	0.0	0.032	0.1	0.017	0.0	330.290	727.5
	miles	trips per day	gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT		gr/VMT	
<TOTAL>				340.3		140.5		70.9		0.4		4.6		4.0		6,343.5

Peak Emissions for Phase		CO	441.8	ROC	179.9	NOx	121.4	SOx	0.5	PM10	7.7	PM2.5	6.7	CO2	10,733.6
	Threshold		550		75		100		150		150		150		NA

**APPENDIX E**

**NOISE IMPACT ANALYSIS**

# NOISE IMPACT ANALYSIS

DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

DANA POINT, CALIFORNIA

LSA

June 2010



# NOISE IMPACT ANALYSIS

DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

DANA POINT, CALIFORNIA

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LSA

June 2010

## TABLE OF CONTENTS

INTRODUCTION.....	1
PROJECT DESCRIPTION .....	1
PROPOSED PROJECT COMPONENTS.....	1
METHODOLOGY RELATED TO NOISE IMPACT ASSESSMENT .....	5
CHARACTERISTICS OF SOUND.....	5
MEASUREMENT OF SOUND.....	5
PHYSIOLOGICAL EFFECTS OF NOISE.....	7
VIBRATION .....	10
EXISTING CONDITIONS .....	10
Sensitive Land Uses in the Project Vicinity .....	10
Overview of the Existing Noise Environment.....	10
Thresholds of Significance .....	10
County of Orange Noise Standards .....	11
City of Dana Point Noise Standards .....	11
IMPACTS AND MITIGATION MEASURES .....	12
Short-Term Construction-Related Noise Impacts.....	12
Short-Term Construction-Related Vibration Impacts.....	14
Long-Term Noise Impacts .....	15
Mitigation Measures .....	15
Cumulative Impacts .....	15
Significant Unavoidable Adverse Impacts .....	16
REFERENCES.....	16

## FIGURES AND TABLES

### FIGURES

Figure 1: Project Location .....	2
Figure 2: Existing Harbor layout.....	3
Figure 3: Proposed Harbor Layout .....	4

### TABLES

Table A: Definitions of Acoustical Terms .....	7
Table B: Common Sound Levels and Their Noise Sources .....	8
Table C: Land Use Compatibility for Exterior Community Noise.....	9
Table D: County of Orange Noise Standards for Residential Land Uses.....	11
Table E: Exterior Noise Limits for Residential Land Uses, L <sub>N</sub> (dBA) .....	12
Table F: Maximum Interior Sound Levels for Residential Land Uses, L <sub>N</sub> (dBA).....	12
Table G: Typical Construction Equipment Noise Levels.....	14

## DANA POINT HARBOR

### INTRODUCTION

This noise impact analysis has been prepared to evaluate the potential noise impacts and mitigation measures associated with the Marina Improvement Project in the City of Dana Point (City), California. The Dana Point Harbor facilities are owned by the County of Orange (County) and operated under the direction of the Orange County Dana Point Harbor (OC DPH), a County agency. This analysis is intended to satisfy the County's requirement for a Project specific noise impact analysis by examining the impacts of the Marina Improvement Project on noise-sensitive uses in the Project area.

### PROJECT DESCRIPTION

Dana Point Harbor, constructed between 1966 and 1970, is located in the City of Dana Point, Orange County, California about 40 miles (mi) south of Long Beach/Los Angeles Harbors (Figure 1). It lies in the lee (protected side) of Dana Point Headlands within Capistrano Bay and is also protected by a 1.7 mi long and 14- to 18-foot (ft) high breakwater. Harbor channel widths vary from 350 ft in the anchorage areas to 600 ft at the Harbor entrance (Wiegel 1993). The Harbor is subject to in-filling of sands that migrate through the quarry rock-breakwater requiring periodic maintenance dredging to maintain safe water depths. The Marina within Dana Point Harbor is divided into two basins, the East Basin and West Basin (Figure 2). Each basin operates as a separate Marina, with a total capacity of about 2,400 shallow-draft vessels. The boat launch ramp at the northeast corner of the Harbor is newly upgraded as of July 2007. Other facilities within the Harbor include the Dana Point Marine Institute, a dry boat storage hoist, fishing pier, shipyard, marine fuel dock, three yacht clubs, and a commercial sports fishing operation. Swimming is allowed at the west end of the Harbor at Baby Beach.<sup>1</sup>

### PROPOSED PROJECT COMPONENTS

The proposed Dana Point Harbor Marina Improvement Project includes replacement of docks and slip facilities in the West and East Marinas, connection of dock gangways with the quay wall and bulkheads within those basins, and replacement of gangways and security gates to both Marina areas. Additionally, new Dry Stack Storage Staging docks and dinghy docks, along with renovations to the Marine Services docks, Orange County Sailing and Event Center docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. In order to accommodate displaced boats during Project implementation, a temporary dock near the breakwater next to Doheny State Beach is included in the Project (Figure 3). The number of boat slips will decrease from 2,409 to 2,293. A total of 1,306 existing piles will be removed and approximately 969 new piles will be emplaced. In addition, the proposed Marina Improvement Project includes the addition of Americans with Disabilities Act (ADA) access at gangway locations where it currently is

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<sup>1</sup> <http://www.ocparks.com/danapointharbor>.

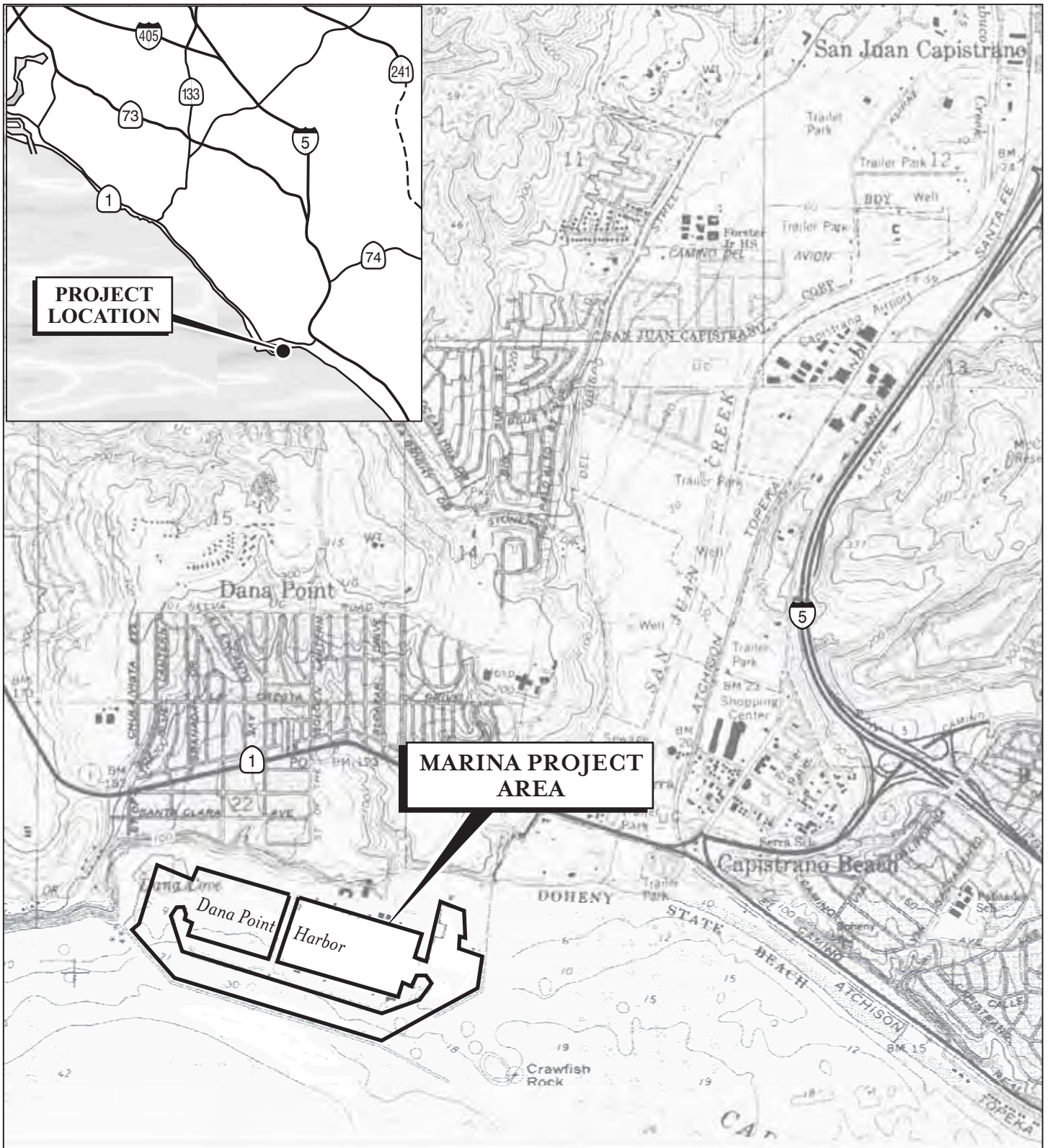
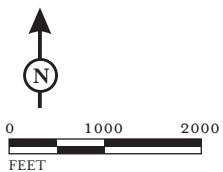


FIGURE 1

LSA



SOURCE: USGS 7.5' Quadrangle, "Dana Point, Calif."

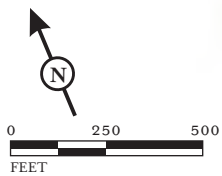
I:\CAE0601\G\Technical Report Figures\FIG 1.cdr (6/12/08)

Dana Point Harbor Marina Improvement Project  
Project Location



FIGURE 2

LSA



LEGEND

- Boundary
- Planning Areas
- Commercial Core Project Area  
(Construction-Level Analysis Analyzed in Certified Final EIR 591)
- Marina Improvement Project Area  
(Proposed Project Construction-Level Analysis)

*Dana Point Harbor Marina Improvement Project*

Existing Harbor Layout

SOURCE: URS/Cash & Associates

I:\CAE0601\G\Technical Report Figures\FIG.2.cdr (6/12/08)

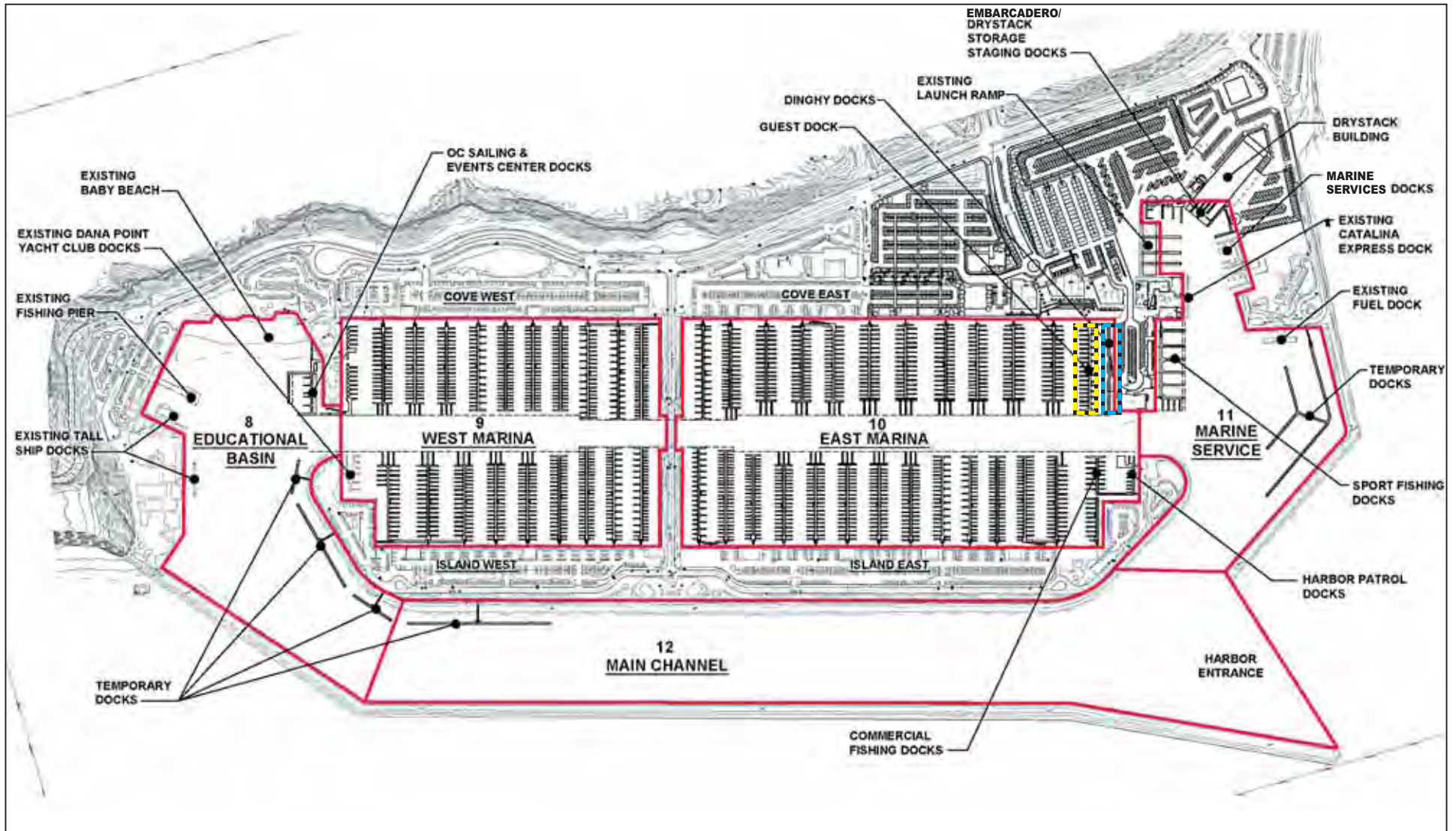
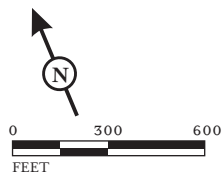


FIGURE 3

LSA



**LEGEND**

- Marina Improvement Project Area
- - - Dinghy Docks
- - - Guest Dock

**NOTE:** Landslide areas are shown in accordance with the Dana Point Harbor Revitalization Plan and District Regulations Land Use Plan.

*Dana Point Harbor Marina Improvement Project*

*Proposed Harbor Layout*

SOURCE: URS Corp.

not available. This report specifically addresses waterside, or Marina, improvements to the Dana Point Harbor.

## **METHODOLOGY RELATED TO NOISE IMPACT ASSESSMENT**

Evaluation of noise impacts associated with a proposed Project typically includes the following:

- Determine the noise impacts associated with short-term construction of the proposed Project on adjacent uses; and
- Determine the long-term noise impacts on off-site noise sensitive uses; and
- Determine the required mitigation measures to reduce short-term and long-term noise impacts.

As described above, although the Dana Point Harbor facilities are owned by the County of Orange and operated under the direction of OC DPH, a County agency, the Harbor is located entirely within the City. Therefore, this noise impact analysis utilizes both the County's and the City's noise standards, including the Noise Elements and Municipal Codes, as thresholds against which potential noise impacts are evaluated.

## **CHARACTERISTICS OF SOUND**

Sound is increasing to such disagreeable levels in the environment that it can threaten quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a Project defines the noise environment of the Project area in terms of sound intensity and its effect on adjacent sensitive land uses.

## **MEASUREMENT OF SOUND**

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units, such as inches or pounds, decibels are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 decibels (dB) are 10 times more intense than 1 dB, 20 dB are 100 times more intense, and 30 dB are 1,000 times more intense. Thirty dB represent 1,000 times as much acoustic



energy as one decibel. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source, noise in a relatively flat environment with absorptive vegetation, decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level ( $L_{eq}$ ) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the  $L_{eq}$  and community noise equivalent level (CNEL) or the day-night average level ( $L_{dn}$ ) based on A-weighted decibels (dBA). CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly  $L_{eq}$  for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m.–7:00 a.m. (defined as sleeping hours).  $L_{dn}$  is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and  $L_{dn}$  are within 1 dBA of each other and are normally exchangeable. The City uses the CNEL noise scale for long-term noise impact assessment.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level ( $L_{max}$ ), which is the highest exponential time averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by  $L_{max}$ .  $L_{max}$  reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L10 noise level represents the noise level exceeded 10 percent of the time during a stated period. The  $L_{50}$  noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The  $L_{90}$  noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the  $L_{eq}$  and  $L_{50}$  are approximately the same.

Noise impacts can be described in three categories. The first is audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise levels of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

## PHYSIOLOGICAL EFFECTS OF NOISE

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160–165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying less developed areas.

Table A lists “Definitions of Acoustical Terms,” and Table B shows “Common Sound Levels and Their Sources.” Table C shows “Land Use Compatibility for Exterior Community Noise” recommended by the California Department of Health, Office of Noise Control.

**Table A: Definitions of Acoustical Terms**

Term	Definitions
Decibel, dB	A unit of level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L <sub>01</sub> , L <sub>10</sub> , L <sub>50</sub> , L <sub>90</sub>	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L <sub>eq</sub>	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dBA to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L <sub>dn</sub>	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L <sub>max</sub> , L <sub>min</sub>	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control 1991.

**Table B: Common Sound Levels and Their Noise Sources**

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	
Near Freeway Auto Traffic	70	Moderately Loud	
Average Office	60	Quiet	One-half as loud
Suburban Street	55	Quiet	
Light Traffic; Soft Radio Music in Apartment	50	Quiet	One-quarter as loud
Large Transformer	45	Quiet	
Average Residence without Stereo Playing	40	Faint	One-eighth as loud
Soft Whisper	30	Faint	
Rustling Leaves	20	Very Faint	
Human Breathing	10	Very Faint	Threshold of Hearing
	0	Very Faint	

Source: Compiled by LSA Associates, Inc. 1998.

**Table C: Land Use Compatibility for Exterior Community Noise**

Land Use Category	Noise Range ( $L_{dn}$ or CNEL), dB			
	I	II	III	IV
Passively used open spaces	50	50–55	55–70	70+
Auditoriums, concert halls, amphitheaters	45–50	50–65	65–70	70+
Residential: low-density single-family, duplex, mobile homes	50–55	55–70	70–75	75+
Residential: multifamily	50–60	60–70	70–75	75+
Transient lodging: motels, hotels	50–60	60–70	70–80	80+
Schools, libraries, churches, hospitals, nursing homes	50–60	60–70	70–80	80+
Actively used open spaces: playgrounds, neighborhood parks	50–67	—	67–73	73+
Golf courses, riding stables, water recreation, cemeteries	50–70	—	70–80	80+
Office buildings, business commercial and professional	50–67	67–75	75+	—
Industrial, manufacturing, utilities, agriculture	50–70	70–75	75+	—

Source: Office of Noise Control, California Department of Health 1976.

Noise Range I—Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Noise Range II—Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Noise Range III—Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Noise Range IV—Clearly Unacceptable: New construction or development should generally not be undertaken.

## **VIBRATION**

Vibration energy propagates from a source through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as motion of building surfaces, rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise. The rumble noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (rms) velocity or peak particle velocity (PPV). Rms is best for characterizing human response to building vibration and PPV is used to characterize potential for damage. Ground vibrations from construction activities, including those within water bodies such as pile driving for pile installation, do not often reach the levels that can damage structures, but they can achieve the audible and feelable ranges in buildings very close to the site. Ground-borne vibration from construction sources, such as the pile installation in the Marina, is usually localized to areas within about 100 ft from the vibration source.

## **EXISTING CONDITIONS**

### **Sensitive Land Uses in the Project Vicinity**

There are residential, commercial, recreational and hotel uses currently surrounding the Project site. The existing residential uses (including the live-aboards within the Marinas) and the Dana Point Marina Inn are the closest noise-sensitive uses and would be potentially affected by noise from the Project site during construction.

### **Overview of the Existing Noise Environment**

The primary existing sources of noise within the Project area are generated by vehicle activities within the parking lots, boat noise within the Marina, and vehicle traffic.

### **Thresholds of Significance**

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the following thresholds were used to assess the significance of potential noise impacts associated with the construction and operation of the proposed Project:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels
- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project
- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project

This noise impact analysis considered both County and City noise standards, including their General Plan Noise Elements and Zoning Code standards, as thresholds against which potential Project noise impacts were evaluated. The County and City have the same noise standards for sensitive land uses and the same regulations regarding noise generated from construction activities.

### County of Orange Noise Standards

**Noise Element of the General Plan and Municipal Code.** The Noise Element of the County of Orange General Plan and the Codified Ordinances of the County of Orange establish noise criteria to ensure that high noise levels do not adversely affect the quality of life of County residents. The noise criteria are based on land use compatibility. Table D provides the County’s exterior and interior noise standards for sensitive land use areas. However, Section 4-6-7 of the County’s Noise Ordinance provides exemptions to the County’s noise standards for specific activities, such as construction. The Ordinance states that noise sources associated with construction, repair, remodeling, or grading of any real property are exempt from the noise standards provided that the construction activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, Saturdays, or at any time on Sundays or a federal holiday.

**Table D: County of Orange Noise Standards for Residential Land Uses**

Maximum Noise Level	Time Period
Exterior noise standards, L <sub>50</sub>	
50 dBA	10:00 p.m.–7:00 a.m.
55 dBA	7:00 a.m.–10:00 p.m.
Interior noise standards, L <sub>8</sub>	
45 dBA	10:00 p.m.–7:00 a.m.
55 dBA	7:00 a.m.–10:00 p.m.

Source: Codified Ordinances of the County of Orange, Sections 4-6-5 and 4-6-6

### City of Dana Point Noise Standards

**Noise Element of the General Plan and Municipal Code.** The Noise Element of the General Plan (July 1991) contains noise standards. The City specifies outdoor and indoor noise limits for residential uses, hotels/motels, commercial, and other land uses. The noise standard for exterior living areas is 65 dBA CNEL. The indoor noise standard is 45 dBA CNEL, which is consistent with the standard in the California Noise Insulation Standard.

In addition, the City has adopted a quantitative Noise Control Ordinance (Municipal Code, Chapter 11.10). The Ordinance establishes maximum permissible hourly noise levels (L<sub>50</sub>) for sensitive land uses in the City. Tables E and F list exterior and interior noise limits for residential uses.

**Table E: Exterior Noise Limits for Residential Land Uses,  $L_N$  (dBA)**

Time Period	$L_{50}$	$L_{25}$	$L_8$	$L_2$	$L_{max}$
Night: 10:00 p.m.–7:00 a.m.	50	55	60	65	70
Day: 7:00 a.m.–10:00 p.m.	55	60	65	70	75

Source: City of Dana Point Municipal Code.

**Table F: Maximum Interior Sound Levels for Residential Land Uses,  $L_N$  (dBA)**

Time Interval	$L_8$	$L_2$	$L_{max}$
Night: 10:00 p.m.–7:00 a.m.	45	50	55
Day: 7:00 a.m.–10:00 p.m.	55	60	65

Source: City of Dana Point Municipal Code.

The City’s Noise Control Ordinance also governs the time of day that construction work can be conducted. Noise sources associated with construction, repair, remodeling, or grading of any real property are exempt from the noise standards listed in Tables E and F, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, Saturdays, or at any time on Sundays or federal holidays.

## IMPACTS AND MITIGATION MEASURES

### Short-Term Construction-Related Noise Impacts

Two types of short-term noise impacts would occur during Project construction. The first is the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the Project site. The pieces of heavy equipment to be utilized during construction will be moved to the site and remain for the duration of each construction phase. The increase in traffic flow on the surrounding roads due to construction traffic is expected to be small. The associated increase in long-term traffic noise will not be perceptible. However, there will be short-term intermittent high noise levels associated with trucks passing by from the Project site.

The second type of short-term noise impact is related to the noise generated by heavy equipment operating within the Project area. Construction of the proposed Marina Improvement Project will occur in multiple phases, which will consist of multiple tasks. The activities that will occur during these tasks will include:

- Slip demolition and pile removal
- Pile installation
- Slip installation

The following construction equipment will be required to complete the above tasks:

- Backhoes
- Loaders
- Bobcats
- Tugboats
- Heavy duty trucks
- Gas skiffs
- Cranes
- Generators
- Air Compressors
- Drill rigs
- Barges
- Jackhammers
- Pile drivers

Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table G lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor.

Pile driving will be the noisiest activity on-site generating up to 93 dBA  $L_{max}$  at a distance of 50 ft. Other construction equipment used on-site, such as loaders and backhoes, would generate up to 86 dBA  $L_{max}$  at a distance of 50 ft.

The nearest sensitive receptors are the Dana Point Marina Inn, located approximately 200 ft from the Marina Improvement Project construction area, and the live-aboards who are in various locations throughout the Marinas. These sensitive receptors would be subjected to short-term noise reaching 87 dBA  $L_{max}$  generated by construction activities. Construction related noise impacts from the proposed Project would be potentially adverse. Construction related short-term noise levels would be higher than existing ambient noise levels in the Project area today but would no longer occur once construction of the Project is completed. Implementation of the mitigation measures listed below and the applicable noise standards would reduce construction noise impacts. However, the length of construction for the proposed Project is anticipated to be up to eight years; therefore, construction-related noise impacts are deemed to be significant and unavoidable due to the duration of construction activities.



**Table G: Typical Construction Equipment Noise Levels**

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers, 12,000 to 18,000 ft-lb/blow	81-96	93
Rock Drills	83-99	96
Jackhammers	75-85	82
Pneumatic Tools	78-88	85
Pumps	74-84	80
Scrapers	83-91	87
Haul Trucks	83-94	88
Cranes	79-86	82
Portable Generators	71-87	80
Rollers	75-82	80
Dozers	77-90	85
Tractors	77-82	80
Front-End Loaders	77-90	86
Hydraulic Backhoe	81-90	86
Hydraulic Excavators	81-90	86
Graders	79-89	86
Air Compressors	76-89	86
Trucks	81-87	86

Source: Noise Control for Buildings and Manufacturing Plants, Bolt, Beranek & Newman 1987.

**Short-Term Construction-Related Vibration Impacts**

The proposed pile driving for pile installation in the Marinas would generate the primary source of vibration during construction. The closest pile driving activities to a sensitive receptor would occur at a distance of 200 ft from the Dana Point Marina Inn, which is the closest land based sensitive receptor. Using Equation 9 and Table 17 from the Caltrans *Transportation and Construction-Induced Vibration Guidance Manual* (Jones & Stokes, June 2004) it was estimated that the vibration level at the Dana Point Marina Inn would be 0.08 inch per second (in/sec). Although perceptible, this level would not exceed the 0.1 in/sec threshold below which there is virtually no risk of resulting in architectural damage to normal buildings. Therefore, the proposed Project would not result in any significant vibration impacts to the Dana Point Marina Inn.

The live-aboards are also in proximity to the proposed construction activities; however, the boats would not be subject to ground-borne vibrations. In addition, implementation of the mitigation measures would minimize construction-related nuisance impacts, and no significant adverse vibration impacts would occur from the proposed Marina Improvement Project.

## **Long-Term Noise Impacts**

The Marina Improvement Project is not expected to increase the number of vehicle trips on local roadways or boats using the docks. Therefore, the proposed Project would not result in any long-term noise impacts.

## **Mitigation Measures**

Implementation of the following mitigation measures would reduce the potential adverse Project construction noise impacts to less than significant levels.

**NOI-1** Prior to issuance of any construction or building permits, the Orange County Dana Point Harbor (OC DPH) shall verify that construction hour limitations are noted on building and/or grading plans. Construction shall be limited to the hours of 7:00 a.m. to 8:00 p.m., Monday through Saturday. In accordance with the County of Orange and the City of Dana Point Noise Ordinances, no construction activities will be conducted outside of these hours or on Sundays and federal holidays.

The following measures shall also be noted on building and/or grading plans and implemented to reduce potential construction noise impacts on nearby sensitive receptors:

1. The Project contractor shall place all stationary construction equipment so that emitted noise is directed away from the sensitive receptors nearest the construction areas.
2. The construction contractor shall locate equipment staging in areas farthest from noise-sensitive receptors nearest the Project site during all Project construction.

**NOI-2** Throughout the phased construction activities of the proposed Project, the OC DPH shall coordinate with the existing residents living on boats within the Marina to relocate them to be moved as far as feasible from the construction activities to minimize construction-related noise nuisance impacts. In addition, OC DPH staff shall provide Marina boat residents with information regarding the availability of other nearby Marina facilities. Information regarding the timing and location of the construction activities shall also be made available on the Harbor Web site, by postings throughout the Marina, and other means as appropriate.

## **Cumulative Impacts**

Noise from construction of the proposed Project and other nearby projects would be localized. Therefore, the cumulative study area for construction noise is the area immediately surrounding or between each particular Project site. The only project in close proximity to the Marina Improvement Project that could potentially have cumulative noise impacts is the Dana Point Harbor Revitalization Commercial Core Project.

The Commercial Core Project associated with the Dana Point Harbor Revitalization Project could potentially be under construction at the same time as the Marina Improvement Project. That Project has the potential to generate construction-related noise in the immediate area, which was considered cumulatively significant in the Program FEIR. Because construction noise for the Marina Improvement Project is also considered a significant adverse impact, the cumulative construction noise impacts for the proposed Project, in conjunction with the Commercial Core Project, is considered cumulatively adverse and significant.

Ground-borne vibration impacts from equipment that would be used during Project construction are localized. The proposed Project would not result in any significant vibration impacts; however, the Program FEIR concluded that vibration impacts on nearby noise-sensitive receptors would be significant and unavoidable due to the duration of construction activities. Therefore, if construction of the proposed Project were to occur at the same time as construction of the Commercial Core Project, ground-borne vibration impacts would be cumulatively adverse and significant.

Long-term noise generated by on-site operations for the Marina Improvement Project would not change after implementation of the proposed Project; the Project is reducing the number of slips in the Harbor. Therefore, the proposed Project would not contribute to off-site cumulative noise impacts from other planned and future projects. Therefore, impacts related to operational noise would be less than cumulatively significant.

### **Significant Unavoidable Adverse Impacts**

Although implementation of the mitigation measures above would help reduce Project-related construction noise impacts, the length of construction for the proposed Project is anticipated to be up to eight years; therefore, construction-related noise impacts are deemed to be significant, unavoidable, and adverse due to the duration of construction activities. In addition, if the Commercial Core Project is under construction at the same time as the Marina Improvement Project, cumulative construction-related noise and vibration impacts would be considered significant and adverse. All other potential Project impacts related to long-term operational noise are considered less than significant.

### **REFERENCES**

Bolt, Beranek & Newman, Noise Control for Buildings and Manufacturing Plants 1987.

California Department of Transportation, Transportation Related Earthborne Vibration, Technical Advisory, Rudy Hendricks, July 24, 1992.

California Department of Transportation, Transportation- and Construction-Induced Vibration Guidance Manual, Jones & Stokes, June 2004

City of Dana Point, Noise Element of the General Plan, July 1991.

City of Dana Point, Municipal Code, Accessed December 2007.

**APPENDIX F**

**MARINE BIOLOGICAL RESOURCES REPORTS AND  
FOCUSED SURVEY REPORTS FOR EELGRASS AND  
INVASIVE ALGAE**

**MARINE BIOLOGICAL RESOURCES TECHNICAL APPENDIX  
FOR THE  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT  
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT, ORANGE COUNTY, CALIFORNIA**



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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1.0 INTRODUCTION</b> .....	1
1.1 Project Purpose .....	1
1.2 Project Location .....	1
1.3 Project Components.....	3
<b>2.0 EXISTING CONDITIONS</b> .....	6
2.1 Physical Environment.....	8
2.2 Marine Biological Environment.....	9
2.3 Sensitive Species.....	18
2.4 Reefs and Kelp Beds.....	26
2.5 Protected Marine Areas .....	26
2.6 Fish Management Plan Species.....	32
2.7 Invasive Species.....	34
<b>3.0 MARINE RESOURCES IMPACT ASSESSMENT</b> .....	36
3.1 Proposed Project .....	36
3.2 Proposed Construction Methods .....	36
3.3 Short-term Water Quality Construction Impacts.....	37
3.4 Short-term Construction Impacts on Marine Resources .....	39
3.5 Long-term Operational Impacts on Water Quality.....	46
3.6 Long-term Operational Impacts on Marine Biological Resources.....	46
<b>4.0 MITIGATION MEASURES AND BEST MANAGEMENT PRACTICES</b> .....	50
4.1 Construction .....	50
4.2 Long-term Marina Operations .....	54
<b>5.0 LITERATURE CITED</b> .....	55

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Project Components.....	4
2 Areas Surveyed in Dana Point Harbor by Coastal Resources Management, Inc. in 2007.....	6
3 Number of Marine Taxa Observed During the Coastal Resources Management, Inc, Dive Surveys .....	11
4 Number of Plants, Invertebrates, and Fish Taxa in the Dana Point Harbor Study Area .....	17
5 State Designated Marine Life Areas In the Vicinity of Dana Point.....	27
6 Dana Point Harbor Waterside Improvement-Existing and Proposed Dock Configurations.....	39

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Project Location .....	2
2 Project Area Study Locations .....	3
3 Proposed Dock Layout Plan .....	5
4 Survey Locations .....	7
5 Eelgrass ( <i>Zostera marina</i> ) .....	18
6 Locations of Eelgrass Near Baby Beach, June, 2010 .....	20
7a Niguel State Marine Park .....	28
7b Dana Point State Marine Park .....	28
7c Doheny Beach State Marine Park .....	29
7d Doheny Beach State Marine Conservation Area .....	29
8 Integrated Preferred Alternative, MLPA South Coast Region, Sub region 4 .....	31
9 Invasive Algae ( <i>Caulerpa taxifolia</i> ) .....	34
10 Invasive Brown Algae, <i>Undaria pinnatifida</i> .....	35
11 Location of Eelgrass Relative to Proposed Dock System at the Youth Sailing Center .....	38

## LIST OF APPENDICES

1 Species List of Organisms Observed During the Coastal Resources Management, Inc. Field Surveys, 2007-2010 .....	60
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## **1.0 INTRODUCTION**

### **1.1 PROJECT PURPOSE**

The County of Orange proposes to make extensive waterside improvements to Dana Point Harbor as part of Dana Point Harbor Revitalization Plan. Consequently, Coastal Resources Management, Inc. (CRM) was retained by the firm of LSA Associates, Inc. to prepare a marine biological resources impact assessment for Waterside Improvement Draft Subsequent EIR. CRM conducted habitat and species surveys within Dana Point Harbor in February/March, October/November 2007, and June (Coastal Resources Management, Inc. 2010). The purposes of the investigation were to (1) determine if eelgrass (*Zostera marina*) or invasive algae (*Caulerpa taxifolia* or *Undaria pinnatifida*) were present in regions of the Harbor where proposed marina improvements are planned, (2) collect data on the presence/absence of other sensitive and non-sensitive species present in the Harbor on soft-bottom, piling, rip-rap and reef habitats that might be affected by marina improvements and (3) assess the potential environmental effects of construction and long-term operation of the marina on sensitive marine resources.

The results of the Coastal Resources Management, Inc. field surveys are contained in a separate project report (Coastal Resources Management, Inc., 2010) and integrated into this impact evaluation report. This document assesses the potential environmental effects of short-term construction and the long-term operation of Dana Point waterside development activity, including a federally-mandated Essential Fish Habitat (EFH) analysis on marine habitats and marine life within Dana Point Harbor.

### **1.2 PROJECT LOCATION**

Dana Point Harbor (“the Harbor”), constructed between 1966 and 1970, is located in the City of Dana Point, Orange County, California about 40 miles south of Long Beach/Los Angeles Harbors (Figure 1). It lies in the lee (protected side) of Dana Point Headlands within Capistrano Bay and is also protected by a 1.7 mile long and 14 to 18 feet (ft) high breakwater. Harbor channel widths vary from 350 feet in the anchorage areas to 600 feet at the Harbor entrance (Wiegel, 1993) The Harbor is subject to in-filling of sands that migrate through the quarry stone-breakwater requiring periodic maintenance dredging to maintain safe water depths.

The marina within Dana Point Harbor is divided into two basins, the East Basin and West Basin (Figure 2). Each basin operates as a separate marina, with a total capacity of about 2,500 shallow-draft vessels. The boat launch ramp at the northeast corner of the Harbor is newly upgraded as of July 2007. Other facilities within the Harbor include the Dana Point Marine Institute, a dry boat storage hoist, fishing pier, shipyard, marine fuel dock, three yacht clubs, and a commercial sports fishing operation. Swimming is allowed at the west end of the Harbor, at Baby Beach. (<http://www.ocparks.com/danapointharbor/>).



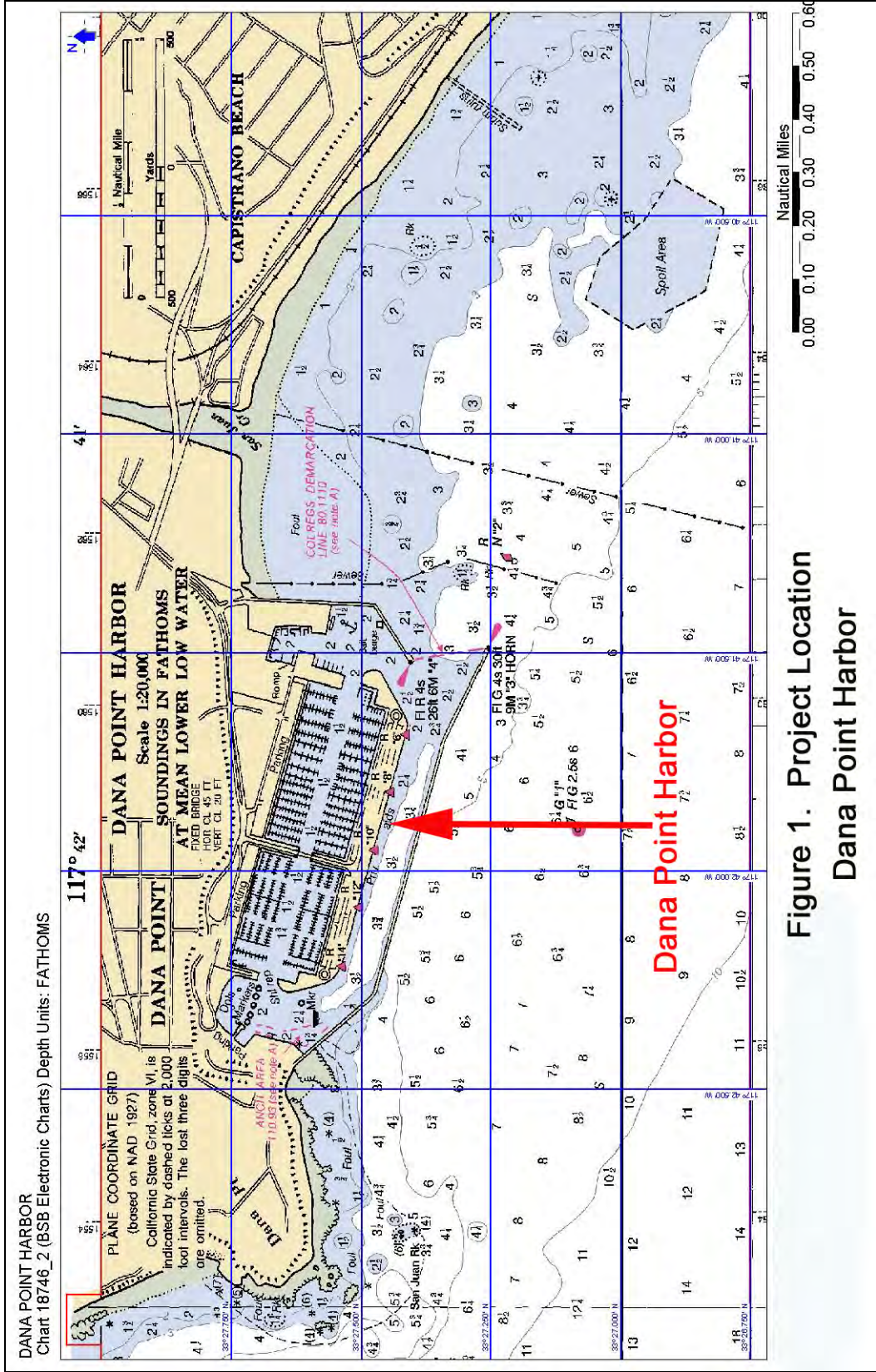


Figure 1. Project Location  
Dana Point Harbor



Dana Point Harbor Waterside Improvement Project  
 Marine Biological Resources Impact Assessment July 2010

Coastal Resources Management, Inc.

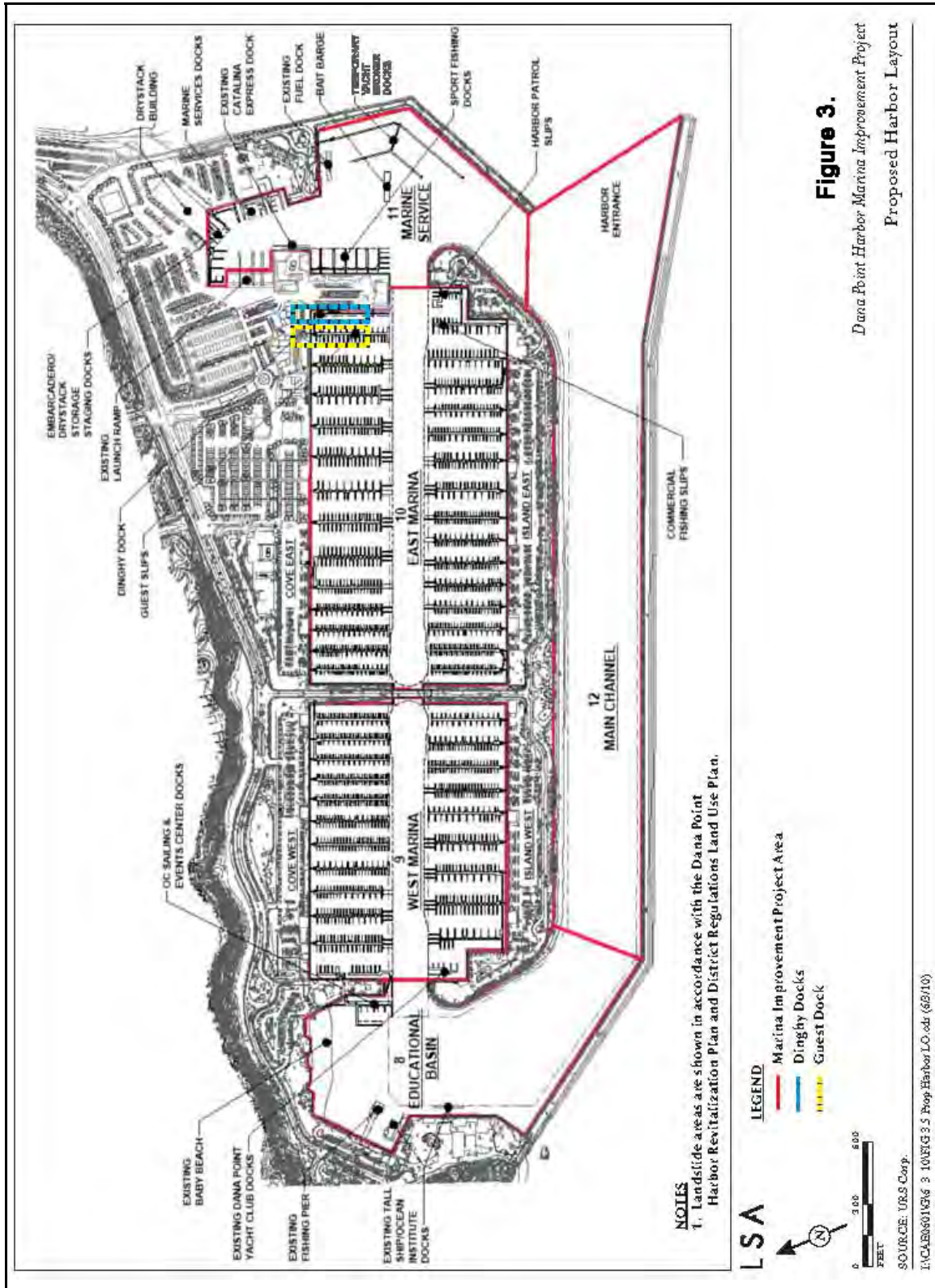
### 1.3 PROPOSED PROJECT COMPONENTS

Table 1 and Figure 3 describe and illustrate the proposed marina improvements, respectively. Waterside upgrades include (1) the renovation and re-orientation of the East and West marina basin dock systems by replacing old and deteriorating docks, slips and gangways with new facilities; (2) dock redesign and improvements for the Youth Sailing Center, the Harbor Patrol facilities, Commercial Fishing Dock, the Sport Fishing dock, the Dry Stack facility, and the Shipyard docks; (3) the construction of for vessels that will be displaced during marina reconstruction.; (4) the addition of handicap access at locations where it currently is not available; (5) upgrading vessel pump out facilities; and (6) upgrading dock utilities.

The number of boat slips within the Harbor will decrease from 2,409 to 2,293 (a loss of 116 slips) although the average slip length will increase from 29.85 feet (ft) to a length not to exceed 32 ft. A total of 1,306 existing piles will be removed and 969 new piles will be emplaced. The total dock surface area will decrease from 492,530 square feet (sq ft) to 459,540 sq ft (a net decrease of 32,990 sq ft) One-thousand three hundred and six, 14-inch diameter pilings with a surface area of 1,396 sq ft will be replaced by 969 piles (851, 16-inch diameter piles and 118, 18-inch diameter piles) with a surface area of 1,395 sq ft.

**Table 1. Proposed Project Components. Source: LSA Associates, Inc.**

<b>Element</b>	<b>Existing Conditions</b>	<b>Proposed Project Improvements</b>
Floating Docks(East/West Marinas and Satellite Areas)	Floating docks supported by 1,306 concrete filled steel pipe piles  2,409 boat slips  Average slip length of 29.85 feet (ft). Majority of West Marina slips oriented west-east. East Marina slips oriented north-south  Approximately 492,530 square feet (sf) of area covered by floating docks  1,306, 14-inch diameter piles (1,396 sq ft)	Remove existing piles and replace with 969 piles  2,293 boat slips (loss of 116 slips)  Average slip length not to exceed 32 ft West Marina slips to be reoriented to a north-south direction. East Marina slips to remain oriented north-south  Approximately 459,540 sf <sup>1</sup> of area covered by floating docks  851, 14-inch diameter and 118, 18-inch diameter piles (1,395 sq ft)
Access	52 existing gangways	59 gangways plus 9 ADA gangways, for a total of 68 gangways
Boat Services	3 sewage pump outs	4 upgraded sewage pump outs
Utilities	electrical service, water service, telephone and cable service	Upgraded electrical service, water service, telephone and cable service
Embarcadero/Dry Stack Storage Staging Docks	Dock Boxes 766 linear feet (lf)	New Dock Boxes 1,300 lf
Marine Services Docks	1,190 lf	896 lf
Sport Fishing Docks	1,350 lf	1,350 lf
Guest Slips	42 existing slips	46 proposed slips
Dinghy Dock	No existing dinghy dock	374 lf
Harbor Patrol Slips	8 existing slips plus 2 emergency side-ties	8 proposed slips plus 2 emergency side-ties
Commercial Fishing Slips	15 existing slips plus 1 end-tie for California Department of Fish and Game boat	15 proposed slips plus 1 end-tie for California Department of Fish and Game boat
OC Sailing and Events Center Docks	890 lf	893 lf
Temporary/Yacht Broker Docks	No existing temporary/yacht broker docks	1 dock located along the breakwater next to Doheny State Beach – approx. 2,590 lf



## 2.0 EXISTING CONDITIONS

The existing marine biological setting within Dana Point Harbor is based upon marine biological field surveys conducted by Coastal Resources Management [CRM], Inc. (2010) between February and October 2007; and June 2010; bird surveys conducted by Keane Biological Consulting (2007) conducted in March 2007, previous studies conducted within the Harbor by RBF and MBC Applied Environmental Sciences, 2003 and MBC Applied Environmental Sciences (2008 and 2009) for the Dana Point Harbor Revitalization EIR, and a literature review of other pertinent data sources.

The CRM surveys were conducted throughout Dana Point Harbor in February/March, 2007, Oct/Nov 2007, and June 2010 (Coastal Resources Management, Inc. 2010) in areas proposed for waterside improvements (Table 1 and Figure 4). Studies were conducted using diver-biologists and Remote Underwater Video (RUV) methods. Other observations were made of bulkhead habitats during low tides. Habitats that were surveyed included subtidal soft benthos (silt and sand sub-habitats), the hardscape of dock pilings, sloped cement bulkheads, small-to-large protective rip rap at the base of bulkheads, breakwater quarry stone, and low-to-moderate relief natural rocky reefs. A total of 329 variable-length underwater transects (15 meters [m] to 258 m in length) were swam using SCUBA. Fourteen dock piles in the Cove East and the Island East marina basins were also surveyed to determine the types and relative abundances of marine organisms that might be affected by marina construction. Underwater Remote Video surveys were also conducted due to the large area of harbor seafloor to be surveyed. Track lines covered 7,899 meters of harbor seafloor (4.91 miles).

**Table 2. Areas Surveyed in Dana Point Harbor\***

Location	Bottom Habitat Survey Area (Acres)	Area of Potential Biological Impact (Acres)	% Total Area Covered*	Depth Range (ft, MLLW)
Baby Beach	1.40	0.75	186.7	-3 to -10
Bridge Abutment Slopes	0.06	0.08	75.3	+3 to -10
Commercial Fishing Docks	0.12	0.58	20.3	+3 to -15.9
Dry Stack/Shipyard Basins	0.30	0.36	83.5	-12.4
Harbor Patrol Basins	0.28	0.13	221.9	+3 to -15.9
Marina Basins	2.98	21.43	13.9	+3 to -11
Sport fishing Dock Basin (inner ½ to bulkhead) and immediately seaward of docks	0.35	0.36	97.6	+3 to -15.4
Temporary Dock Area, East Channel	0.88	2.04	43.0	+3 to -12
Youth Sailing Center	0.12	0.10	110.7	+3 to -12
<b>Total</b>	<b><u>6.28</u></b>	<b><u>25.28</u></b>	<b><u>24.7</u></b>	<b><u>+3 to -15.9</u></b>
<b>Other Regions Surveyed</b>				
West Jetty Channel Slope**	0.42	none**	**	-2 to -12
Main Channel**	1.9	none**	**	+3 to -20.4
* Includes both biologist/diver and remote video survey coverage				
** Not in project area				



**Figure 4. Survey Locations**  
 Basin Transect Surveys   
 Basin Piling Surveys •  
 Baby Beach and Sailing Center Transect Surveys   
 Remote UW Video Survey Area

The surveys covered 6.28 acres of harbor bottom habitat (Table 1 and Figure 4). Overall, the bottom area surveyed by both diving biologists and remote video averaged 24.7% of the total bottom habitat within the project survey limits, ranging from 13.9% in the East and West Marina basins to over 100% coverage in the at the Youth Sailing Center and the Harbor Patrol basin. Baby Beach areal cover (by divers and video in 2007 and 2010) encompassed 187% of the survey area, and reflected a survey effort concentrated in a region where there was a probability of locating eelgrass since a very small patch of eelgrass (three

turions) was located there in April 2005 (Chambers Group, Inc., 2005). The eelgrass survey area in 2010 was concentrated along the eastern one-third of Baby Beach from depths of -3 to -12 ft MLLW beginning immediately west of the existing Sailing Center Dock and all of the basins at the Embarcadero and Dry Stack/Staging Area north of the launch ramp (Figure 4).

## 2.1 PHYSICAL ENVIRONMENT

### 2.1.1 Water Depths

Dana Point Harbor depths vary between approximately 21 feet (ft) Mean Lower Low Water (MLLW) in the Entrance Channel and Main Channel to intertidal depths in the Turning Basin where Baby Beach provides sandy intertidal habitat (Coastal Resources Management, Inc. 2010). Depths within the marina basins are generally between -8 and -12 ft MLLW.

### 2.1.2 Substrate Types

**Unconsolidated sediments.** Surficial sediments within all the marina and harbor basins were fine sands to extremely fine silts although underlying sediments tend to be sandier (Geotechnical Inc., 2006). Unconsolidated sediments in the Turning Basin and the East Channel near the Youth Sailing Center were sandy silts but visually, increased in sand percentages closer to the Baby Beach shoreline. Sediments were coarsest near the Youth Sailing Center; and on the south side of the bait barge along the base of the East Breakwater (Temporary Dock area). In each of these areas, sediment sized decreased with depth. Significant amounts of trash and debris (cans, bottles, plastic bags, fishing lines, etc.) was also found on the bottom all along the base of the East Breakwater.

**Hard substrate.** Intertidal and subtidal rock quarry stone and smaller rip rap is present in many areas of Dana Point Harbor and serves as protection for bulkheads and shorelines. The breakwaters and the south side of the East and West Island marinas consist of larger quarry stone, whereas the rip rap that protects the bulkheads of the marinas in the vicinity of the Youth Sailing Center and the Sport Fishing Dock consist of small-to moderate-sized rip rap. Sloped, cement quay walls occur around the perimeter of the marina basins and at the bridge abutments. These cement slopes were covered by a light to moderate layer of fine sediments.

Pilings and docks are attachment surfaces for plants and invertebrates. This community of organisms is commonly referred to as the “biofouling community”. These hard surfaces extend between the highest high tide line and the Harbor bottom depths, supporting both an intertidal and subtidal complex of organisms. This habitat type is common throughout the Harbor.

Exposed natural reef is present within many areas of the Harbor, a remnant of the extensive reef habitat that was present prior to the construction of the Harbor. Isolated rock habitat in the marina basin that was observed during the subtidal surveys included three, single rock outcrops in the Island West Basin and one moderate relief (1 meter high) rock outcrop in Cove West Basin. These outcrops were at depths between -8 and -10 ft MLLW. Other outcrops are likely present but not observed during the surveys. Outside of the marina basins, scattered low to medium relief (<1 to 2 meter high) reef outcrops and isolated boulders were located in the Turning Basin west of the Youth Sailing Center docks at depths between -3 and -8 ft MLLW; in the Main Channel and East Channel at depths between -8 and -20 ft MLLW; in the East Channel seaward of the Sport Fishing Docks; and in the Anchorage Area at the north end of the proposed temporary dock at depths of -12 ft MLLW.

### 2.1.3 Underwater Visibility and Water Temperature Conditions During The Surveys

Underwater visibility in the Harbor is highly variable, depending on factors such as plankton blooms, stormwater runoff into the Harbor, wind-generated waves and currents, tidal currents, vessel prop wash, and proximity to the entrance to the Harbor. During surveys conducted by CRM in Feb/March 07, underwater visibility ranged between 1 and 3 ft within the marina basins and 1 to 4 ft in the vicinity of Baby Beach and the Youth Sailing Center (Coastal Resources Management, In. 2010). During the October/November 2007 survey, underwater visibility was still limited within the marina and harbor basins, but was substantially better outside the marina basins where visibility approached 8 to 10 ft in the vicinity of the proposed in the West Channel and on the south side of the bait barge in the vicinity of the proposed temporary dock. In June 2010, underwater visibility was approximately 2-3 feet near Baby Beach, 5-10 ft in the West Main Channel, and 2 feet in the East Channel near the bait barge and the dry stack storage area.

Comparatively, underwater visibility averaged about 3 ft near the boat launch ramp in August 2006 (Chambers Group, Inc 2006) and 8 feet at depths of 0.0 to -10 ft MLLW at Baby Beach in April 2005 (Chambers Group, Inc., 2005).

## 2.2 MARINE BIOLOGICAL ENVIRONMENT

Dana Point Harbor intertidal habitats extend from the extreme low to extreme high water mark (-1.2 to +7.0 ft MLLW). The types of habitats in this zone include sandy intertidal, quarry stone (rip rap), dock piles, and sloping cement bulkheads. Portions of, or all of these shoreline types are exposed to both air and water during the tidal cycle. Habitats below the extreme low tide zone are “subtidal” and are never exposed. Project area subtidal habitats include unconsolidated, soft-bottom (sands and muds) which make up the majority of the Harbor’s benthic (bottom) environment, portions of docks, pilings, bulkheads, isolated reef outcrops, and the water column. These habitats support marine plants, invertebrates, fishes, and birds.

### 2.2.1 Intertidal Sandy Beach

Sand beach habitat is found in the Turning Basin at Baby Beach. This sand beach is a low-energy environment that is affected primarily by wind waves and tidal action within the Harbor. It is in the lee of Dana Headlands and is exposed only to significant winds during easterly and southerly wind events. The sediments consist of a combination of fine-grain sediments mixed with coarse grained sand, imported to form and sustain the beach (Applied Ecological Research [AER], 2000). The high intertidal portion of the County-maintained public beach supports few if any marine organisms because of infrequent tidal exposure and periodic cleaning and grooming. This higher elevation however, provides resting habitat for seabirds (gulls and pelicans). The middle and low intertidal zones provide consistent tidal inundation and therefore support burrowing species of invertebrates (primarily clams, crustaceans, and polychaete worms). These organisms attract shorebirds to the beach that utilize the invertebrates as their food source (Quammen 1980). Core samples analyzed by AER included polychaete worms and snails; the algae *Enteromorpha* was found below the tide line along the beach.

### 2.2.2 Subtidal Environments

The benthic invertebrate community in the Harbor is made up of a complex of species that live on the sediment surface (epibenthic organisms) or in the soft-bottom sediments (infauna). Bottom-dwelling fish that either live in burrows (i.e., gobies), as well as species that are dependent on the bottom sediments for foraging (i.e. sting rays, sand bass, and halibut) are important members of the bottom community within bays and harbors.



**Subtidal Soft-bottom Habitat.** Invertebrates in Dana Point Harbor are found in a range of sediment regimes between fine silts to coarse sands/gravels, and are transitional in their affinities to offshore benthic communities and coastal embayments. While the majority of benthic invertebrates obtain their nutrition by consuming organic detritus, some graze on diatoms and algae or actively prey on other invertebrates. In turn, bottom feeding fishes and resident soft-bottom-dwelling fishes (gobies, juvenile flatfish, and sand bass) rely upon these benthic organisms as food sources (USACOE, 2000; MBC and SCCWRP, 1980).

Common types of benthic infaunal organisms that are associated with bay and harbor sediments include flat worms, amphipod crustaceans, crabs, snails, clams, polychaete worms (capitellids, spionids, cirratulids, and ophelliids), oligochaete worms and brittle stars. Sediment physical and chemical characteristics, water column properties, tidal circulation, proximity to storm water outfalls and other contaminant sources, and harbor configuration all play a role in the types of benthic organisms present in the Harbor as well as where these organisms live.

Benthic surveys in Dana Point Harbor indicate that the infaunal community is dominated by small polychaete annelid and arthropod species, with fewer numbers of clams and nemerteans (Robert Bein, William Frost Associates and MBC Applied Environmental Sciences, 2003). These studies also suggest that the infaunal community makeup and composition is similar to Newport Harbor (State Water Resources Control Board, 1998; Coastal Resources Management, 2003), Alamitos Bay (Coastal Resources Management, 1998), and Marina del Rey Harbor (ABC Laboratories, Inc., 2005).

During benthic surveys conducted in 1994 and 1998 by the State Water Resources Control Board, infaunal species composition and dominance was dominated by a similar group of species that included amphipods (*Grandidierella japonica* and *Corophium* sp.) and annelid worms (*Pseudopolydora paucibranchiata* and *Euchone limnicola*). High abundances at some stations of species tolerant of variable salinities, such as *P. paucibranchiata* and *G. japonica*, suggest that freshwater input from urban runoff may be considerable in some areas of the Harbor. These species are also dominant species within Newport Bay (State Water Resources Control Board 1998; Coastal Resources Management, 2003). Density of infaunal organisms in the Harbor in 1994 ranged from approximately 3,000 organisms per square meter (sq m) in sediments from the south side of the Harbor to almost 20,000 organisms per sq m near the storm drain at Baby Beach. During Southern California Bight Wide regional benthic surveys conducted in 1998, infaunal density in the Harbor ranged from approximately 1,250 to nearly 7,000 organisms per sq m, with the highest densities found in the Baby Beach area. As is typical in southern California harbors, species found during infauna sampling include both native and well-established introduced species.

Coastal Resources Management, Inc. (2010) observed eighty-eight (88) taxa of marine plants, invertebrates, and fishes during field surveys conducted between February 2007 and June 2010 (Table 3 and Appendix 2). Marine plants (algae and seagrass) contributed the highest number of taxa (34.1% of the total). Mollusks (octopus, snails and clams) contributed the second highest number (22.7 % of the total), followed by fish (11.4%), annelid worms (8.0) and arthropods (5.7%).

***Soft-Bottom Epi-Benthos.*** The soft-bottom epibenthic community in Dana Point Harbor during CRM field surveys was species poor (Coastal Resources Management, 2010). Eleven soft-bottom plant and macro-invertebrate taxa were observed in the marina basins and other soft-bottom habitats in Dana Point Harbor (Table 4). Sediments within the east and west basins as well as other areas within and outside the marina basins were lightly coated with a layer of diatoms, and secondarily, spotty cover of the algae *Chaetomorpha aerea* and *Ulva intestinalis*. This was typical in areas of lower tidal current flows. Small beds and patches of Eelgrass (*Zostera marina*) were observed in the shallow subtidal habitat offshore of Baby Beach encompassing 457 square feet of bottom habitat (See Section 2.3).

**Table 3. Number of Marine Taxa Observed During the CRM Dive Surveys, Feb/Mar 07, Oct/Nov 07, and June 2010.**

<b>Taxonomic Group</b>	<b>Total Taxa</b>	<b>% Total</b>
<b>Algae</b>	29	33.0
<b>Seagrasses</b>	1	1.1
<b>Porifera</b>	2	2.3
<b>Cnidaria</b>	6	6.8
<b>Platyhelminthes</b>	1	1.1
<b>Annelida</b>	7	8.0
<b>Arthropoda</b>	5	5.7
<b>Mollusca</b>	20	22.7
<b>Bryozoa</b>	3	3.4
<b>Tunicata</b>	4	4.5
<b>Fish</b>	10	11.4
<b>Total</b>	<b>88</b>	<b>100.0</b>

The most common occurring macro-invertebrate on soft sediments was the predatory snail *Navanax inermis*, which was ubiquitous throughout the Harbor soft-bottom habitats. The burrowing anemone *Pachycerianthus fimbriatus* was common within the West Marina although found in many areas of both marina basins and in the Main Channel. The tube-building polychaete *Diopatra ornata* the bubble snail *Haminoea vesicula* were observed where sediments were sandier in the East Channel near the southern section of the proposed temporary dock. Notably, no marine invertebrates or algae were observed on the soft substrates within the Dry Stack or the Ship Yard basins.

Rocky Intertidal and Subtidal Habitat (Pier Pilings, Rock Rip Rap, Cement Bulkheads, and Natural Reefs).

Most plants and invertebrates were associated with harbor artificial hardscape and natural reef (81 of 88 taxa). Of the various hard-bottom habitat types, 59 were associated with East and West marina hard substrate, and 68 were present on hard substrate in the Main Channel, West Channel, and East Channel on larger quarry stones and natural reefs (Table 4). The most productive areas were reefs and quarry stone in the Main Channel (49 taxa), the hardscape of the Youth Sailing Center reefs (40 taxa), marina pilings (36 taxa), the hardscape of the East Breakwater quarry stone and isolated reefs near the proposed temporary dock (25 taxa), and the hardscape of the Sport Fishing Dock bulkhead and rip rap (25 taxa).

Marina Basin Pilings. Thirty-six taxa were observed on 14 piles scattered throughout the East Marina (Table 4). While the cumulative number of taxa observed on pilings was 36 for all piles, the number of taxa on a single pile varied between five and 11. Species richness decreased with depth. The dominant organisms on the upper three feet of the pilings included a complex of green algae (*Ulva intestinalis*), a turf and filamentous red algae complex, brown algae (*Colpomenia perigrina*, *Dictyota flabellata*, and *Sargassum muticum*), hydroids (*Aglaophenia* sp.), serpulid polychaete worms, barnacles (*Balanus amphitrite* and *B. glandula*), and mussels (*Mytilus galloprovincialis*). The mid-depth piling community (-3 to -7 ft) was dominated by polychaete worms (serpulid worms and the calcareous tube-building *Dodecaceria fewksii*), mussels, solitary tunicates (*Styela plicata*), and ectoprocts (*Bugula neritina* and unid. encrusting ectoprocts). The bottom depth piling community (-7 to -10 ft MLLW) was dominated by tunicates, ectoprocts, and hydroids.

**Table 4. Number of plants, invertebrate, and fish taxa in the Dana Point Harbor Survey Areas- Feb/Mar, Oct/Nov 2007, and June 2010**

<b>Region of Harbor</b>	<b>Total Number of Taxa</b>
Island Way Bridge Abutment (north side)	12
Marina Pilings	36
Marina Quay Walls	18
Youth Sailing Center Rip Rap and Reefs, and Soft-benthos (epibiota)	42
<b>All Areas Within East and West Marina Basins</b>	<b>59</b>
Main Channel Reefs, Rip Rap, and Soft Epi- Benthos	49
Temporary Dock Area (Hard-bottom and Soft-bottom epi-benthos)	28
Sport Fishing Docks (Hard-bottom)	25
<b>All Soft-bottom Substrate in Survey Areas (epibiota)</b>	<b>11</b>
<b>All Hard Substrate in Survey Areas Outside West and East Marina Basins</b>	<b>68</b>
<b>All Hard Substrate in Survey Areas, Dana Point Harbor</b>	<b>81</b>
<b>All Soft and Hard Bottom Substrate in Survey Areas, Dana Point Harbor</b>	<b>88</b>

Basin Quay Walls. The sloping, cement bulkhead around the perimeter of Cove East and West and Island East and West Basins (including the Harbor Patrol Basin) supported 18 species of algae and invertebrates. However, this habitat exhibited a low diversity of taxa and extremely low percent cover of marine life. The most conspicuous species was the calcareous, tube-building polychaete *Dodecaceria fewksii* that formed small colonies on most of the quay walls examined. Other common species included lined-shore crabs (*Pachygrapsus crassipes*), solitary ascidians, and scattered, juvenile mussels. A fine silt layer, approximately 1-2 cm deep, covered the substrate. Other than *Dodecaceria*, most of the flora and fauna were found in the depressions formed by the meeting of adjoining cement sections of quay wall.

Bridge Abutments, Island Way. Twelve taxa were represented on the north bridge abutment at depths between +3 to -10 ft MLLW (Table 4). This site consisted of a low-diversity assemblage of macrophytes and macroinvertebrates due to a lack of sunlight and a coating of sediment over the concrete slope. Four macrophytes were observed-*Corallina pinnatifolia*, *Dictyota binghamiae*, *Dictyopteris undulata*, and *Colpomenia sinuosa*. The dominant invertebrates included acorn barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), bay mussels (*Mytilus galloprovincialis*), tunicates (*Styela plicata*), sponges (*Leucosolenia* sp.), and hydroids (*Aglaophenia* sp); hydroids exhibited the highest cover.

Breakwater Quarry Stone and Natural Reef, Main Channel. This area is located outside of any harbor improvements. Substrata at depths between the intertidal to -7 ft MLLW was primarily quarry stone rip-

rap. Naturally occurring low-to moderate relief reefs were present throughout the area surveyed in the channel.

The most productive intertidal and subtidal habitats were those associated with large quarry stone and natural reef outcrops. These areas supported a diverse assemblage of macrophytes and invertebrates and fishes (49 taxa) characteristic of communities associated with a greater degree of wave exposure than protected marinas. The common red macrophytes include articulated corallines (*Corallina chilensis*, *C. pinnatifolia*, *Lithothrix aspergillum*, *Amphiroa zonata*, *Bossiella orbigniana*), coarsely branched red algae (*Gelidium purpurascens*), and crustose corallines (*Lithothamnion* spp.), while other less common red macrophytes included *Ceramium/Polysiphonia* spp., *Cryptopleura crispa*, and *Laurencia pacifica*. This habitat also supported a rich brown macrophyte community including Dictyotales (*Dictyota binghamiae*, *Dictyopteris undulata*, *Zonaria farlowii*, *Taonia lennebackerae*), the Fucales (*Sargassum muticum*, *Halidrys dioica*), and one member from both the Laminariales (*Eisenia arborea*) and the Scytosiphonales (*Colpomenia sinuosa*). Giant kelp (*Macrocystis pyrifera*) was also present, in very low abundances. Many of the plants observed had only a few number of thin stipes, and were in poor condition.

The most conspicuous lower-intertidal and subtidal invertebrates included limpets (*Lottia limatula*, *L. gigantea*, *L. scabra*), barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), scaly tube snail (*Serpulorbis squamigerus*), and trochid snails (*Tegula eiseni*). Larger, but less abundant invertebrates included lobsters (*Panulirus interruptus*), gorgonians (*Muricea californica*), warty sea cucumbers (*Parastichopus parvimensis*), rock scallops (*Crassidoma giganteum*), festive murex snails (*Pteropurpura festiva*), and tunicates (*Styela plicata*). No sensitive or listed species of plants, invertebrates, or fishes were documented from this site.

Breakwater Quarry Stone and Isolated Reefs, East Basin Temporary Dock, Similar to the area surveyed in the Main and West Channel, hardscape in the East Channel near the breakwater supported many plant and invertebrate form in response to adequate tidal exchange and tidal currents, and suitable substrate. The East Breakwater provided the most extensive hard-bottom habitat. Common red macrophytes present in the low intertidal and shallow subtidal zone included articulated corallines (*Corallina chilensis*, *C. pinnatifolia*, *Amphiroa zonata*), and crustose algae (*Lithothamnion* spp., *Peyssonneliaceae/Hildenbrandiaceae*) and secondarily, *Ceramium/Polysiphonia* spp. and *Laurencia pacifica*. Several species of brown macrophytes were also present-*Dictyota binghamiae*, *Dictyopteris undulata*, *Zonaria farlowii*, *Taonia lennebackerae*, *Sargassum muticum*, *Halidrys dioica*, *Eisenia arborea* and *Colpomenia sinuosa*.

A fauna similar to the West Channel quarry stone community was also found at this site and included limpets (*Lottia limatula*, *L. scabra*, *Crepidula onyx*), barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), and trochid snails (*Tegula eiseni*). The snails *Pteropurpura festiva* and *Acanthina spirata* were also present, but were not as common.

North of the bait barge, a few moderate relief (1.5-2 m high) rocky reefs were located in the general vicinity of the proposed Temporary Dock. These reefs supported fewer macrophytes and macroinvertebrates than the subtidal fauna on the East Breakwater and in the Main Channel. Species that were observed included the red algae complex *Ceramium/Polysiphonia* spp., and *Rhodymenia californica*; brown macrophytes (*Sargassum muticum*, *Dictyopteris undulata*); slipper limpets (*Crepidula onyx*); and gorgonians (*Muricea fructicosa*). These features exhibited a higher degree of sedimentation than reefs in the West and Main Channels.

A significant amount of trash was observed while surveying the East Breakwater biological communities. This debris was concentrated at the base of the breakwater lodged in the rocks as well as on the sediments at the base of the breakwater rocks.

Youth Sailing Center Reefs and Rip Rap. Rip rap behind the docks and low relief natural reef in the Turning Basin in front of the Youth Sailing Center docks supported a large number of species-40 taxa of plants and invertebrates similar in nature to those occurring in the marina piling community and the quarry stone/natural reef habitats in the West Channel and Main Channel. Dominants included the southern sea palm algae (*Eisenia arborea*) the brown seaweed *Sargassum muticum*, coralline turf algae, and invertebrates such as sponges, colonial polychaete worms, lobsters (*Panulirus interruptus*), snails (*Kelletia kelletii*), limpets (*Lottia* spp.), slipper limpets (*Crepidula onyx*), and mussels (*Mytilus galloprovincialis*).

Rip rap lined the cement bulkhead on the south side of the Youth Sailing Center,. The most commonly red algal forms included articulated corallines (*Corallina pinnatifolia*, *Amphiroa zonata*), coarsely branched red algae (*Gelidium purpurascens*), and crustose corallines (*Lithothamnion* spp.). Small red turf algae (*Ceramium* and *Polysiphonia* spp.) was less common. The dominant brown macrophytes were *Dictyota binghamiae*, *Dictyopteris undulata*, and *Sargassum muticum*. Barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), lobsters (*Panulirus interruptus*), slipper limpets (*Crepidula onyx*), and tunicates (*Styela plicata*) were the most common-occurring invertebrates.

Sport Fishing Dock Rip Rap. The variable-sized rip rap in front of the Sport Fishing Docks supported a moderately-diverse community of intertidal and subtidal plants and invertebrates typical of both the inner marina and the outer channels of the Harbor. The most common types of plants were filamentous red algal taxa, coralline turf algae, and macrophytes, particularly *Sargassum muticum* and *Dictyota flabellata*. The most conspicuous macroinvertebrates were limpets (*Lottia* spp.), mussels (*Mytilus galloprovincialis*, sea fans (*Muricea californiensis* and *M. fruticosa*), lobsters (*Panulirus interruptus*), and colonies of the cup coral *Astrangia lajollensis*.

**Comparative Studies.** Coastal Resources Management, Inc. (2009) conducted dive surveys at the Dana Point Marine Institute in July 2009 for proposed dock and improvements. The area surveyed within the project area covered a total of 32,000 sq ft (0.73 acre) from the bulkhead out into the West Channel. Dominant reef algae included *Sargassum muticum*, *Dictyopteris undulata*, and *Corallina* spp. Less common species included individual giant kelp plants (*Macrocystis pyrifera*) on low relief reef, sea palms (*Eisenia arborea*) at the base of the rip rap and the dock, and the brown algae *Taonia lennebackerae* on the rip rap. *Pachycerianthus fimbriatus* (burrowing anemone) was the only epifaunal species observed on soft bottom habitat. Other species observed on bulkhead walls, pilings, and rip rap included sponges (*Haliclona* sp.) barnacles (*Chthamalus fissus/dalli* and *Balanus glandula*), shorecrabs (*Pachygrapsus crassipes*), mussels (*Mytilus galloprovincialis*) and limpets (*Lottia limatula* and *L. scabra*). Scattered colonies of gorgonians (*Muricea californica*) were also present in the rocky subtidal habitat. Fishes observed included unidentified flatfish, kelp bass (*Paralabrax clathratus*), barred sand bass (*P. nebulifer*), opaleye (*Girella nigricans*), and pile perch (*Damalichthys vacca*).

Lambert and Lambert (2003) studied the distribution and abundance of non-indigenous ascidians (tunicates) in southern California marinas between 1994 and 1998, including a site near the Orange County Marine Science Institute floats (Dana Point Marine Institute). As a consequence of low flushing rates in most of the Harbor which is nearly completely enclosed by breakwaters, few ascidians or other marine invertebrates were ever found at sites other than the site near the harbor entrance. The most common ascidian found was *Styela plicata*, which favors a preference for lower tidal flushing rates over *S. clava*. During the CRM field surveys in 2007, two specific types of tunicates were found in the marina basins-*Botrylloides* spp. and *Styela plicata*. *Botrylloides* commonly was found covering mussels and other biological substrate. *Styela* was common on the pilings as well as occasionally present on the quay walls.

MBC Applied Environmental Sciences conducted a brief reconnaissance survey near the Ocean Institute on 22 November 1999 to evaluate the intertidal community on the riprap (Robert Bein, William Frost Associates and MBC Applied Environmental Sciences, 2003). They concluded that in general, the community composition in Dana Point Harbor closely resembles those communities in other southern California harbors. The community was highly degraded with few species and low abundances. At the +3 ft level, only a few slipper shells and limpets were noted. In the high intertidal (+5 ft MLLW), abundance was low, with white acorn barnacle most abundant and bay mussels in crevices. Below that, brown acorn barnacle became more prominent, and overall coverage was greater. Below the +2 ft level, barnacles, limpets, and slipper shells were dominant. At the 0-ft level, some low lying algae was present, and in the subtidal, the brown alga *Sargassum muticum* was noted.

The shallow subtidal riprap at Dana Point Harbor was also briefly surveyed by MBC (Robert Bein, William Frost Associates and MBC Applied Environmental Sciences, 2003). At two locations, approximately 50 meters apart, percent cover of dominant organisms was estimated. Results from that survey indicated that the epibiota of the riprap of the shallow subtidal was relatively depauperate compared with that seen in Long Beach Harbor. The probable cause is the decrease in tidal strength and increasing shallowness progressing into the inner portion of the basin, resulting in less water movement for filter feeders and increasing siltation which potentially smothers settling epibiota. The upper subtidal at the innermost site was dominated by *Mytilus* spp. and coralline algae, whereas at the other location, the upper subtidal was dominated by large brown algae, particularly *Sargassum muticum*.

In conclusion, studies of Dana Point Harbor intertidal and subtidal flora and fauna conducted between 1994 and 2010 indicate that the overall biodiversity of pilings, rocky intertidal, and subtidal hardscape varies greatly within different parts of the Harbor. Highest diversity occurs in the Main, West, and East Channel outside the marina basins on large breakwater quarry stone and isolated patch reefs. These areas support a greater diversity of macrophytes and invertebrates than the pilings, docks, quay walls, and bulkheads within the Marina Basins. Giant kelp may be found incidentally within the Main and West Channel although the dominant macrophytes are the sea palm (*Eisenia arborea*) and the invasive *Sargassum muticum*. Primary limiting factors for the varying distribution patterns of plants and invertebrates are related to reduced tidal flushing and water turnover within the Harbor basins and secondly, the accumulation of silts over the surfaces of the rocky habitats as a consequence of the Harbor being nearly completely enclosed by the breakwater. The flora and fauna components of Dana Point Harbor are composed of a mixture of species, both endemic and invasive, that are generally found within other bays and harbors within Southern California.

### 2.2.3 Plankton

Plankton consists of algae (phytoplankton) and animals (zooplankton) small enough to be suspended in the water column and drift through tidal and oceanic currents. Common types of phytoplankton in the Southern California Bight (SCB) include diatoms, dinoflagellates, euglenoids, coccolithophores, and ciliates (Hardy, 1993) while the zooplankton are those animals that spend part (meroplankton) or all (holoplankton) of their life cycle as plankton (Dawson and Pieper, 1993). Fish eggs and larvae (ichthyoplankton) are an important component of the zooplankton community. With the exception of a few fish species (e.g., the Embiotocidae or surf perches that bear live young), most fish that occur in southern California are present as larvae or eggs in the plankton community. Plankton abundances and distributions are directly tied to water temperature, nutrients, upwelling, and current movements, and for zooplankton, the amount of phytoplankton food resources. The planktonic community in Dana Point Harbor is expected to be composed of the same types of organisms common to the nearshore coastal environment offshore of Dana Point, since the plankton are drawn into the Harbor through tidal and wind-driven processes and there is not a significant estuarine influence in the Harbor.

## 2.2.4 Fishes

The types of fishes which commonly occur in protected marinas and harbors of southern California are a combination of species that are associated with both soft-bottom habitat and hardscape of pilings, docks, cement bulkheads, and breakwaters.

Soft-bottom (demersal) species include gobies (*Clevelandia ios*) and flatfish (California halibut, *Paralichthys californicus*; diamond turbot, *Hypsopsetta guttulata*). Water-column species include topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), black surfperch (*Embiotoca jacksoni*), shiner surfperch (*Cymatogaster aggregata*), walleye surfperch (*Hyperprosopon argenteum*), white croaker (*Genyonemus lineatus*), queenfish (*Seriphus politus*) and white surfperch (*Phanerodon furcatus*).

Marinas provide additional structure (pilings, docks, and breakwaters) that attract different groups of fish (Coastal Resources Management, 1993). Hard substrate in marinas offer cover, protection, or sources of food for pile perch (*Damalichthys vacca*), pipefish (*Syngnathus* spp.), kelpfish (*Heterostichus* spp.), and opaleye (*Girella nigricans*), while the breakwater riprap protecting the Harbor provides a habitat for barred sand bass (*Paralabrax nebulifer*), kelp bass (*P. clathratus*), sargo (*Anisotremus davidsoni*), halfmoon (*Medialuna californiensis*), and cryptic species (blennies and sculpins).

Water-column species such as topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), black surfperch (*Embiotoca jacksoni*), shiner surfperch (*Cymatogaster aggregata*), walleye surfperch (*Hyperprosopon argenteum*), white croaker (*Genyonemus lineatus*), queenfish (*Seriphus politus*) and white surfperch (*Phanerodon furcatus*) are also common within southern California marinas and may be expected to be present in Dana Point Harbor.

### Fishes Observed during CRM Field Investigations

**Soft-Bottom.** Few fish were observed over sedimentary habitats, likely due to low visibility (CRM, 2010). Of the two species observed, only the round sting ray (*Urolophus halleri*) was common. Other unidentified flat fish were seen, but could not be identified. However, there are several other species of fish that occur in other bays and harbors in southern California that are likely to be present in Dana Point Harbor. These include gobies (*Clevelandia ios*), and flatfish (California halibut, *Paralichthys californicus*; diamond turbot, *Hypsopsetta guttulata*).

**Hard-Bottom.** Nine species of fish and one unidentified juvenile were observed in the vicinity of hard-bottom habitat during the dive and remote video surveys. The most common fishes observed included garibaldi (*Hypsypops rubicundus*), kelp bass (*Paralabrax clathratus*), opaleye (*Girella nigricans*), pile surfperch (*Damalichthys vacca*), blacksmith (*Chromis punctipinnis*), señorita (*Oxyjulis californica*), and kelpfish (*Heterostichus rostratus*). Most fish were seen in the vicinity of the Youth Sailing Center Docks, the Sport Fishing Docks, the West Channel, Main Channel, and East Channel.

**Water Column.** Water-column species such as topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), black surfperch (*Embiotoca jacksoni*), shiner surfperch (*Cymatogaster aggregata*), walleye surfperch (*Hyperprosopon argenteum*), white croaker (*Genyonemus lineatus*), queenfish (*Seriphus politus*) and white surfperch (*Phanerodon furcatus*) are also common within southern California marinas and are also expected to be present in Dana Point Harbor.

### 2.2.5 Marine Mammals

One of the most important areas of high concentrations of marine mammals in southern California is the waters within a 10-mile radius between San Clemente and Dana Point (Bonnell et al 1981). These waters are known for high seasonal concentrations of common dolphin (*Delphinus delphis*) and the nearshore migratory pathway of California gray whales (*Eschrichtius robustus*) which was delisted as an endangered species in June 1994.

Several species of marine mammals inhabit the local waters (Bonnell et al., 1981; Bonnell and Dailey, 1993; Dohl et al., 1981). These include two pinnipeds (California sea lions [*Zalophus californicus*] and harbor seals [*Phoca vitulina*]) and 12 species of cetaceans (whales and dolphins). Four of the whales are baleen (filter feeding) whales, and eight species are odontocetes (toothed whales). The California gray whale, bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), and Pacific white-sided dolphin (*Lagenorhynchus obliquidens*) are the most commonly occurring species in the waters offshore of Dana Point Harbor.

Whales and dolphins are uncommon visitors to Dana Point Harbor. Recently however, a young, emaciated, gray whale entangled in fishing gear swam into Dana Point Harbor and remained for a few days in mid-May 2010. The net was removed by a team of biologists, and the whale swam out of the harbor. It died offshore of Doheny Beach on May 14<sup>th</sup>, 2010 (Orange County Local News Network, 2010). California sea lions and harbor seals are more frequently observed within the Harbor waters, with sea lions also hauling out on the breakwater. The Harbor is not considered a breeding habitat for pinnipeds but it is a secondary foraging area.

### 2.2.6 Water-Associated Birds

Shorebirds, waterfowl, and seabirds occur along the shoreline throughout the year but concentrations are usually highest during the fall to spring period when seasonal migrants winter over along the southern California shoreline. Common shorebirds include willet (*Catoptrophorus semipalmatus*), whimbrel (*Numenius phaeopus*), marbled godwit (*Limosa fedoa*), and sanderling (*Calidris alba*). The western grebe (*Aechmophorus occidentalis*), various species of cormorants (*Phalacrocorax spp.*) and surf scoter (*Melanitta perspicillata*) are among the water fowl which occupy the nearshore waters of Dana Point Harbor. Sea birds and larger marsh birds such as California brown pelican (*Pelecanus occidentalis*), terns (*Sterna spp*), western and ring-billed gulls (*Larus occidentalis* and *L. delawarensis Larus spp*), great blue herons (*Ardea herodias*) black-crowned night herons (*Nycticorax nycticorax*), and snowy egrets (*Egretta thula*) are expected to either occur in the waters and on the shoreline in the immediate area of Dana Point, or potentially within Dana Point Harbor as foraging and/or resting habitat.

Bird surveys conducted in March 2007 (Keane Biological Consulting, 2007) and March 2003 (MBC Applied Environmental Sciences in: RBF and MBC Applied Environmental Sciences, 2003) indicated that approximately one-half of the species observed were marine water-associated birds. Herons, egrets, and gulls, and pelicans were the most common species observed during both surveys. Other common water-associated bird species present included surf scoter (*Melanitta perspicillata*) and cormorants (*Phalacrocorax spp*). Although not observed, dabbling and wading ducks can also be found in the Harbor. During spring and summer, California least terns (*Sterna antillarum browni*), Forster's terns (*Sterna forsteri*), elegant terns (*Sterna elegans*), Caspian terns (*Sterna caspia*) and black skimmer (*Rynchops niger*) may be seen in local harbors, including Dana Point Harbor.

**Breeding and Nesting Species of Water Birds in Dana Point Harbor.** Fourteen bird species were identified as confirmed breeders in the Dana Point Harbor area during the March 2007 bird survey and an additional eight species are expected to nest in the area (Keane Biological Consulting, 2007). Of these



species, one water bird (black-crowned night heron) was observed nesting. Both snowy egrets and great blue herons were determined to be likely nesters nearby the Harbor.

## 2.3 SENSITIVE SPECIES

### 2.3.1 Eelgrass (*Zostera marina*)

**Importance of Eelgrass.** Eelgrass (Figure 5) is a marine flowering plant that grows in soft sediments in coastal bays and estuaries, and occasionally offshore to depths of 50 feet (ft). Eelgrass canopy (consisting of shoots and leaves) enhances the abundance and the diversity of otherwise barren sediments. Many species of invertebrates (i.e., clams, crabs, and worms) live either on eelgrass or within the soft sediments that cover the root and rhizome mass system. Eelgrass is a nursery habitat for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass). They are also foraging centers for seabirds such as the endangered California least tern that seek out juvenile topsmelt that are attracted to the eelgrass cover. Lastly, eelgrass is an important contributor to the detrital (decaying organic) food web of bays as the decaying plant material is consumed by many benthic invertebrates (such as polychaete worms) and reduced to primary nutrients by bacteria.

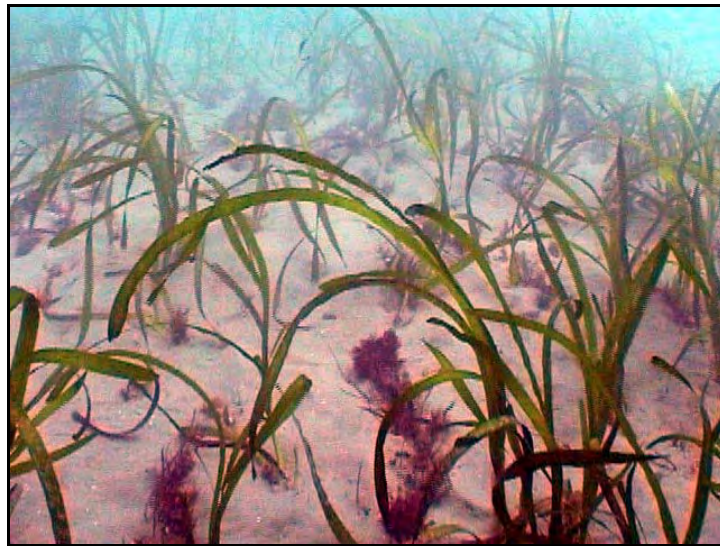


Figure 5. Eelgrass, *Zostera marina*. One “shoot” and the cluster of “blades” arising from the shoot is considered a “turion unit”. (Photo: CRM)

**Eelgrass in Dana Point Harbor.** Studies conducted between 2005 and 2010 have documented the expansion of an eelgrass bed seaward of Baby Beach in the western section of Dana Point Harbor (Figure 6). Most recently, small-to-large patches of eelgrass were located 160 to 412 feet west of the existing bulkhead at the Youth Sailing Center (Figure 6) during surveys conducted by MBC Applied Environmental Sciences (2008 and 2009) and CRM (Coastal Resources Management, Inc. 2010). The results of eelgrass surveys conducted to date in Dana Point Harbor are discussed below.

Chambers Group, Inc. located a single, three-turion plant at the eastern end of Baby Beach in 2005 (Chambers Group, Inc (2005) for the Dana Point Harbor Maintenance Dredging Project. MBC Applied Environmental Sciences conducted eelgrass and invasive algae surveys for the Dana Point Harbor Maintenance Dredging and Pipeline Corridor Project in August 2008 (MBC Applied Environmental Sciences, Inc. 2008 and 2009). A total of 14.5 square meters of eelgrass was located seaward of Baby Beach in 2008, and 70 square meters of eelgrass were located seaward of Baby Beach in 2009. Eelgrass

turion density ranged between about 48 to 56 turions per square meter during the February 2009 survey. None of the eelgrass was impacted by the County dredging project.

Coastal Resources Management, Inc. (2010) did not locate eelgrass within Dana Point Harbor during the February/March 2007 or the October/November 2007 reconnaissance surveys of Baby Beach. On June 8th, 2010, CRM updated the earlier Dana Point Harbor marine biological surveys in the vicinity of Baby Beach and the Sailing Center Docks along the eastern one-third of Baby Beach at depths between -3 and -12 ft MLLW (Figure 6). CRM reported the presence of 457.3 square feet (42.5 square meters) of eelgrass within the survey area at depths between -2.5 and -4.5 ft MLLW in a mixture of silt and scattered boulders (Figure 7). Eelgrass density was extremely low, ranging between 4 and 10 turions per square meter. None of this eelgrass was reported by MBC during the 2009 and 2009 surveys. In addition, turion density was extremely low. These observations suggest that eelgrass recently expanded during the 2009-2010 growing season and will likely continue to increase in areal cover, and increase in density to levels observed by MBC in 2008 and 2009.

CRM could not relocate the eelgrass patch that MBC located in the Dry Stack Storage area docks during the 2010 survey. This location appeared to be located underneath jet ski platforms at the time of the survey.

### 2.3.2 Surfgrass (*Phyllospadix spp.*)

Surfgrass is a sensitive marine resource that occurs in rocky shoreline and rocky subtidal habitats at depths to approximately 20 feet. Its sensitivity is related to its use by invertebrates and fishes as nursery habitat and its susceptibility to long-term damage because it is a very slow growing species. Revegetation occurs very slowly through initial seeding and eventually the spreading of roots and rhizomes over surfaces of rocks.

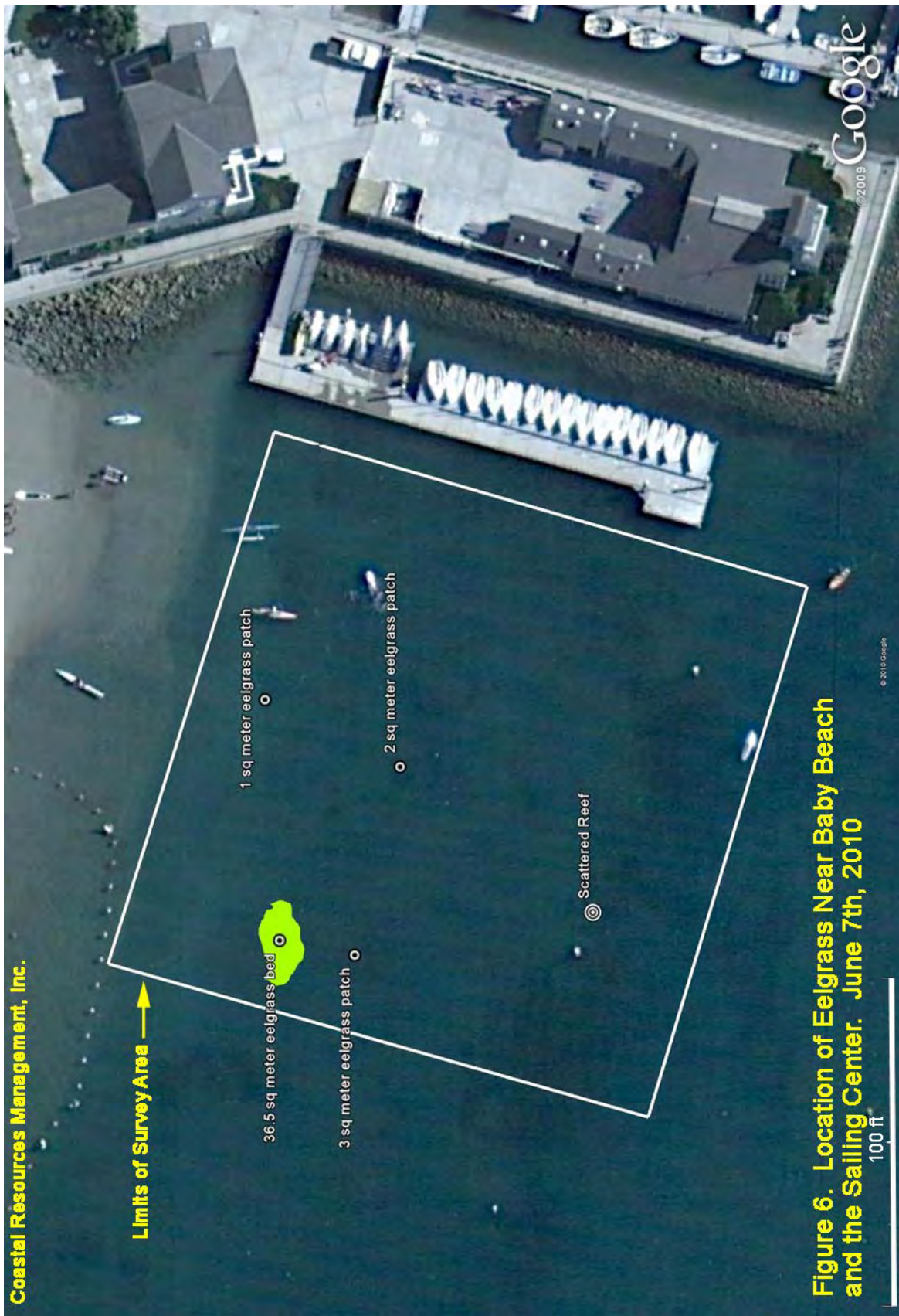
Surfgrass is considered to be Essential Fish Habitat by the National Marine Fisheries Service, and juvenile olive rockfish (*Sebastes serranoides*) which are a Fisheries Management Plan Groundfish species utilize surfgrass beds as nursery habitat. Surfgrass is also an extremely important nursery habitat for juvenile lobsters.

Surfgrass is a dominant feature of the Dana Point State Marine Park and Niguel State Marine Park intertidal and subtidal habitat (Applied Ecological Research 2001, Coastal Resources Management, 1998). Its presence on the inside of the Harbor's breakwater, or within the marina is likely limited because of the lack of wave action and other related requirements. No surfgrass was observed within the Harbor project area during the CRM 2007 field surveys (Coastal Resources Management, Inc., 2010).

### 2.3.3 Abalone

**Abalone (*Haliotis sorenseni*).** The white abalone is one of eight species of abalone that is known from California. Its listing as a federally endangered species in May 2001 is the result of a population reduction related to over fishing. It is unlikely to occur anywhere in Dana Point Harbor because of a lack of suitable rocky habitat and depth.

White abalones are found in open low and high relief rock or boulder habitat that is interspersed with sand channels. Sand channels may be important for the movement and concentration of drift macro-algae, such as *Laminaria farlowii*, *Agarum fimbriatum*, and a variety of red algae, upon which white abalone are known to feed (<http://www.nmfs.noaa.gov/pr/species/invertebrates/whiteabalone.htm>).



White abalone is reported to be most abundant between 25-30 m (80-100 ft) depths, making them the deepest occurring abalone species in California (California Department of Fish and Game 2001). The white abalone depth range is generally believed to be between 60 to 200 ft deep (18 to 60 m) with most occurring at depths greater than 75 ft on reef in exposed areas (California Department of Fish and Game 2001). However, white abalones have been verified at depths as shallow as 28 ft (8.5 meters) in surveys conducted in April and March 2002 in the vicinity of El Capitan State Beach (R. Ware, pers. observation; R. de Wit pers. observation; verified by Ian Tanaguchi, California Dept of Fish and Game in: L.A. de Wit Consultant, 2002). A hybrid white and red abalone was also found at a depth of 22 ft in April 2001 in the same area (R. Ware, pers. observation 2001; L.A. de Wit Consultant, 2001). MBC Applied Environmental Sciences Inc. (2003) noted that “a listing of the white abalone as having previously occurred at Doheny Marine Life Refuge is probably in error. None of the marine life refuge’s area is deeper than 6 to 8 m, which is well outside of the white abalones’ habitat range”. However, due to its confirmed presence at depths as shallow as 22 ft (8.5 m) in Santa Barbara County, there is a potential that this species occurrence in the Marine Life Refuge (State Marine Park) is a valid record, or alternatively, it could be a white/red abalone hybrid since one was observed at these depths along the Santa Barbara County coastline.

**Black Abalone (*Haliotis cracherodii*).** In 1998, the National Oceanographic and Atmospheric Administration’s (NOAA) National Marine Fisheries Service (NMFS) added black abalone to the candidate species list for possible listing under the federal ESA, and on January 14<sup>th</sup>, 2009, NMFS listed black abalone as an endangered species (Federal Register / Vol. 74, No. 9 / Wednesday, January 14<sup>th</sup>, 2009 /Rules and Regulations). Black abalones usually inhabit surf-battered rocks and crevices from the intertidal zone to shallow subtidal zone down to 20 ft (6 m). It is a long-lived species, attaining an age of 25 years or more. Now a rare species, the black abalone was abundant in California until the mid-1980’s. It once occurred in such high concentrations that individuals were observed stacked on top of one another. Density studies conducted at the Channel Islands indicate significant declines attributed to Withering Syndrome. According to NMFS, no effort has been made to assess effects of withering syndrome at Santa Catalina Island, though the Island historically supported black abalone populations (NMFS, 2008b). This species is potentially present within the Dana Point Marine Refuge and on the outer side of the Dana Point Harbor breakwater but in highly reduced numbers. It does not occur within Dana Point Harbor.

**Red Abalone (*Haliotis rufescens*).** Red abalone is listed as a species of special concern by the NMFS. In southern California, they are exclusively subtidal, restricted to areas of upwelling along the mainland and the northwestern Channel Islands. In central and southern California, red abalone had declined the least of all five species by the time the fishery was closed in 1997. A successful red abalone sport fishery continues in northern California, where SCUBA and commercial take have been prohibited. It does not occur within the Dana Point Harbor project area.

**Green Abalone (*Haliotis fulgens*).** Green abalone is listed as a species of special concern by the NMFS. It prefers shallow water from the low tide zone down to 25 feet (8 m). Green abalone may occupy a particular site, called a home site or scar, and abalone larger than one inch seldom leave their home scar to forage, relying solely on drift algae. Smaller individuals actively forage but return to their home scar in the day. Now rare, the green abalone was once a common species in southern California. It does not occur within the Dana Point Harbor project area.

**Pink Abalone (*Haliotis corrugata*).** This NMFS species of special concern occurs in a depth range from the lower intertidal zone to almost 200 feet (60 meters), but most are found from 20 to 80 feet (6 to

24 m). It has the broadest distribution of the southern California abalones. In the early 1950's, pink abalone comprised the largest segment of the abalone fishery, about 75 percent (California Department of Fish and Game, 2001). By the early 1980's, the commercial pink abalone fishery had expanded throughout its range and the landings dwindled to virtually nothing. Surveys at San Clemente, Santa Catalina, and Santa Barbara Islands in 1996 and 1997 indicated that there were few remaining abalone on these islands (California Department of Fish and Game, 2001).

#### 2.3.4 Fishes

**California Grunion (*Leuresthes tenuis*).** This fish species is not a formally listed species but is considered sensitive because of its beach spawning activity and potential impacts from beach disturbances such as beach cleaning and beach nourishment. It uses the high intertidal sandy beach habitat of many southern California beaches as spawning habitat. Grunion lay their eggs in the wet beach sands during the highest spring tides between late February or early March to as late as early September (Walker 1952). Dana Strands beach is a grunion spawning habitat which has been used by grunion on a regular basis. Doheny (Capistrano Beach) is also a historical spawning grounds for this particular species (Walker 1952 and H. Helling, pers. comm.). It does not occur within the Dana Point marina project area.

**Steelhead Trout (*Onchorynchus mykiss*).** Steelhead are a unique form of rainbow trout. Like salmon, they spent most of their adult lives in the ocean, but spawn in freshwater streams and rivers. It lives approximately two to four years of its life (but this period varies greatly) in the open ocean prior to returning to the stream where it was spawned. It is dependent on small, clear-flowing but not rapid, streams with gravel beds to complete its spawning cycle. The area must also have protective cover and an adequate food source. Steelhead populations are declining because of impacts on habitat such as dams, turbidity, and other habitat incursions (RBF Engineering and MBC Applied Environmental Sciences, Inc. 2003).

Although steelhead probably once existed in most of the California rivers and creeks with outlets to the ocean, recent records of this species are few, until the mid-1990s. Historically, a few fish were known to enter most of the waterways south of the Los Angeles Basin; however, spawning success may have been sporadic. The last published data indicated that anglers caught large numbers of juvenile rainbow fish in coastal lagoons in the 1930s (RBF Engineering and MBC Applied Environmental Sciences, 2003).

Colonization events of steelhead were documented during 1996-2002 in Topanga and San Mateo Creeks. These colonization events were represented by a few spawning adults or the observation of a single individual, when some fry suspected to be juvenile steelhead were discovered in San Mateo Creek in 1999. [http://ecos.fws.gov/docs/federal\\_register/fr3542.pdf](http://ecos.fws.gov/docs/federal_register/fr3542.pdf).

Except for the colonization of the small population in San Mateo Creek in northern San Diego County, steelhead appear to have been completely extirpated from nearly all systems in the southern portion of the range of the Distinct Population Segment (DPS) from Malibu Creek to the Mexican border. <http://www.nmfs.noaa.gov/pr/species>.

A steelhead trout was caught in the Harbor as recently as December 30, 2002 (RBF Engineering and MBC Applied Environmental Sciences, 2003). However, it is unlikely that this species would naturally occur in the Harbor.

In 1994, the National Marine Fisheries Service (NMFS) received a petition to list steelhead throughout its range in California, Oregon, Washington, and Idaho under the Endangered Species Act (ESA). On January 5, 2006, NMFS listed nine Distinct Population Segments (DPSs) including the west coast steelhead as threatened and one as endangered. Some of them had been previously listed between 1996

and 1998, but, because of legal and other issues, all listings were reaffirmed and/or revised in 2006 (National Oceanographic and Atmospheric Administration, 2006).

**Tidewater Goby (*Eucyclogobius newberryi*).** The tidewater goby is a Federally-listed endangered species that has been expatriated from many southern California creek mouths (U.S. Fish and Wildlife Service, 2000; Swift et al., 1989). It is currently found in shallow marine areas and lower reaches of streams between San Diego northward to Humboldt County waters where salinity is less than 10 ppt. The population of Tidewater Goby is depleted due to reduced or eliminated flows in the lower reaches of coastal streams, pollution, and the filling in, channelization, and other physical alterations of their habitats. The population disappeared from about 74 percent of the coastal lagoons from Morro Bay southward to San Diego (U.S. Fish and Wildlife Service, 1995).

Historically, the tidewater goby inhabited San Juan Creek from the mouth to 2.5 miles inland of the ocean. A search of the California Department of Fish and Game Natural Diversity Data Base (indicated the tidewater goby is extirpated from the creek and was last observed in 1984. The U.S. Army Corps of Engineers (1997) reported that habitats at the mouth of both San Juan Creek and Aliso Creek were poor in habitat and water quality and unlikely to support populations of this endangered species. Habitat conducive to tidewater gobies is absent from Dana Point Harbor.

**California Halibut (*Paralichthys californicus*).** Although it does not have a formal special status, the California halibut is considered a sensitive species by resource agencies because of its commercial value and a continued region-wide reduction of its nursery habitat in bays and wetlands. California halibut spawn at sea and its larval stages are planktonic. After several months, larval fish settle to the bottom and migrate into shallow coastal waters. Young-of-the-Year fish (YOTY) prefer shallow waters between about -1.5 feet and -3.5 feet MLLW, whereas juveniles prefer deeper channel bottoms to a maximum depth of approximately -15 feet MLLW. After spending nearly nine months in coastal embayments, juveniles move out into the open coastal environment. The species uses inshore waters of bays, harbors, and estuaries as a nursery habitat. Halibut may occasionally be found particularly in the outer channels of Dana Point Harbor, but are much more common in the open coastal environment. Their occurrence within the marina basins is likely rare.

### 2.3.5 Reptiles

**Sea Turtles.** Several species of federally-listed threatened and endangered sea turtles could potentially occur in the nearshore open water habitats surrounding Dana Point Harbor. There are no known nesting beaches for these species in the United States, but they have been observed off the coast of southern California. These include the threatened population of green sea turtle (*Chelonia mydas*), the endangered leatherback sea turtle (*Dermochelys coriacea*), the threatened but federally-proposed endangered, North Pacific Distinct Population Segment loggerhead sea turtle (*Caretta caretta*), and the endangered olive ridley sea turtle (*Lepidochelys olivacea*). Sightings are extremely rare and it is unlikely that they would be affected by project activities.

The green sea turtle, Federally-listed as endangered have been sighted from Baja California to southern Alaska, but most commonly occur from San Diego south (<http://www.nmfs.noaa.gov/pr/species/turtles/green.htm>). Green sea turtles, have been sighted offshore of Dana Point Harbor (RBF Engineering and MBC Applied Environmental Sciences 2003) although the nearest place they are frequently seen is in and near the mouth of the San Gabriel River and Alamitos Bay (Fullerton 1985 in RBF Engineering and MBC Applied Environmental Sciences, 2003). A 21-inch juvenile green sea turtle (estimated to be between three to five years old) was found by fishermen casting lines in the channel at the intersection of Pacific Coast Highway and the San Gabriel River on 29 August, 2008 (Aquarium of the Pacific, 2008), stranded within the intake channel, and was reported to have been

harassed by several unknown individuals. It was removed and transferred to the Long Beach Aquarium for rehabilitation from minor injuries. This species would be considered uncommon to rare as it is more common in tropical and subtropical waters.

### 2.3.6 Marine Mammals

**California Gray Whale (*Eschrichtius robustus*).** Two distinct populations of gray whales occur in the North Pacific Ocean, a western and an eastern stock. The eastern stock occurs along the eastern Pacific coastline and is known as the California gray whale. In June 1994, the eastern Pacific population was removed from the Federal Endangered Species List, due to recovery of population numbers to near the estimated sustainable population size.

The California gray whale migrates through the SCB twice each year, traveling between its feeding grounds in Alaska and its breeding grounds in Baja California. The southern migration through the SCB occurs from December through February, with pregnant females moving through the area first. The northward migration begins in February and lasts through May, peaking in March (Poole, 1984; Dailey and Bonnell, 1993). Solitary animals generally lead the northbound migration with cow-calf pairs following 1 to 2 months later (Poole, 1984). Gray whales migrate within 125 miles (200 km) of the shoreline and many are sighted within 9 miles (15 km) of shore (Dailey et al. Bonnell and Dailey, 1993). On the northbound migration, cow-calf pairs are believed to more closely follow the shoreline rather than the offshore route (Dailey and Bonnell, 1993). Gray whales are observed commonly in the nearshore waters of the project area, but rarely do individual whales enter Dana Point Harbor.

### 2.3.7 Water-Associated Bird Species

A bird survey focusing on nesting species was conducted by Keane Biological Consulting (2007). This section focuses on marine-associated sensitive species of birds, including observations from that survey, and a 2003 survey conducted by MBC Applied Environmental Sciences (2003).

**California Gull (*Larus californicus*).** The California Gull is a Species of Special Concern. It nests in alkali and freshwater lacustrine habitats east of the Sierra Nevada, and not locally. It is abundant in the project area during its non-breeding season (August-March) (Zeiner et al., 1990). This species would roost on the breakwater and docks of Dana Point Harbor during the non-breeding season.

**Double-Crested Cormorant. (*Phalacrocorax auritus*).** A Species of Special Concern, this species is vulnerable to reduced nesting success from persistent pesticides in the water (Zeiner et al., 1990). This species is the most widespread of all cormorants in North America but in California, they are the least abundant of the various species of cormorants (Sowls et al., 1980) and uncommon in southern California. In California, they nest offshore on rocks and islands, on abandon wharves and power poles, and most of the breeding colony sites are in central to northern California. They can be found in nearshore waters and roost on the breakwater and docks of Dana Point Harbor. Cormorants are diving birds that forage on fish.

**California brown pelican (*Pelicanus occidentalis californicus*).** The California brown pelican is federally- and state-listed as an endangered species. It is observed primarily in the open ocean and beaches but is also common in estuaries, tidal rivers, rocky coasts, breakwaters, and islands. Breeding locations along the west coast of California are limited to the Channel Islands. During the late 1960's and early 1970's, the brown pelican population suffered a widespread and dramatic decline linked to egg shell thinning due to DDT, first noted in 1962, which resulted in listing the subspecies as endangered. The population is now recovering well. Brown pelicans do not breed on the mainland but are frequent inhabitants of southern California estuaries and harbors.

The Dana Point harbor breakwater provides roosting habitat for pelicans, and the Dana Wharf region and bait barge attract large numbers of pelicans. However, no nesting habitat for pelicans is present on the California mainland.

**California least tern (*Sterna antillarum browni*.** The California least tern is federally- and state-listed as endangered. A migratory species, it nests from April through August along the coast of California from San Francisco south to Baja California. It presumably winters in Central America or northern South America, although the specific location of its wintering range is unknown. In 2006, the California least tern breeding population was estimated at over 7,000 pairs, more than a ten-fold increase from estimated numbers when it was listed in the early 1970's. Least terns breed on sparsely vegetated sandy beaches, salt flats, and dredge spoil in colonies of few to several hundred nesting pairs. This species relies on sight for foraging and usually requires relatively clear water to locate its preferred baitfish food sources, northern anchovy (*Engraulis mordax*), topsmelt (*Atherinops affinis*), and jacksmelt (*Atherinopsis californicus*). The majority of foraging occurs in open ocean (Atwood and Minsky 1983, Minsky 1984, Keane Biological Consulting, 2002). California least terns are expected to forage occasionally among the docks of the project site, particularly during years when offshore prey (small baitfish) are limited in availability.

There are no nesting sites in the immediate vicinity of Dana Point Harbor. The nearest nesting site to the south of Dana Point is Red Beach on the Pendleton Marine Corps Facility, approximately 20 miles south of Dana Point. In 2006, there were 27 least tern nest with 16 fledglings (Kathy Keane, per. com. with R. Ware, 3 July, 2007). The nearest breeding site to the north west of Dana Point is in Upper Newport Bay. In 2006, only 18 of 61 eggs (36 nests) hatched and only 2 of those chicks survived to fledging. In 2007 to date, there have been 35 nests built but hatching success appears to be much higher than in 2006, with a minimum of about of 20 fledglings (Kathy Keane, pers. com. with R. Ware, 3 July, 2007). Other nesting sites for this species are located at the Santa Ana River mouth, Bolsa Chica, and in the Port of Los Angeles.

**Western Snowy Plover (*Charadrius alexandrinus nivosus*).** The western snowy plover is a federally and state-listed threatened shorebird that nests on sand spits, dune-backed beaches, river/creek mouth beaches, and on salt pannes in lagoons and estuaries. Its current breeding range extends between southern Washington to Baja California. Breeding occurs from early March to late September. Individuals of the wintering population can be expected to be present along south Orange County beaches and forage along the shoreline between November and February.

Small numbers of migrant or wintering snowy plovers are occasionally reported from the nearby San Mateo Creek area, but no nesting has been documented at Dana Point Harbor (RBF Engineering and MBC Applied Environmental Sciences 2003). Population declines are attributed to human disturbance and raking of beaches. Their occurrence in the Harbor is limited by the small amount of available sandy beach and mudflat. Snowy plovers prefer the same type of nesting habitat as least terns, so little potential exists for them to nest at the beaches of Dana Point Harbor.

**Great Blue Heron.** The great blue heron has no listing status, and although it is a common wading bird in southern California estuaries its nesting sites in California are uncommon. It is one of the most widespread and adaptable wading birds in North America (Butler 1992). The range of the great blue heron extends from Southeast Alaska and north British Columbia to south Quebec and south to Florida, Texas, Baja California, and Central America, at least to Belize and Guatemala. Along the Pacific coast, its range extends from southeast Alaska to Mexico (Butler 1992), and they are known to be common in coastal California (Kathy Keane, Keane Biological Consulting, personal observation). They can be found in shallow estuary systems and fresh and saline emergent wetlands all year throughout most of the state. Great blue herons usually arrive on breeding grounds by early February (Butler 1992). Courtship and nest-building begin shortly thereafter, and eggs are laid in late February or March. They usually nest



in colonies, sometimes with five or more pairs, but often with fewer (Butler 1992). This species is sensitive to human disturbances and probably to pesticides and herbicides in nesting and foraging areas (Zeiner et al 1990).

Great blue herons are believed to nest nearby the Dana Point project vicinity (Keane Biological Consulting 2007).

## 2.4 REEFS AND KELP BEDS

Subtidal reefs are considered Essential Fish Habitat for groundfish species. Kelp forests associated with reefs provide protection and cover for many marine invertebrates and fishes (Foster and Schiel, 1985). Kelp (*Macrocystis pyrifera*) grows on rock and cobble habitat offshore of Dana Point northwest through Corona del Mar at depths between 20 and 45 feet. California Department of Fish and Game Kelp Bed #9 extends between Emerald Bay and Dana Point Harbor. Kelp canopy has historically persisted in two regions of Orange County; between Heisler Park and Cactus Point in Laguna Beach and between Mussel Cove (South Laguna) and Dana Point, including the waters offshore of Dana Strand and the Dana Headlands. Kelp beds located between the Dana Point Harbor breakwater and San Mateo Creek are located at distances between approximately 1,600 and 5,000 feet from shore and are identified as California Department of Fish and Game Kelp Bed #8.

Kelp grows on the breakwater of Dana Point Harbor, the hard substrate of the SERRA outfall downcoast of Dana Point Harbor at depths less than 40 ft, intermittently for about 1 mile south of the outfall on low relief cobble and boulder, and immediately downcoast of the Capistrano Beach County Park at distances between 600 and 1,500 feet offshore (ECOSCAN 1990). Inshore kelp beds are patchy, and not always present due to their shallow nature and greater susceptibility to damage from storms. Hard-Bottom features and kelp beds are more common farther offshore at depths between 40 and 55 ft between Doheny Beach Marine Life Refuge and San Mateo Point.

Inside Dana Point Harbor, giant kelp is very sparse. Individual giant kelp plants, in extremely low density and in poor condition were found on isolated rock outcrops and quarry stone in the vicinity of the in the Main Channel during Oct/Nov 2007 field surveys (Coastal Resources Management, Inc. 2010). However, there was no observable surface canopy.

## 2.5 PROTECTED MARINE AREAS

### 2.5.1 Current Marine Protected Areas in the Vicinity of Dana Point Harbor

Currently protected Marine Areas nearby Dana Point Harbor are listed in Table 5 and their locations are shown in Figures 6a-6d. Upcoast of Dana Point Harbor, intertidal and subtidal habitats receive local and state environmental protection status as part of the *Niguel Marine Park* and the *Dana Point Marine State Park* located at the base of the Headlands. The Niguel State Marine Park boundaries extend 1,200 feet offshore and 2.1 mi along the shoreline. It encompasses an area of 315.2 acres. Dana Strands Beach and the waters offshore of the beach are located within the boundaries of this State Marine Park. The Dana Point State Marine Park boundaries extend 0.7 mi offshore and 1,200 ft of shoreline between the headlands and Dana Point Harbor. This covers an area of 124.8 acres.

Downcoast of Dana Point Harbor, *Doheny Beach State Marine Conservation Area* is also an underwater park. This area overlaps with the *Doheny Beach State Marine Park*. The Marine Park extends 600 feet offshore, whereas the State Marine Conservation Area extends 1,500 ft offshore. Most of the shoreline is sandy habitat, although there is some rocky intertidal habitat at the northern edge of the Marine Park. Offshore, the seafloor is a mixture of both sand bottom and low-to-high relief reef. Lagoon wetland

habitat in located at the mouth of San Juan Creek. The County of Orange-maintained *Capistrano Beach County Park* is located at the southern end of Doheny State Marine Park.

**Table 5. State Designated Marine Life Areas in the Vicinity of Dana Point**

<i>Name/Area<sup>1</sup></i>	<i>Approximate Boundaries</i>	<i>Overlapping Designation</i>	<i>Area Covered</i>	<i>Managing Agency (ies)</i>
<i>Niguel State Marine Park</i>	SE point of Mussel Cove to NW tip of Dana Point	None	2.1 mi of coastline and 1,200 ft offshore	CDF&G; County of Orange
<i>Dana Point State Marine Park</i>	NW tip of Dana Point Headland to Eastern tip of headland	None	0.7 mi of coastline and 1,200 ft offshore	CDF&G; County of Orange
<i>Doheny Beach State Marine Conservation Area</i>	Dana Point Harbor to Palisades Drive	County of Orange Capistrano County Park	1.2 mi of coastline and 1,500 ft offshore	California Department of Parks and Recreation; CDF&G; County of Orange
<i>Doheny Beach State Marine Park</i>	Dana Harbor south to Palisades Drive	Doheny State Marine Conservation Area	1.2 mi of coastline and 600 ft offshore	California Department of Fish and Game (CDF&G); County of Orange

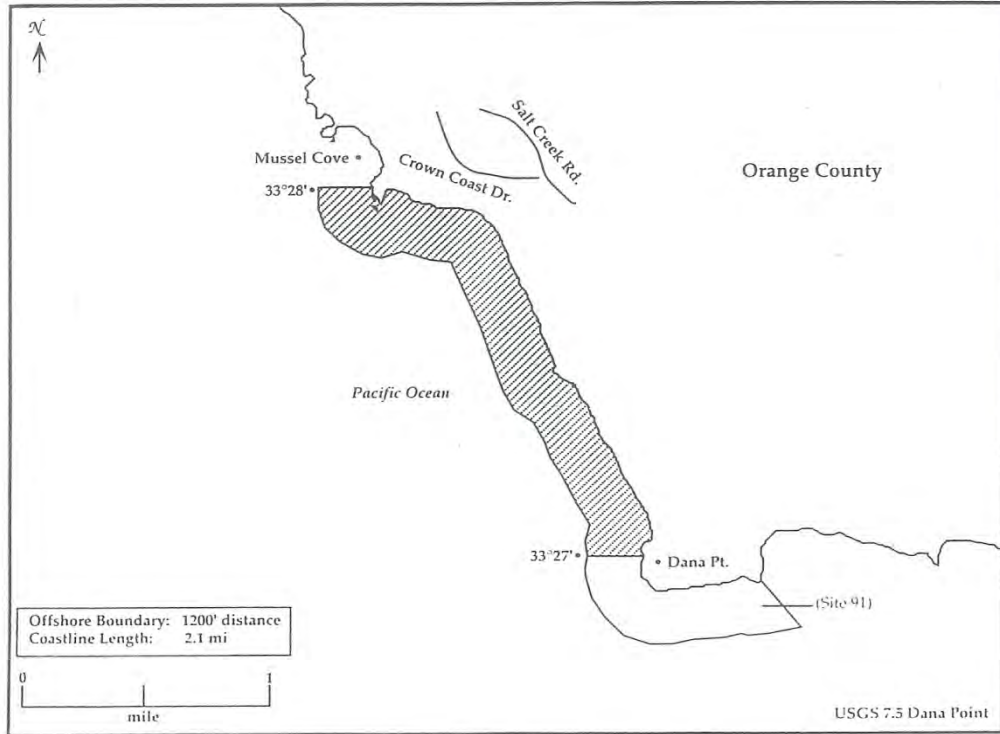


Figure 7a. Niguel State Marine Park

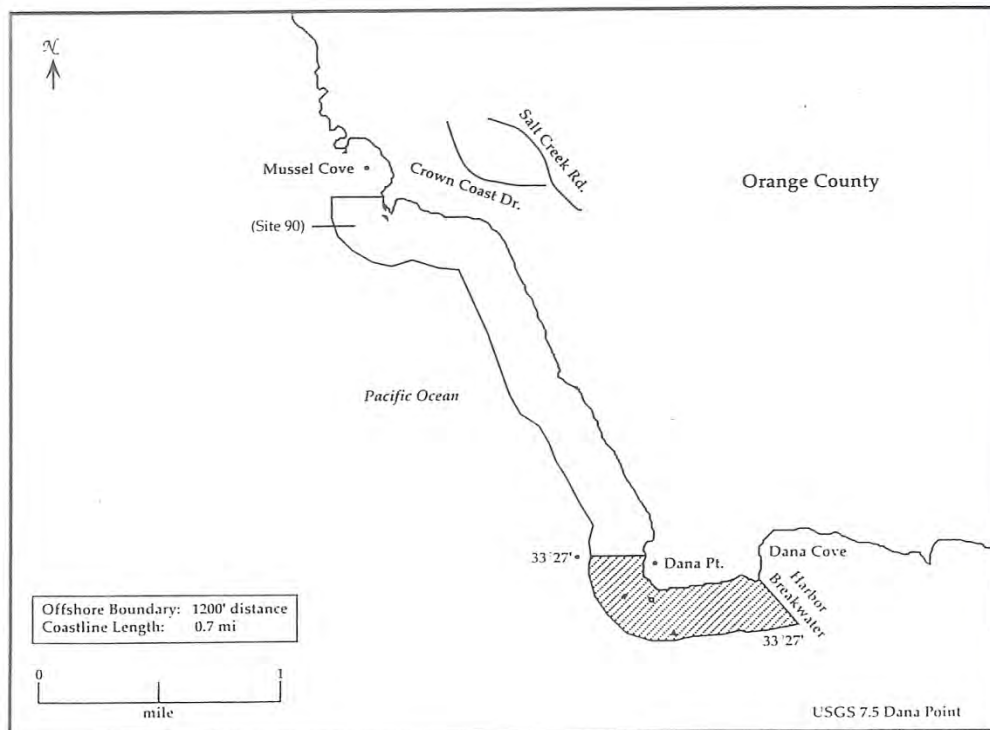


Figure 7b. Dana Point State Marine Park

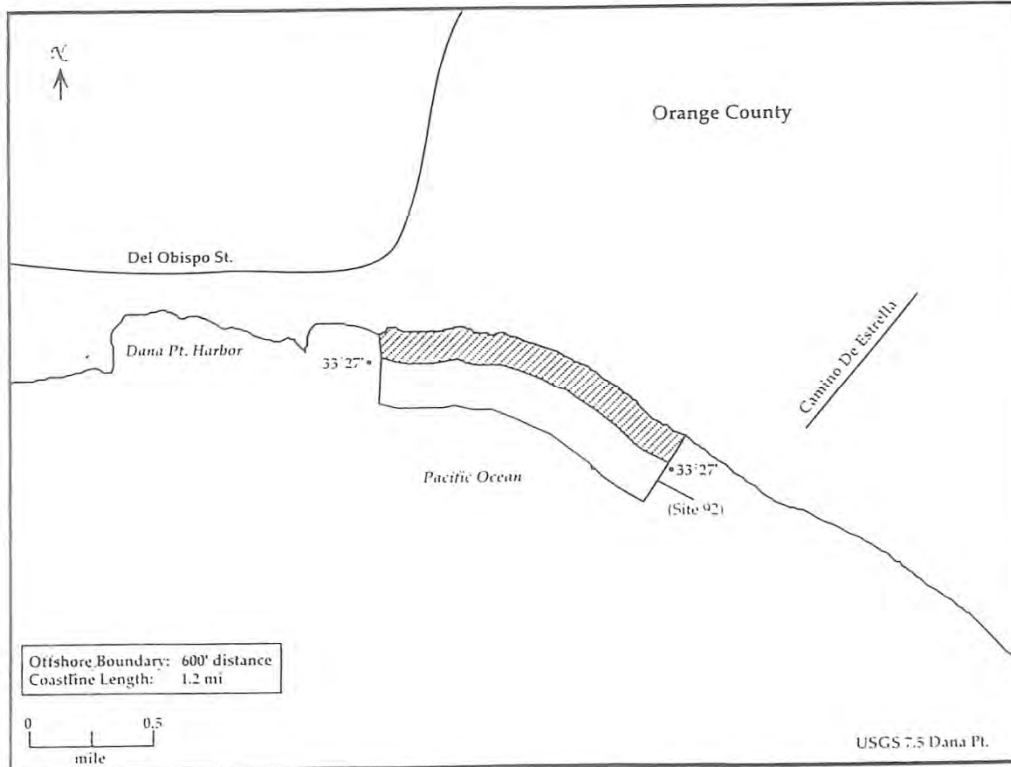


Figure 7c. Doheny Beach State Marine Park

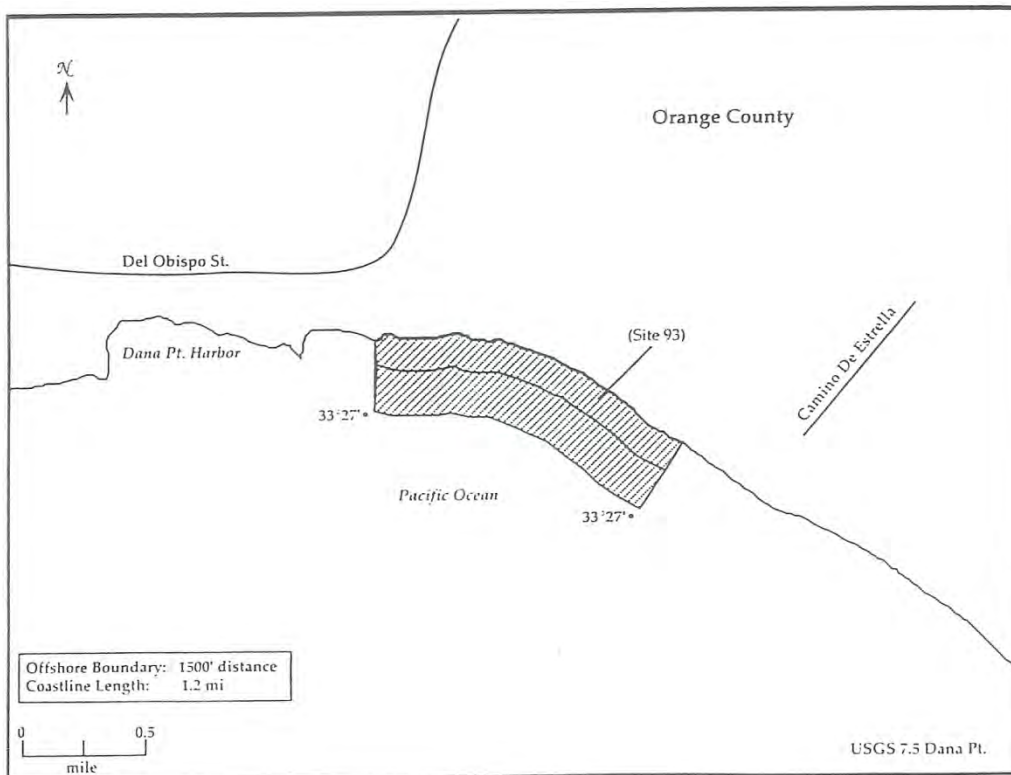


Figure 7d. Doheny Beach State Marine Conservation Area

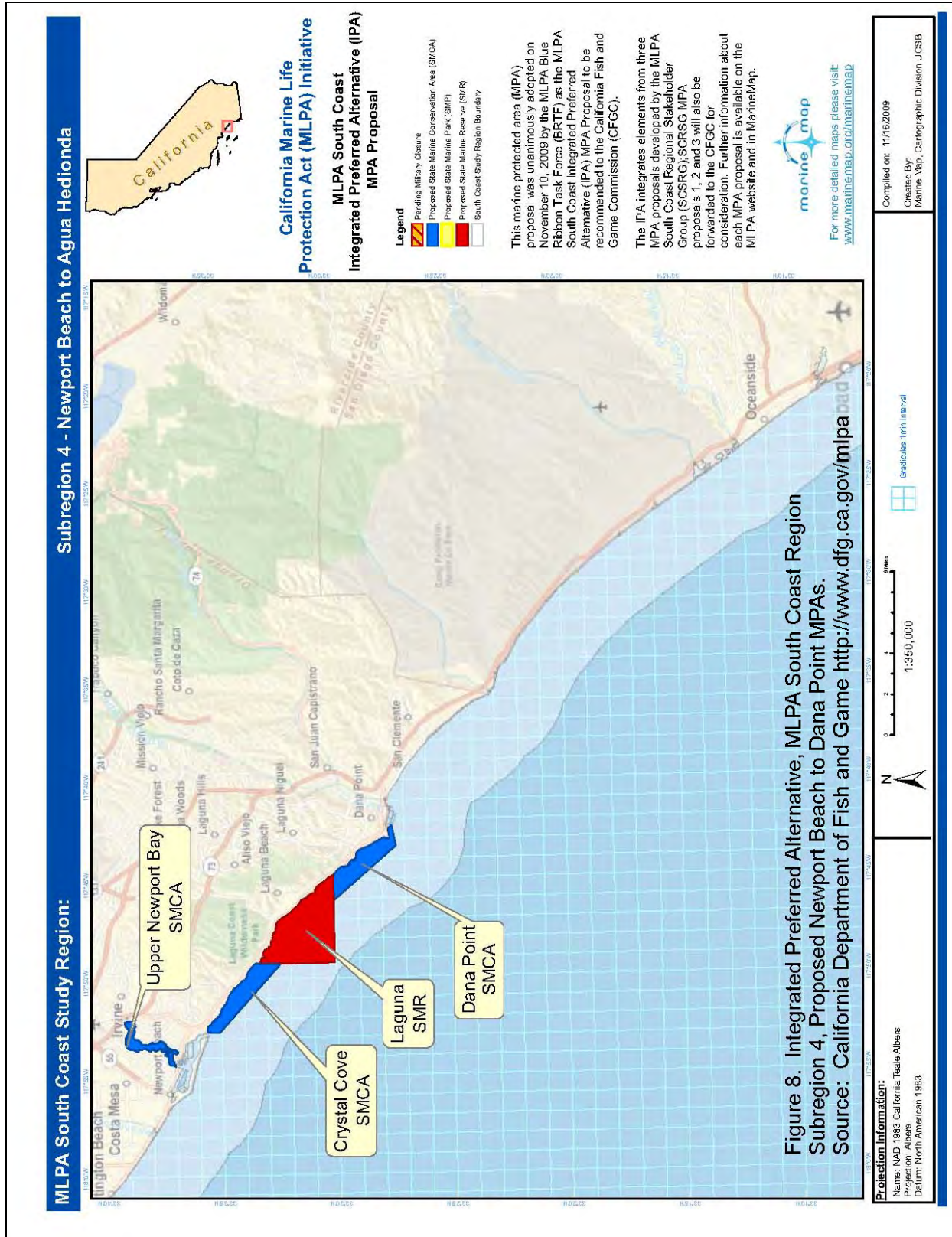
### 2.5.2 Proposed Marine Protected Areas

The 1999 Marine Life Protection Act (MLPA) mandated that the State of California design and manage an improved network of marine protected areas to protect marine life and habitats, marine ecosystems, and marine natural heritage. Marine protected areas include marine reserves, marine parks and marine conservation areas. Intertidal and subtidal habitats that were previously listed as State of California Marine Ecological Reserves and Marine Life Refuge have been reclassified. This re-classification was the result of a state-wide simplification of existing state-protected areas into six classifications, and replaced 18 classifications that were previously used to categorize state Marine Managed Areas (MMAs). Marine Protected Areas (MPAs) are a subset of MMAs and include conservation areas, marine reserves, state marine parks, and state marine conservation areas. The MLPA requires that the Department of Fish and Game (Department) prepare and present to the Fish and Game Commission (Commission) a master plan that will guide the adoption and implementation of a Marine Life Protection Program, which includes a statewide network of marine protected areas (MPAs). Other recent related legislation includes the Marine Life Management Act of 1998 (MLMA; Stats. 1998, Chapter 1052), Marine Managed Areas Improvement Act of 2000 (MMAIA; Stats. 2000, Chapter 385), and California Ocean Protection Act of 2004 (COPA; Stats. 2004, Chapter 719).

In August 2004, the California Resources Agency, California Department of Fish and Game, and Resources Legacy Fund Foundation launched an effort to implement the MLPA, after two unsuccessful earlier attempts. On April 13, 2007, the California Fish and Game Commission adopted regulations to create a new suite of marine protected areas (MPAs) designed for the Central Coast of California, the first region considered for the State. This move effectively launched the state's Marine Life Protection Act (MLPA) Program. Southern California MPAs (Point Conception to the Mexican Border) and Northern California MPAs are currently undergoing reviews.

For Southern California, a marine protected area (MPA) proposal was unanimously adopted on November 10, 2009 by the MLPA Blue Ribbon Task Force (BRTF) as the MLPA South Coast Integrated Preferred Alternative (IPA) MPA Proposal to be recommended to the California Fish and Game Commission (CFGC). The IPA integrates elements from three MPA proposals developed by the MLPA South Coast Regional Stakeholder Group (SCSRG); the BRTF also adopted a motion to forward SCSRG MPA proposals 1, 2 and 3 to the CFGC for consideration. The IPA recommends 50 marine protected areas (MPAs) in state waters in the MLPA South Coast Study Region, which extends from Point Conception in Santa Barbara County to the California/Mexico border in San Diego County (<http://www.dfg.ca.gov/mlpa/southcoastipa.asp>).

The proposed Sub region 4 MPAs in the vicinity of Dana Point Harbor are shown in Figure 8. These include the Crystal Cove State Marine Conservation Area, the Laguna Marine Life Reserve, and the Dana Point State Marine Conservation Area. Local



## 2.6 FISH MANAGEMENT PLAN SPECIES

This assessment of Essential Fish Habitat (EFH) for the Dana Point Harbor Waterside Improvement Project is being provided in conformance with the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (FR 62, 244, December 19, 1997). The 1996 amendments to the Magnuson-Stevens Act set forth a number of new mandates for the National Marine Fisheries Service, eight regional fishery management councils, and other federal agencies to identify and protect important marine and anadromous fish habitat. The councils, with the assistance from NMFS are required to delineate EFH for all managed species. Federal action agencies which fund, permit, or carry out activities that may adversely impact EFH are required to consult with NMFS regarding the potential effects of their actions on EFH, and respond in writing to the NMFS recommendations.

The Dana Point Harbor Waterside Improvement Project area is located in an area designated as EFH in the Coastal Pelagics Fisheries Management Plan (FMP) and the Pacific Groundfish FMP. The Coastal Pelagics FMP includes four finfish (Pacific sardine, chub mackerel, northern anchovy, and jack mackerel) as well as market squid (Pacific Fisheries Management Council, 1998). The Pacific Groundfish FMP includes 83 species, many of which are rockfish (Pacific Fisheries Management Council, 2008).

### 2.6.1 Coastal Pelagic FMP

Coastal Pelagic FMP Species that are likely to be present within and outside of Dana Point Harbor include northern anchovy and Pacific sardine. Outside the Harbor, jack mackerel and chub mackerel are known to occur; these however, would only be present within the Harbor, on rare occasions.

Of these species, the northern anchovy is the most likely species to be within the Dana Point Harbor Waterside Improvement Project Area.

**Northern Anchovy-*Engraulis mordax*:** The central subpopulation ranges from approximately San Francisco, California, to Punta Baja, Baja California. The bulk of the central subpopulation is located in the Southern California Bight, a 20,000-square-nautical-mile area bounded by Point Conception, California, in the north and Point Descanso, Mexico, (about 40 miles south of the U.S.-Mexico boarder) in the south. Northern anchovy in the central subpopulation are typically found in waters that range from 12° C to 21.5° C. All life stages are found in the surface waters of the EEZ. Eggs and larvae are found near the surface, generally at depths of less than 50 meters and in the same areas as spawning adults. Anchovy eggs are most abundant at about 14° C. Nearshore habitat areas <90 meters) between Pt. Conception, California and Pt. Banda, Baja California represented 23% of the available habitat for central stock juvenile northern anchovy (Pacific Fishery Management Council, 1998).

Northern anchovy comprise a significant portion of nearshore otter trawl catches and contribute moderately to the nearshore fish biomass of the nearshore area of San Pedro Bay (MBC Applied Environmental Sciences, 1997) and accounts for about 80% of all fishes caught within 3 km of the coast in the Southern California Bight (Cross and Allen 1993). Along the coast of northern Orange County and Long-Beach to LA Harbors, this species ranked highest in abundance during 6 of the 11 monitoring surveys between 1972 and 1997 offshore of the San Gabriel River and was never ranked lower than the 5<sup>th</sup> most abundant species. The northern anchovy is also the most abundant species in Los Angeles Harbor, representing over 80% of the fish caught (MEC Analytical Systems, 1988, 1999), and larvae of the species are also a common component of the ichthyoplankton (MEC Analytical Systems, 1988). In Los Angeles Harbor, Northern Anchovy appear to prefer deeper waters of the Harbor. There is a

commercial bait fishery for northern anchovy offshore of Dana Point Harbor, and a commercial bait barge is located within Dana Point Harbor. Larvae of northern anchovy are also part of the Dana Point ichthyofauna and ichthyoplankton community.

### 2.6.2 Pacific Groundfish FMP

The Pacific Groundfish FMP species that are likely present within Dana Point Harbor or immediately outside Dana Point Harbor rocky habitats include the California scorpion fish (*Scorpaena guttata*) that is associated rocky habitats on the breakwaters, and potentially, juvenile Olive rockfish (*Sebastes serranoides*). While both may be associated with rocky habitats along the breakwaters and to a lesser extent the quarry stone lining the Island Marina shoreline in the outer section of the Harbor, populations of these species are expected to be low.

**California scorpion fish -*Scorpaena guttata*.** California scorpionfish are benthic and found intertidally as deep as 183 m. They are commonly found in both sandy and rocky areas, in association with rocky reefs, often lodged in crevices. Although it is commonly a solitary species, it aggregates near prominent features and can be associated with anthropogenic features including pipes and wrecks. Juveniles settle on rocky bottom. Very young scorpionfish live in shallow water hidden away in habitats with dense algae and bottom-encrusting organisms McCain (2003). The Dana Point breakwaters and the quarry stone protecting the marinas is likely habitat for this species.

**Olive rockfish-*Sebastes serranoides*.** Olive rockfish occur from surface/intertidal waters to 174 m deep but most commonly they occur in waters less than 30 m. Adult olive rockfish are a midwater fish, almost always lining over hard, high relief (such as reefs, wrecks, oil platforms or pipes), Young-of-the-year and adults are primarily found hovering off the bottom, Sometimes olive rockfish are observed well off the bottom, in or near kelp or over rocky reefs, Olive rockfish prefer clear-water areas of dense kelp and are rarely caught or seen over sandy substrate, Olive rockfish distribution is fairly even over all rocky substrata, although significant selection is exhibited toward low rock substratum, The larval stage of olive rockfish is planktonic, When young-of-the-year olive rockfish settle out of the plankton they are most commonly found in and around kelp beds, oil platforms, surfgrass, and other structures at depths as shallow as 3 m, Young olive rockfish also are found under drifting kelp mats McCain et al (2003). In Los Angeles Harbor, olive rockfish has been found largely as juveniles associated with the kelp growing along the inner edge of the federal breakwater (MEC Analytical Systems, 1988). One unidentified rockfish was observed nearby eelgrass patches and low-relief reef seaward of Baby Beach in June 2010 (CRM, Inc., 2010)

### 2.6.3 Habitats of Particular Concern

Eelgrass (*Zostera marina*) is identified as HAPC for ESH groundfish species. Eelgrass meadows form a basis of primary production that supports ecologically and economically important species. Eelgrass is an important habitat for invertebrates which use eelgrass beds as a source of food and attachment. Marine fishes seek the shelter of the beds for protection, and forage on invertebrates that colonize the eelgrass blades and sediments in and around eelgrass vegetation. The vegetation also serves a nursery function for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass) and federal Fishery Management Plan (FMP) groundfish species (i.e., lingcod (*Ophiodon elongatus*), and Bocaccio rockfish (*Sebastes paucispinis*)).

As discussed in Section 2.3.1, eelgrass is found in Dana Point Harbor, although it is not abundant and its density is low. Its distribution is primarily limited to the region near Baby Beach (Chambers Group, Inc. 2005; BC Applied Environmental Sciences 2008, 2009; Coastal Resources Management, Inc., 2010). A single patch was also located in the boat basin north of the launch ramp in 2009 (MBC Applied



Environmental Sciences, 2009) but it was not relocated in 2010 (Coastal Resources Management, Inc. 2010).

## 2.7 INVASIVE ALGAE

### 2.7.1 *Caulerpa taxifolia*

*Caulerpa* (Figure 9) has a potential to cause ecosystem-level impacts on California's bays and nearshore systems due to its extreme ability to out-compete other algae and seagrasses. *Caulerpa taxifolia* grows as a dense smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a non-native marine habitat. Fish, invertebrates, marine mammals, and sea birds that are dependent on native marine vegetation are displaced or die off from the areas where they once thrived. It is a tropical-subtropical species that is used in aquariums. It was introduced into southern California in 2000 (Agua Hedionda Lagoon and Huntington Harbour) by way of individuals likely dumping their aquaria waters into storm drains, or directly into the lagoons. While outbreaks have been contained, the Water Resources Board, through the National Marine Fisheries Service and the California Department of Fish and Game require that projects that have potential to spread this species through dredging, and bottom-disturbing activities conduct pre-construction surveys to determine if this species



Figure 9. The invasive algae, *Caulerpa taxifolia*. Source: NOAA/NMFS

is present using standard agency-approved protocols and by National Marine Fisheries Service/California Department of Fish and Game Certified Field Surveyors.

### **Focused Surveys for Invasive Algae**

*Caulerpa* was not observed within the regions proposed for waterside improvements during surveys conducted for this project in Feb/March 2007, Oct/Nov 2007, and June, 2010 (Coastal Resources Management, Inc., 2010), or for the Dana Point Harbor Maintenance Dredging and Beach Nourishment Project (Chambers Group, Inc. 2005, 2006; MBC Applied Environmental Sciences, 2008). The CRM invasive algae survey covered 6.28 acres of harbor bottom habitat (Table 2 and Figure 4). Overall, the bottom area surveyed by both diving biologists and remote underwater video averaged 24.7% of the total

bottom habitat within the project survey limits, ranging from 13.9% in the East and West Marina basins to over 100% coverage in the at the Youth Sailing Center and the Harbor Patrol Basin. Baby Beach areal cover (by divers and video in 2007 and 2010) covered 100% of the survey area, and reflected a survey effort concentrated in a region where there was the highest probability of locating either *Caulerpa* algae or eelgrass.

### 2.7.2 *Undaria pinnatifida*

*Undaria pinnatifida* (Figure 10) is a golden-brown kelp native to the Japan Sea. It has been introduced in Australia, New Zealand, and Europe and has now spread to the California coastline. It has been found in Santa Barbara Harbor, Long Beach Harbor, Anaheim Bay, San Diego Bay, and offshore of Catalina Island.

In Japan it is known as wakame and is extensively cultivated as a fresh and dried food plant. However, it has the potential to become a major pest in our coastal waters. *Undaria* grows to between 3 to 7 feet (1 and 2 m) tall and is found in sheltered harbor waters on rocks, breakwaters, and marine debris from the low-tide mark to 50 feet (15 m). A mature plant has a distinctive, spiraled (frilly), spore-producing structure at its base. It also has an obvious central stem to 4 inches (10 cm) wide that extends for the length of the plant (Figure 7). The blade may be up to 3.1 feet (1 m) wide and extends from the tip of the plant for half the length of the plant.

#### Focused Survey for *Undaria*

*Undaria* was not observed during dive surveys or remote video surveys in Dana Point Harbor between February 2007 and June 2010 (Coastal Resources Management, Inc. 2010).



Figure 10. *Undaria pinnatifida*. Source Photo: CRM

**2.7.3 *Zostera japonica*.** Dwarf eelgrass is native to Asia and threatens to upset the natural balance of California's wetlands. It has been found in Humboldt Bay (<http://www.dfg.ca.gov/invasives/dwarfeelgrass>; Foss et al., 2007). It has not been found in Dana Point Harbor.

### **3.0 MARINE RESOURCES IMPACT ASSESSMENT**

#### **3.1 PROPOSED PROJECT**

Proposed waterside upgrades to Dana Point Harbor include (1) the renovation and re-orientation of the East and West marina basin dock systems by replacing old and deteriorating docks, slips and gangways with new facilities; (2) dock redesign and improvements for the Youth Sailing Center, the Harbor Patrol facilities, Commercial Fishing Dock, the Sport Fishing Dock, the Dry Stack Docks, and the Embarcadero Docks; (3) the construction of a temporary dock facility for vessels that would be displaced during marina reconstruction.; (4) the addition of handicap access at locations where it currently is not available; (5) upgrading vessel pump out facilities; and (6) upgrading dock utilities.

The number of boat slips within the Harbor will decrease from 2,409 to 2,223 (a loss of 116 slips) although the average slip length will increase from 29.85 feet (ft) to a length not to exceed 32 ft. A total of 1,306 existing piles will be removed and 969 new piles will be emplaced. The total dock surface area will decrease from 492,530 square feet (sq ft) to 459,540 sq ft (a net decrease of 32,990 sq ft) One-thousand three hundred and six, 14-inch diameter pilings with a surface area of 1,396 sq ft will be replaced by 969 piles (851, 16-inch diameter piles and 118, 18-inch diameter piles) with a surface area of 1,395 sq ft.

In order to accommodate boaters during the dock and slip renovations, the project also includes a set of temporary docks along the breakwater adjacent to Doheny State Beach that will have a surface area of 2,590 square feet. Once renovations to all dock areas are completed, the temporary docks may become docks for some yacht brokers who currently have docks in the East and West Basins. An ADA gangway is included in the plans for the temporary/yacht broker docks. The relocation of some yacht broker slips to this new location will allow for more slips to be made available to the general public. The number of yacht broker slips is not being increased with the proposed project. The placement of these docks near the breakwater would require the nearby relocation of the existing bait barge.

#### **3.2 PROPOSED CONSTRUCTION METHODS**

Improvements are anticipated to occur over a period of about eight years. Within each area, the construction phases will include the removal of the existing dock and piles, and the installation of the new dock and piles. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut two to three feet below the mudline. The old piles and floating docks will be lifted from the water using a crane and then trucked off-site.

New floating docks systems will consist of prefabricated, lightweight aggregate concrete modules. No creosote treated wood products will be included in the new concrete dock system.

The last phase for each area would be the placement of the piles and prefabricated docks. It is anticipated that piles will be pre-drilled into rock. Pre-stressed concrete piles will then be set into these holes and then grouted with cement or sand. A Seaflex anchoring system for the temporary docks is currently being considered as an alternative to the standard dock and pile design. If a Seaflex system is used, anchors will still have to be anchored, to perhaps drilled-in piles, since the typical helix anchors would not be able to penetrate the rock substrate (Randy Mason, URS Corporation, pers. com with R. Ware 1/10/08). However, this analysis assumes that a Seaflex system will not be employed.

### 3.3 SHORT-TERM WATER QUALITY CONSTRUCTION IMPACTS

#### 3.3.1 Pile Replacement and Dock Construction

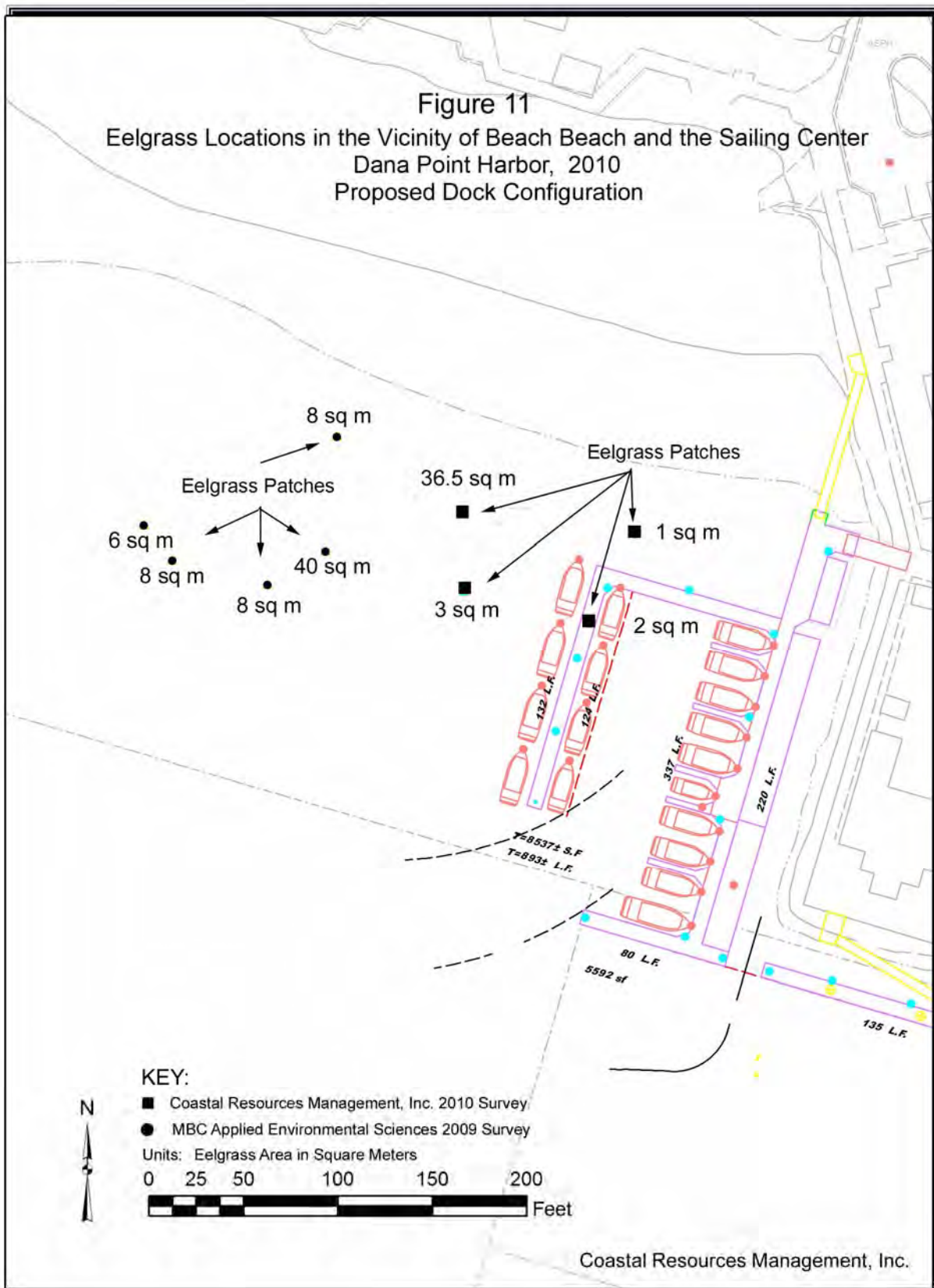
**Marina Basins, Dry Stack Dock, and Ship Yard Docks.** New piles will be removed, cut off at the water-line, and new ones placed into pre-drilled holes in rock substrate. These activities could increase the levels of water turbidity as each phase of the project is being conducted. Higher turbidity is expected to be limited to the specific area of dock improvements and the turbidity plume would dissipate as a function of tidal exchange within the basins. While the impact is expected to be short-term and have a less-than-significant impact on water quality within each specific phase, the project will be conducted over a period of several years. Thus, site-specific turbidity levels have a potential to be above-ambient with a portion of the Harbor for an extended period. Best Management Practices and Mitigations Measures to limit the spread of the turbidity plume outside the work area are provided in Section 4, Mitigation Measures.

Pile replacement activities would also have a potential to release detectable levels of sediment-bound contaminants into the water column that would be redistributed through the tidally-induced movement of the turbidity plume. Organically enriched sediments resuspended into the water column during pile replacement would also cause a slight decrease in dissolved oxygen levels. Tidal currents would slowly dissipate the oxygen-poor water mass and replenish ambient oxygen levels within one-to-several tidal exchanges.

Sediment testing for the Dana Point Harbor Dredge Material Evaluation (Kinnetic Laboratories and Moffatt & Nichol, 2007) indicated that fine sediments in one particular zone near the 60 inch storm drain in the East Basin contain elevated levels of copper and total DDTs compared to other sites tested. Consequently, pile removal and replacement in the vicinity of this one zone may result in the resuspension of material that could degrade water quality. This has a potential to result in a short-term adverse, significant impact to water quality within the East Basin. Mitigation measures to reduce the level of impact to less-than-significant is provided in Section 4, Mitigation Measures.

**Temporary Dock, Youth Sailing Center Docks, and Sport Fishing Docks.** Turbidity associated with pile driving and/or boring activity in the vicinity of hard-bottom habitat and reefs will potentially result in a short-term reduction of light and an increase of suspended material. Bottom sediments may also be disturbed during the process that could increase turbidity in the vicinity of eelgrass near the proposed Sailing Center docks. Eelgrass surveys conducted in the vicinity of the proposed dock improvements (Coastal Resources Management, Inc. 2010) indicate that as of June 2010, one or two small patches of low-density eelgrass may be affected by turbidity generated from pile driving activity. However, there is a potential for more eelgrass expanding into the proposed dock footprint in the next several years.

Turbidity plumes would dissipate and disperse out of the area over the course of daily tidal changes. Some suspended sediment may settle on eelgrass blades. The loss or reduction of eelgrass areal cover and density as a result of increased turbidity would be a local but significant impact to the expanding eelgrass bed in the vicinity of Baby Beach. Pre-and-post dock construction eelgrass surveys will be required per the provisions of the Southern California Eelgrass Mitigation Policy (National Marine Fisheries Service, 1991 as amended). Based upon these surveys, a determination will be made if mitigation is required, and a mitigation plan to offset eelgrass habitat losses will be developed if eelgrass losses occur. Best Management Practices to reduce the potential for eelgrass habitat losses during construction are presented in Section 4.



**3.3.2 Oil and Fuel Discharges.** Accidental oil or fuel spills that could potentially occur during the Harbor renovation project could significantly affect water quality and marine biological resources within and nearby the Harbor. Such events are likely to be localized spills of lighter, refined diesel fuels, gasoline, and lubricating oils that are highly toxic to marine life. The potential for the occurrence of petroleum-product leaks or spills would be low-to-moderate but the potential for significant, long-term effect on marine resources would be moderate-to- high in the event of a spill. Best Management Measures (BMPs) to avoid oil spills, water quality degradation, and adverse impacts on fish and wildlife are provided in Section 4. With the inclusion of BMPs, the expected impact on fish and wildlife would be less-than-significant. The inclusion and implementation of a Marina Construction Management Plan for the project will assist in preventing accidental spills and provide the necessary guidelines to follow in case of an oil or fuel spill. Such an action will assist in reducing a potentially significant oiling event to less-than-significant.

### 3.4 SHORT-TERM CONSTRUCTION IMPACTS ON MARINE BIOLOGICAL RESOURCES

#### 3.4.1 Soft and Hard-bottom Associated Benthic Communities

**Dock and Pile Replacement.** The removal of 1,306 piles and subsequent placement with 969 support piles for the new dock systems in Dana Point Harbor will result in minor disturbances to soft-bottom benthic invertebrates within a zone of disturbance around the piles to be removed related to sediment resuspension and sediment disturbances from machinery. This would constitute a less-than-significant impact on soft-bottom infauna. Once disturbances end, larvae will settle on the sediments and begin the process of recolonization. Long-term impacts of removal of soft bottom habitat and replacement with piles are discussed in Section 3.6.

Marina Basins. The removal of docks and dock pilings within the marina basins, the Youth Sailing Center, the Sport Fishing Dock, Dry Stack Dock, and the Ship Yard Dock will result in an initial loss of biofouling (pile-dwelling) associated flora and fauna on each of the 1,306 piles. Because the marina redevelopment will occur during several phases over an eight-year period, losses will be site-specific and will not occur throughout the Harbor at the same time. Some of the biofouling cover will be dislodged during the pile removal process, creating a zone of organic debris on the Harbor bottom in the immediate vicinity of the docks.

Most of the biofouling organisms would be removed and transported offsite to a proper disposal area eliminating a significant localized impact related to an accumulation of decaying organic material on the harbor seafloor. The removal of the pilings is unlikely to result in the release of a significant amount of contaminants; most contaminants present on the pilings would be bound up within the tissues of the organisms being removed. None of the species that would be removed are considered sensitive or unique.

#### Youth Sailing Docks, and Sport Fishing Docks-Hard Substrate Impacts

Construction of piling and dock systems for the Youth Sailing Center and the Sport Fishing Dock would potentially affect hard-bottom macroflora and fauna living on or among the subtidal hardscape within these areas. Losses would be associated with the direct effects of pile driving and secondary turbidity plumes. Mortality of individual plants and invertebrates might occur. These initial losses would be offset since additional pile substrata and surface area would be added. Plants and invertebrates would begin to colonize the new hard substrate upon completion of construction. Mobile *macroinvertebrates* (i.e., octopus and lobsters) would likely move out of the impact zone. The losses of plants and invertebrates from pile driving would not result in any population level impacts to *macrobiota* within the surrounding region. Therefore, the construction of docks and the addition of the piles would have an unavoidable,

short-term less-than-significant, on hard-bottom associated plants and invertebrates within these areas of Dana Point Harbor.

Temporary Dock System. The majority of habitat potentially affected the construction of the proposed temporary dock system in the East Channel (and permanent broker docks) is sand to silty bottom in the lee of the East Breakwater. Remnants of low-reef outcrops may be present but these are mostly buried and exhibit low biological productivity. The loss of biomass would be offset by the addition of piles that would function as additional hard bottom habitat for invertebrates and algae.

Dumping of trash, debris, hazardous materials, and organic wastes from vessels or from visitors to the Temporary Dock area could degrade water quality, habitat values, and marine life. This would result in a potentially significant, localized impact on the quality of the bottom habitats. BMPs to reduce this impact to less-than-significant are discussed in Section 4.

### 3.4.2 Water Column Biota

**Piling Replacement Activities.** The project area water column habitat supports species of plankton and fish common to bays and harbors of southern California. These organisms live with constant sources of turbidity from runoff and other sources have acclimated to some degree to turbid conditions that might arise from pile removal and replacement. In addition, fishes have the ability to swim away from disturbances such as noise, vibrations, and excess turbidity, while plankton move with the currents and do not remain in one location for an extended period of time. These behavioral mechanisms help preclude construction impacts from occurring on water column organisms.

Construction activities would cause a temporary reduction in submarine light levels and a very localized, short-term reduction of plankton productivity due to increased turbidity. Because plankton drift with the currents there would be only be short-term, less-than-significant construction impacts to the plankton community.

There would be no direct loss of open water (schooling) fishes from pile removal and replacement. Water column fishes would avoid the immediate work area due to either increased turbidity, or a potential increase in underwater pressure and noise levels from work equipment. However, the removal of pilings may also attract some fish to biofouling debris that is removed from piles that settles on the harbor floor. No mortality of bottom-dwelling species such as gobies is anticipated due to the mobile nature of fishes.

Secondary impacts of increased water turbidity on fishes would be a short-term, less-than-significant construction impact. A greater-than ambient suspended sediment load related to higher turbidity may temporarily reduce the ability of both visual-foraging fishes to feed (i.e., surfperch and halibut) and planktivores (i.e., topsmelt, anchovy, juvenile surfperch, and juvenile sciaenids). Because the Harbor Waterside Improvement project would proceed incrementally over months-to-years, fish living within the marina basins would be able to move to nearby areas without any negative impacts to their habitat or food sources.

Water column dissolved oxygen concentrations may decrease due to the resuspension of organically-enriched sediments. The resuspension of potentially toxic levels of copper and DDT may also potentially increase, particularly in areas near storm drains. These impacts would physiologically stress the fish in the area; their response would be to swim to less-stressed areas of the harbor. Since fish would likely move away from the immediate zone of turbidity, their exposure to elevated levels of contaminants is expected to be minimal. Turbidity would return to ambient levels upon cessation of pile removal and replacement activities through tidal flushing, which would allow fish to return to the area. In summary, the potential

impacts arising from pile and dock removal and replacement in Dana Point Harbor would have potentially less-than-significant, localized, and temporary impacts to the plankton and fish community.

### **3.4.3 Seabirds (See Section 3.4.5 )**

### **3.4.4 Marine Mammals (See Section 3.4.5)**

### **3.4.5 Sensitive Species**

**Eelgrass and Surfgrass.** Pile driving will not result in the direct loss of eelgrass based upon the results of 2009 and 2010 field surveys (MBC Applied Environmental Sciences, 2009; Coastal Resources Management, Inc. 2010). Should eelgrass areal cover expand into areas where pile driving will occur, there is a potential for some direct losses of eelgrass. Potential impacts at present are related to secondary turbidity effects (See Section 3.2).

Pre-and-post construction eelgrass monitoring surveys will be conducted to determine if direct loss of eelgrass have occurred as a consequence of pile driving activity. Based upon these surveys, it will be determined if mitigation for eelgrass losses are required, under provisions of the Southern California Eelgrass Mitigation Policy (National Marine Fisheries Service, 1991 as amended). BMPs to reduce eelgrass habitat losses in the general area of Baby Beach are provided in Section 4.0.

Surfgrass does not occur within the confines of Dana Point Harbor Improvement Area. This sensitive marine resource would not be impacted by construction activities.

**Abalone.** White, red, green, and black abalones are not likely to be present within any of the Harbor Waterside Improvement project construction zones. Their distribution is limited to areas outside of the Harbor on the seaward side of the marina breakwaters and in offshore rocky habitats. Consequently, Harbor waterside improvement construction activities are not expected to impact these sensitive mollusks.

**Tidewater Goby.** Tidewater gobies are not known to occur within Dana Point Harbor; no construction-related impacts would occur on this species or its habitat.

**Steelhead Trout.** There are no known populations of this species in the Harbor, although there are rare occasions when individuals may be present. Therefore, construction-related impacts on Steelhead Trout are not expected to occur, nor would its nearest spawning habitat (San Mateo Creek) be affected.

**California Halibut.** Juvenile halibut can be found within Dana Point Harbor. During pile installation, individuals in the immediate area of construction would swim away from bottom disturbances within the construction zone. No mortality or short-term stress on this species is anticipated as a result of construction activities.

**Sea Turtles.** The green sea turtle, Federally-listed as endangered, has been sighted offshore of Dana Point Harbor (RBF Engineering and MBC Applied Environmental Sciences, 2003) but their occurrences would be considered rare. There are no warm water discharges which might attract them to the Harbor, nor is there available suitable seagrass habitat for foraging. Although an occasional green sea turtle may enter the Harbor at the time of waterside improvements, the potential for adverse impacts to an individual is low. If present, marina reconstruction, the construction and abandonment of the temporary dock systems, and vessel movements within the Harbor could induce behavioral modifications to individuals (i.e., changes in swimming behavior) to avoid excessive noise, turbidity, or vessel movements.

No green sea turtle mortality would be expected to occur as a result of the waterside construction activities nor would the project cause any decline in green sea turtle populations. If a sea turtle is present



in the project area during marina renovation the mitigation measures identified in Section 4 would reduce these potentially short-term construction impacts to a less- than- significant level.

**Listed or Otherwise Sensitive Bird Species.** The special-status marine birds most likely to occur in the vicinity of the project area include brown pelican, double-crested cormorant, western snowy plover, California gull, elegant tern, and occasionally, California least tern and common loon. All of these species feed on fish and may, on occasion, forage in Dana Point Harbor. No breeding colonies for any of the sensitive species of seabirds exist in the project area.

Pile driving activity could potentially result in less-than-significant impacts to sensitive bird species related to an increase in localized turbidity plumes and a reduction in foraging habitat. These species rely on sight foraging behavior to catch their prey. In addition, their fish and invertebrate prey base may move out of the turbidity plumes caused by construction activities. Because pile driving activities are within localized areas, other areas of the Harbor would be available as foraging habitat for these species. Exposure to contaminants that could cause acute toxicity or bioaccumulation to sea birds would also be avoided by the implementation of a Marina Construction and Management Plan which would assist in reducing impacts related to contamination to less-than-significant.

Seabirds roosting on docks and jetty areas near the bait barge in the vicinity of the proposed Temporary Dock may be affected by construction. Seabirds would respond by moving to other, nearby roosting habitat, which is available throughout the harbor. This modification of seabird behavior would not have any population level impacts on seabird. Therefore, the impacts are considered to be less-than-significant.

A decrease in the amount of open-water habitat in the vicinity of the Temporary Dock in the East Channel would have a less-than-significant impact on the ability of seabirds to forage in the outer harbor channels. Schooling fishes (including baitfish used by seabirds) would likely aggregate in other areas of the channel. Therefore, foraging terns, gulls, and pelicans would follow their food sources. This modification of forage behaviors would not result in any significant, adverse impacts on seabirds.

**Marine Mammals.** All marine mammals are protected by the Federal Marine Mammal Protection Act of 1972 (MMPA). The MMPA prohibits the intentional taking, import, or export of marine mammals without a permit. Several of the species that occur within the SCB are also protected under the Federal Endangered Species Act of 1973 (ESA). A species that is listed as threatened or endangered under the ESA is categorized as depleted under the MMPA. Unintentional take of a depleted species is allowed by permit only if the activity is determined to have a negligible impact. Intentional take of a depleted species is only allowed under a scientific research permit.

Marine mammals are not anticipated to be in the immediate areas where pile removal and replacement would occur in the Harbor and would not suffer any direct mortality resulting from pile removal or pile replacement.

Vessel traffic coming in and going out of Dana Point Harbor (barges, tugs, work vessels) would be transiting to-and-from offshore waters where California sea lion, Pacific harbor seal, California gray whale, bottlenose dolphin, and other marine mammals are found. Transiting vessels have a low potential to collide with marine mammals, or exposure these resource groups to contaminants, or interfere with foraging activity. Marine mammals are generally capable of avoiding boat traffic (Richardson et al., 1983) especially at the speeds the vessels will likely be transiting at. Marine mammals in the local waters have also likely habituated to vessel traffic since large fishing vessels, excursion vessels, and work vessels commonly transit in-and-out of Dana Point Harbor. Vessel operators are also trained to recognize the presence of marine mammals which reduces the potential for adverse impacts. Therefore, impacts to

marine mammals should be less than significant. In the event a pinniped or cetacean is injured or killed as consequence of a collision, the impact would be a locally significant impact, but it would not result in a population-level impact. Should this occur, the vessel operator and the County of Orange will immediately notify the National Marine Fisheries Service (Southwest Division) and will submit a written, follow up report within 24 hours of the incident.

Marine mammals are not anticipated to be in the immediate areas where pile removal and replacement will occur in the marina and will not suffer any direct mortality resulting from pile removal or pile replacement.

**Noise Production from Pile Extraction and Pile Driving.** Marine mammals are capable of hearing over long distances, and even though they may not be in immediate vicinity, there is a low potential for marine mammals to be affected by pile driving activity. The duration of such noise would be intermittent and the work at each site would be in different locations and at different times.

One-thousand three hundred and six, 14-inch diameter pilings will be replaced by 969 piles (851, 16-inch diameter piles and 118, 18-inch diameter piles). The use of concrete piles is an environmentally superior method- acoustically speaking- to the use of steel piles since because it produces less noise from individual pile strikes (ICF Jones & Stokes and Illingworth and Rodkin, Inc. 2009). However, pile extraction and pile driving will still result in the production of some underwater noise and vibrations within Dana Point Harbor that marine mammals may be capable of sensing. Overall however, moving sound sources from vessels and aircraft seem to be more disturbing than stationary sources such as drilling rigs and drill ships (Richardson et al., 1983). The initiation of these pile driving could potentially result in a minor startle response from nearby marine mammals and they would be expected to either move away from, or avoid the immediate vicinity. A minor startled response by a marine mammal (most likely a sea lion) would include swimming away from the source of dredging, from either the physical presence of the dredge equipment or sound/vibration detected by the animal that was produced from dredge equipment. No deleterious impacts would result from a minor startled response. Over time, marine mammals would acclimate to the noise. Most pile driving would occur within the East and West Marina Basins, where marine mammals are least likely to be. and although they would likely able to “sense” pile driving noise, the magnitude and intensity of the source sounds are unlikely to result in any significant changes in behavior. Such types of sounds and their intensity levels are common throughout the range in which these marine mammals live.

Pile driving in the air and water could cause seal lions to temporarily move farther away from these activities, although the sea lions are anticipated to adapt to noise. Breeding would not be affected because sea lions do not breed in Dana Point Harbor (Bonnell and Dailey, 1993)

The following information is extracted the Port of Los Angeles (2008), Pacific L.A. Marine Terminal LLC Crude Oil Terminal Final SEIS/SEIR 3.3-23 and 3.3 24 in response to the National Marine Fisheries Service’s comments regarding the effects of noise on pinnipeds relative to pile driving in L.A. Harbor.

“Pinnipeds appear to have greater tolerance to noise levels than cetaceans. Kastelein et al. (2006) demonstrated that captive seals avoid zones where the sound pressure levels were louder than 107 dBrms (re 1  $\mu$ Pa), but noted that it is possible that in the wild, seals may tolerate higher levels, in order to get food, escape predators, or stay with a pup. Finneran et al. (2003) found no measurable Temporary Threshold Shift (TTS) at sound pressure levels up to 178 to 183 dB (re 1  $\mu$ Pa) for California sea lions, a sea lion, harbor seal, and northern elephant seal at sound pressure levels over periods of 25 to 50 minutes. Increasing the exposure duration from 25 to 50 minutes had a greater effect on threshold shifts than increasing the exposure level from 80 dB original sound source level (SL) (137 to 159 dBrms re 1  $\mu$ Pa) to 95 dB SL (152 to 174 dBrms re 1  $\mu$ Pa); SELs resulting in TTS onset ranged from about 183 to 206 dB (re

1  $\mu\text{Pa}^2$  s). Kastak and Schusterman (1996) reported TTS in California sea lions exposed to airborne noise from nearby construction.

Pile driving produces noise levels of 175 to 205 dBrms 177 to 220 dB (re 1  $\mu\text{Pa}$ ) at 33 ft (10 m) depending on the material and size of the piles (Caltrans 2007). Caltrans (2007) data indicate the sound level for the proposed steel piles could be as high as 195 dBrms at 33 ft (10m). In comparison, an underwater sound level of 180 190 dBrms (re 1  $\mu\text{Pa}$ ) has been designated as the level A harassment level for pinnipeds (Federal Register 2005), representing a potential effect level for marine mammals occurring close to construction noise in the Outer Harbor.

Observations during pile driving for the San Francisco-Oakland Bay Bridge East Span seismic safety project showed minimal response in harbor seals while sea lions swam rapidly out of the area (Caltrans 2001). In water, sound transmission loss is between 3 and 6 dB per doubling of distance, with approximately 4.5 dB per doubling of distance in nearshore waters (Vagle 2003). However, at distances of less than about 330 feet (100 m), the transmission loss (rate of attenuation) can be less (Caltrans 2007). For this project, marine mammals such as pinnipeds could experience sound levels approaching Level A harassment levels at around 100 m (330 feet) from the pile driving. This estimate accounts for the size of the largest steel piles, the power of the hammer that would be required to drive them, the lower rate of attenuation close to the pile, and uncertainty in the sound propagation rate that depends on site-specific characteristics (Caltrans 2007). “

Few, if any, individual sea lions or marine mammals would be expected to be present with the Dana Point Harbor during dredging or pile extraction or cement pile driving activities. Any sea lions or other marine mammals present would not be harmed, because they would likely either move out of range of sound produced by pile driving, or they would adapt to expected sound intensities. The effect would be of short duration for each pile. The size of the piles to be driven for the project (average of 14 and 18 inch diameter pilings) are smaller in diameter than those typically used for commercial port shipping operations and the use (cement production piles) will produce less noise. Therefore, the sound intensity produced, and the potential level of impact for the Dana Point Harbor project will be less than that within the Port of Los Angeles for pile driving operations, and a less-than-significant project impact.

Based on the review of data for Los Angeles Harbor, and the fact that smaller concrete production piles will used for this project do not produce as intense sounds as steel piles, the expected level of impact to marine mammals for the project will be less-than-significant. Noise levels are expected to be below that identified as harassment during therefore an application to the NMFS for an Incidental Harassment Authorization, under Section 101 of the Marine Mammal Protection Act will not be necessary. In addition, the County of Orange will add a mitigation measure to the project that requires slowly ramping up pile-driving activities (referred to as a “soft start”) at the start of Dana Point Harbor pile-driving activities (at the beginning of the day and at restarting of construction after lunch breaks or other pile driving interruptions of longer than 15 minutes). See Section 4 for this mitigation measure.

Exposure to contaminants that could cause acute toxicity or bioaccumulation to marine mammals, sea turtles, and sea birds would be avoided by implementing a Marina Construction and Management Plan as part of the County’s marina management program. With the implementation of this BMP, impacts related to contamination would be less than significant. No mitigation would be required.

### 3.4.6 Sensitive Habitats

**Reef Habitat.** Scattered low-to-moderate relief rocky reef habitat is present within the confines of the protected Dana Point Harbor, remnant of the open coastal reefs present prior to the construction of the harbor. While biological diversity of these reefs is less compared to reefs outside the Harbor due to

sedimentation, less wave exposure, and exposure to higher levels of contaminants, Dana Point Harbor reef habitat still supports many types of plants, invertebrates, and fishes.

Within the limits of proposed harbor improvements, the scattered outcrops support characterized by low-diversity biological communities are found in the East and West marina basins; west of the Sailing Center; and in the East Channel in general proximity to the proposed Temporary Dock (Coastal Resources Management, Inc. 2010). Outside the project area (in the Main Channel and West Channel near the protective quarry stone slopes of the Island Marina), biological diversity is considerably higher.

Pile driving has a potential to damage isolated reef outcrops and associated macro-invertebrates and macro algae (i.e., gorgonians, snails, and urchins, and kelp). Because it is not generally known exactly where these reefs are with respect to pile locations, sidescan sonar surveys will be necessary prior to the construction of the temporary docks to pinpoint reef habitat and assess the amount and quality of reef habitat and associated biological resources. However, based upon the results of previous surveys, the reefs in the East Channel are highly impacted, very low relief, and covered in silt (Coastal Resources Management, Inc. 2010). Reefs in the West Channel are outside the footprint of the proposed Sailing Center Dock. If reef habitat is present, pile removal and installation may result in the disturbance of a small percentage of low-relief and associated organism. Based on existing information, is anticipated that the impacts from the construction of the temporary dock in the East Channel will result in less-than-significant on rocky subtidal habitat and biota. Best Management Practices (BMPs) to lessen the potential for adverse impacts to reefs in the vicinity of the temporary dock are provided to further reduce potential impacts on reefs (See Section 4).

**Giant Kelp.** Individual giant kelp (*Macrocystis pyrifera*) plants may be present on either remnant natural reef or quarry stone protecting the marinas, but outside of the proposed construction zones. Short-term turbidity increases from pile emplacement activities in the construction zone will not impact local giant kelp populations within the general Dana Point Harbor region. Consequently, the pile driving will have a not impact giant kelp populations.

### 3.4.7 Marine Protected Areas

No Marine Protected Areas occur in Dana Point Harbor precluding short-term construction related impacts to MPAs.

### 3.4.8 Fisheries Management Plan Species

Project activities that could potentially affect identified Coastal Pelagic FMP species (northern anchovy) and Pacific Groundfish FMP species (scorpion fish and juvenile Olive rockfish) include increased water turbidity caused by the demolition and replacement of docks and bulkheads, increased underwater pressure and noise due to pile driving and pile removal; and direct mortality from habitat destruction. These impacts could potentially result in (1) the movement of schooling anchovies away from the impact zones to more suitable offshore habitat (2) an increase in the suspended sediment load that could potentially introduce this species to harmful levels of contaminants and clog their gill apparatus, resulting in a reduced ability to breathe and/or feed. This is particularly true for northern anchovy, which is a filter feeder that uses their gill structures to filter plankton. Groundfish species are likely to be extremely rare in the project area. However, should they be present, the potential for direct mortality of juveniles, or adults of these species is minimal.

Based upon the life histories and the distribution of these species that favor most of the populations to be distributed in offshore areas rather than the confines of Dana Point Harbor, the potential for short-term

construction impacts on these FMP species is expected to be less-than-significant. There would not be any population-level impacts on Fisheries Management Plan species.

Eelgrass is a Habitat of Particular Concern (HAPC) for FMP groundfish species (rockfish) and is present near Baby Beach and the proposed dock at the Youth Sailing Center. See Section 3.3.1 and 3.4.5 for a discussion of water quality and construction-related impacts to eelgrass.

See Section 3.4.5 for a discussion of project construction impacts on green sea turtles.

### 3.4.9 Invasive Species

***Caulerpa taxifolia.*** *Caulerpa* is not present within Dana Point Harbor which precludes the potential spread of this species during Harbor Waterside improvement construction activities. However, a *Caulerpa* algae survey will be conducted according to the National Marine Fisheries Service Control Protocol prior to construction (National Marine Fisheries Service, 2008). If this species is found, then protocols for the eradication of *Caulerpa* will be implemented to remove this species from the project area. (<http://swr.ucsd.edu/hcd/CaulerpaControlProtocol.htm>).

***Undaria pinnatifida.*** *Undaria pinnatifida* is not currently growing within Dana Point Harbor. Should it be found during pre-construction surveys, then it should be removed prior to marina modifications to prevent its spread during the pile and dock removal process. It should be noted that at this time, there are no defined eradication processes for this species by the National Marine Fisheries Service or the California Department of Fish and Game.

***Zostera japonica.*** This species of eelgrass does not grow in Dana Point Harbor and will not be impacted during Harbor Waterside improvement construction activities.

## 3.5 LONG-TERM OPERATIONAL IMPACTS ON WATER QUALITY

**Marina Operations.** Water quality within Dana Point Harbor will be governed by the practices of the tenants relative to their compliance with ordinances, laws, and guidelines related to discharges, vessel maintenance and marina maintenance. Periodic and/or uncontrolled discharges of various pollutants, oils, greases, and wastes would potentially create significant long-term, adverse effects on water quality with subsequent adverse impacts on local marine life. To prevent long-term impacts on local water quality, a Marina Management Plan should be implemented to provide tenants and boaters with reasonable BMPs, safety guidelines, information on pump out facility use, regulations and steps to take in response to trash and debris disposal, accidental spills, leakages, and fires to reduce the potential for water quality degradation. Implementation of a Marina Management Plan that covers these issues will assist in reducing potential long-term water quality impacts to less-than-significant (Section 4).

**Temporary Dock Operations.** Dumping of trash, debris, hazardous materials, and organic wastes from vessels or from visitors to the Temporary Dock area could degrade water quality, habitat values, and marine life in a region of the Harbor that supports many types of marine life. This would result in a significant, localized impact on the quality of the Main Channel and West Channel bottom habitats. Mitigation measures and BMPs to reduce this impact to less-than-significant are discussed in Section 4.

### **3.6 LONG-TERM OPERATIONAL IMPACTS ON MARINE BIOLOGICAL RESOURCES**

#### **3.6.1 Dock and Pile Surface Area Changes**

The number of boat slips within the Harbor will decrease from 2,409 to 2,293. A total of 1,306 existing piles will be removed and 969 new piles will be emplaced. The total dock surface area will decrease from 492,530 square feet (sq ft) to 459,540 sq ft (a net decrease of 32,990 sq ft. 0.76 acres) One-thousand three hundred and six, 14-inch diameter pilings with a surface area of 1,396 sq ft will be replaced by 969 piles (851, 16-inch diameter piles and 118, 18-inch diameter piles) with a surface area of 1,395 sq ft.

A decrease in dock surface area will result in a long-term, beneficial impact to open water habitat. This will increase waterbird (and endangered species) seabird foraging habitat and reduce shading effects on harbor waters. In the long-term, there will be a net overall benefit to the marine ecosystem related to a decrease in dock surface area. Discussions of long-term impacts by habitat types are discussed below.

#### **3.6.2 Intertidal Sandy Beach**

Waterside improvements within Dana Point Harbor will not affect sandy beaches or sandy beach flora and fauna.

#### **3.6.3 Soft-Bottom Benthos**

The number of piles will decrease although the reduction in surface area of the piles will not substantially decrease (1 sq ft). This will have no adverse or beneficial effects on soft bottom-associated organisms.

#### **3.6.4 Hard Substrate-Pilings, Docks, Rip Rap, and Natural Reefs**

**Docks and Pilings.** The proposed project will result in a net decrease of biofouling organisms because of a decrease in dock surface area (0.76 acres) and 1 sq ft of piling habitat. This will not result in a regional or local loss of any invertebrate or algae species. Once new piles are re-installed in the marina basins, they will be recolonized by similar types of organisms that were initially removed. The process of recolonization would begin immediately upon the structures being placed in the water, but re-establishment of mature biofouling communities would take several years.

#### **3.6.5 Water Column Organisms**

Dana Point Harbor waterside improvements will have a long-term, beneficial effect on water column habitat and associated plankton and fish populations. In the long-term, an additional 0.76 acres of open water habitat will experience direct sunlight as consequent of the reconfiguration of the dock systems. Consequently, there will be a greater surface area of unshaded open water, that will locally increase primary (plankton) plankton production. Additionally, the increase in open water habitat will have a beneficial impact on fishes and foraging seabirds.

#### **3.6.6 Reptiles (See Section 3.6.9)**

No long-term impacts to sea turtles will occur as a result of the Harbor Waterside Improvement Project. The proposed project components will have no effect on sea turtle abundance or distribution.

### 3.6.7 Seabirds (See Section 3.6.9)

### 3.6.8 Marine Mammals (See Section 3.6.9)

### 3.6.9 Sensitive Species

**Eelgrass.** The proposed project has a potential to impact eelgrass in the vicinity of the proposed Sailing Center Dock (Section 3.2) as a consequence of shading from either dock structures or boats tied up to the dock. The level of impact and the mitigation required for any disturbance to eelgrass will be determined during pre-and-post construction surveys for the project according to the provisions of the Southern California Eelgrass Mitigation Policy (NMFS 1991, as amended). Should it be determined that a loss of eelgrass has occurred, appropriate mitigation measures to offset any observed eelgrass losses will be implemented.

**Surfgrass.** No long-term impacts to surfgrass will occur as a result of the Harbor Waterside improvement Project.

**Abalone.** No long-term impacts to abalone will occur as a result of the Harbor Waterside improvement Project.

**Tidewater Goby.** No long-term impacts to the tidewater goby will occur as a result of the Harbor Waterside improvement Project.

**Steelhead Trout.** No long-term adverse related impacts would occur on this species or its habitat. However, assuming this species' inland critical aquatic habitat is restored in the future to levels that would enhance the population of local steelhead trout, better water quality within Dana Point Harbor could potentially create a condition that might allow greater numbers of steelhead trout to transit through the Harbor.

**California Halibut.** No long-term impacts to California halibut will occur as a result of the Harbor Waterside improvement Project.

**Green Sea Turtles.** No long-term impacts to green sea turtles will occur as a result of the Harbor Waterside improvement Project.

**Seabirds.** Seabirds would be beneficially impacted by the increase of open-water foraging habitat. Additionally, there will be an increase of open water foraging habitat for the endangered least tern and the California brown pelican. The long-term waterside improvements within Dana Point Harbor will not result in the mortality of any species of endangered or other sensitive species of seabirds.

**Marine Mammals.** No long-term impacts to marine mammals will occur as a result of the Harbor Waterside Improvement Project.

### 3.6.10 Fishery Management Plan Species

No long-term adverse impacts to either coastal pelagic or groundfish FMP species will occur as a result of the Harbor Waterside improvement Project. Because there will be an increase in the amount of unobstructed open water habitat within Dana Point Harbor, this could potentially result in long-term beneficial effect on northern anchovy .

### 3.6.11 Sensitive Habitats

Reefs and Kelp Beds. No long-term impacts on reef or kelp beds are anticipated.

### 3.6.12 Invasive Species

*Caulerpa* algae is not expected to be present in Dana Point Harbor which precludes the potential for the spread of this species. However, if *Caulerpa* is found following waterside improvements, a *Caulerpa* algae eradication program will be required <http://swr.ucsd.edu/hcd/CaulerpaControlProtocol.html>; (National Marine Fisheries Service 2006).

*Undaria pinnatifida* is not currently growing within the Harbor; however, if it is discovered following waterside improvements to the Harbor then thought should be given to its eradication, based on recommendations from the California Department of Fish and Game and the National Marine Fisheries Service.

*Zostera japonica* does not occur within Dana Point Harbor and will not be impacted by the project.



## **4.0 BEST MANAGEMENT PRACTICES**

### **4.1 CONSTRUCTION**

#### **4.1.1 Water Quality**

Short-term, potentially significant impacts on water quality related to sediment and contaminant resuspension are reduced to a less-than-significant impact through the implementation of the following Best Management Practices.

- No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to tidal erosion and dispersion.
- Construction materials shall not be stored in contact with the soil. Any construction debris within the temporary cofferdam area shall be removed from the site at the end of each construction day.
- Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into Dana Point Harbor. Such measures include deployed oil booms and a silt curtain around the proposed construction zone at all times to minimize the spread of any accidental fuel spills, turbid construction related water discharge, and debris. Other measures include training construction workers on emergency spill notification procedures, proper storage of fuels and lubricants, and provisions for on-site spill response kits.
- All trash shall be disposed of in the proper trash receptacles at the end of each construction day. Any construction debris shall be removed from the site.
- During construction, floating booms shall be used to assist in containing debris discharged. Any debris discharged shall be removed as soon as possible but no later than the end of each day.
- Remove all construction debris from the seafloor. A post-construction bottom survey shall be conducted if all material has been successfully removed from construction areas.
- The County of Orange shall limit, to the greatest extent possible, the suspension of benthic sediments into the water column. If turbid conditions are generated during construction, a silt curtain shall be utilized to control turbidity.
- Construction methods shall be used that are the least damaging to benthic sediments and organisms.
- Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into Dana Point Harbor. The County of Orange shall have adequate equipment available to contain such spills immediately.
- Construction methods shall be used that are the least damaging to benthic sediments and organisms.

- Federal and State permit conditions related to the maintenance of water quality standards shall be implemented throughout the term of construction; and

#### 4.1.2. Marine Resources

The following Best Management Practices (BMPs) are recommended to reduce potential adverse impacts to marine resources during the renovation of the Dana Point Harbor Marina.

- All BMPs identified in Section 4.1.1 apply to the protection of marine resources during waterside improvement construction activities.

##### Pre-Construction-General

- Prior to construction activities, a pre-construction marine biological survey should be conducted to identify sensitive marine biological resources (i.e., eelgrass, reefs and kelp beds, and seabirds). This survey shall be used to prepare a Marine Biological Impact Reduction Plan (MBIRP) to minimize construction impacts to marine resources. Sensitive biological resources shall be mapped.
- A project marine biologist shall meet with the construction crews prior to construction to review sensitive areas to avoid and to review proper construction techniques.
- Special design and engineering consideration should be given to the type of materials used for the Temporary Dock floats and pier to minimize shading effects on open water habitat. Such features could include the use of translucent materials.

##### During Construction:

- Barges and work vessels should be operated in a manner to ensure that sensitive resources within Dana Point Harbor are not impacted through grounding, propeller damage, or other activities that may disturb the sea floor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.
- Minimize direct pile drilling impacts to rocky intertidal and subtidal habitats in the vicinity of the Temporary Docks.
- The contractor shall be required to use sound abatement techniques to reduce noise and vibrations from pile-driving activities. Recommended sound abatement techniques can include, but not be limited to vibration or hydraulic insertion techniques, drilled or augured holes for cast-in-place piles, bubble curtain technology, and sound aprons depending upon their feasibility for the project.
- At the initiation of each pile-driving event and after breaks of more than 15 minutes, the pile driving shall also employ a “soft-start” in which the hammer is operated at less than full capacity (i.e., approximately 40 to 60 percent energy levels) with no less than a 1-minute interval between each strike for a 5-minute period. The operation of the hammer at 40 to 60 percent energy level during the soft start of pile driving is expected to result in similar levels of noise reduction (40 to 60 percent) underwater.

- The project marine biologist shall monitor the construction process on a regular basis to ensure that all water quality Best Management Practices (BMPs) are implemented, and to assist the project engineer in avoiding and minimizing environmental effects to harbor marine biological resources.

The following BMPs are proposed to avoid potential impacts to existing eelgrass resources in the project area.

- Impacts to eelgrass beds shall be avoided where practical and feasible. A project marine biologist shall mark the positions of eelgrass beds with buoys prior to the initiation of any construction to minimize damage to eelgrass beds outside the construction zone. To assist the construction crew in avoiding unnecessary damage to eelgrass, the project marine biologist shall meet with the construction crews prior to construction to review areas of eelgrass to avoid and to review proper construction techniques.
- Barges and work vessels shall avoid impacts to eelgrass beds located near Baby Beach and the Sailing Center. Barges and work vessels shall be operated in a manner to ensure that eelgrass beds are not impacted through grounding, propeller damage, or other activities that may disturb the seafloor. Such measures shall include speed restrictions, establishment of off-limit areas, and use of shallow draft vessels.
- An eelgrass mitigation plan shall be developed based upon the results of pre-and-post construction surveys. The Plan shall require that any direct losses, if any, to eelgrass vegetation will be mitigated at a ratio of 1.2:1 (mitigation to impact) and potential eelgrass habitat will be mitigated at a ratio of 1:1 according to requirements of the Southern California Eelgrass Mitigation Policy (SCEMP)
- As detailed in the SCEMP, the actual amount of eelgrass to be mitigated shall depend on pre-construction surveys, post-construction surveys.

The following BMPs are proposed to avoid potential impacts to sea turtles and marine mammals in the project area.

- A qualified marine biologist shall be on site during the construction period to monitor the presence of endangered species. The on-site biological monitor shall have the authority to halt construction operations and shall determine when construction operations can proceed. Construction crews and work vessel crews shall be briefed on the potential for this species to be present and will be provided with identification characteristics of sea turtles, since they may occasionally be mistaken for seals or sea lions.
- Vessel operators will be instructed by a qualified marine biologist on the goals of the Marine Mammal Protection Act (1972) and the need to avoid a “take” of a marine mammal. "The term 'take' means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal. Feeding is prohibited." "The term 'harassment' means any act of pursuit, torment, or annoyance which: injures or has the potential to injure a marine mammal or marine mammal stock in the wild; or disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding or sheltering to a point where such behavior patterns are abandoned or significantly altered." (NOAA website, [www.noaa.gov](http://www.noaa.gov))

- Construction crews and work vessel crews shall be briefed on the potential for turtles and marine mammals to be present and will be provided with identification characteristics of sea turtles, since they may occasionally be mistaken for seals or sea lions.
- In the event that a sea turtle is sighted within 100 meters of the construction zone, all construction activity shall be temporarily stopped until the sea turtle is safely outside the outer perimeter of construction. The on-site biological monitor shall have the authority to halt construction operation and shall determine when construction operations can proceed.
- If a marine mammal is observed within a radius of 1,200 ft (366 meters) from the construction zone, then activities shall not be initiated until the animal has passed out of the project area. If an animal is periodically but not constantly observed during this period, construction activities shall not be initiated for a period of 15 minutes, which is the estimated amount of time for a seal lion or other marine mammals to transit out of the project area.
- The biological monitor shall prepare an incident report of any marine mammal or green sea turtle activity in the project area and shall inform the construction manager to have his/crews be aware of the potential for additional sightings. The report shall be provided within 24 hours to the California Department of Fish and Game (CDFG) and the National Marine Fisheries Service (NMFS).
- In the event of a watercraft collision with a marine mammal or sea turtle the biological monitor shall prepare an incident report of any green sea turtle activity in the project area and shall inform the construction manager to have his/crews be aware of the potential for additional sightings. The report shall be provided within 24 hours to the California Department of Fish and Game (CDFG) and the National Marine Fisheries Service (NMFS).

The following BMPs are proposed to determine the presence of invasive algae in the project area prior to construction and the procedures to be followed if invasive algae is found in the project area.

- A field survey to investigate the presence of the invasive algae *Caulerpa taxifolia* is required 30 to 60 days prior to commencement of construction by qualified divers certified by the California Department of Fish and Game (CDFG) and National Marine Fisheries Service (NMFS) to conduct such surveys. The pre-construction *Caulerpa* surveys will be conducted according to the accepted criteria of the Southern California *Caulerpa* Action Team (SCCAT) for conducting surveys for invasive algae and in accordance with the NMFS and CDFG *Caulerpa* survey protocols. In accordance with the recommendations of the SCCAT, and according to the NMFS *Caulerpa* Control Protocol (Version 4, adopted March 28<sup>th</sup>, 2008 [NMFS 2008]), a survey must be conducted in harbor areas that may be disturbed. In areas that are expected to be free of *Caulerpa*, a 20 percent visual Surveillance Level survey is required prior to any dredging. The survey will also identify any other marine vegetation in the proposed construction area, including eelgrass. Project reports will be transmitted by the County of Orange via *Caulerpa* Survey Reporting Form to NMFS and the CDFG within 48 hours of completion of the survey. If *Caulerpa* is identified in the project area, the County, NMFS, and CDFG will be notified within 24 hours of completion of the survey. In the event that *Caulerpa* is detected, disturbance shall not be conducted until such time as the infestation has been isolated, treated, or the risk of spread from the proposed disturbing activity is eliminated in accordance with Section F of the *Caulerpa* Control Protocol.

## 4.2 LONG-TERM MARINA OPERATIONS

Best Management Practices for marina operation and management should be implemented to reduce the potential for water quality and degradation of Dana Point Harbor marine resources. These BMPs include, but are not limited to:

- The County of Orange should provide each marina tenant with a copy of all applicable regulations regarding vessel discharges of wastes, antifouling paint use, and refuse management (including handling of hazardous wastes) as part of the lease materials;
- The County of Orange should provide each marina tenant with information regarding procedures for notifying appropriate authorities regarding spills of hazardous materials, containment measures, and applicable penalties for violations as a part of lease materials;
- The County of Orange should provide regular cleaning of the marina dock facilities and vacuum sweeping of the parking lots;
- Adequate signs should be posted to identify the location off pump-out stations, and hours of operation;
- The pump-out facility should be user friendly;
- The County of Orange should develop and adhere to a regular inspection and maintenance schedule for the pump-out facility;
- The County of Orange should provide educational information about the pump out station to tenant boaters;
- The County of Orange shall enforce existing local, state and federal regulations pertaining to marine sanitation devices and the illegal discharge of boat sewage; and;
- The County of Orange shall post and make available to boaters a list of other local pump out locations.

To prevent long-term impacts on local water quality, a Marina Management Plan should be developed to provide tenants and boaters with reasonable BMPs, safety guidelines, and steps to take in response to accidental spills, leakages and fires to reduce the potential for water quality degradation. In addition, two pamphlets *The Guide to Clean, Green Boating* (California Department of Fish and Game 1999) and *Clean Boating* (California Department of Boating and Waterways (undated material) should be distributed and made available to both hotel management and marina tenants.

Clean Marinas California Program (2006) has developed a guidebook for to making marinas environmentally clean facilities and to help protect the state's waterways from pollution. This guidebook is available at <http://cleanmarinascalifornia.org>. It is recommended that a copy of this document be kept onsite in the marina operations offices.

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**APPENDIX 1. SPECIES LIST OF ORGANISMS  
OBSERVED IN DANA POINT HARBOR  
FEB/MARCH 2007 AND NOV/DEC 2007  
COASTAL RESOURCES MANAGEMENT SURVEYS**

Common Name	Scientific Name	Epi Benthos	Baby Beach	Marina Hard Scape	Youth Sailing Center Reefs	West Jetty Shoal and Channel Slope	West Main Channel	Temp Dock (South of Bait Barge)	Temp Dock (North of Bait Barge)	Youth Sailing Center Rip Rap	Bridge Bases	Harbor Patrol Basin*	Sportfishing Dock Rip Rap and Reef	Dry Stack and Shipyard Basins	All
sponge	Porifera, Unid.	x		x	x		x				x				x
anemone	<i>Anthopleura sola</i>			x			x						x		x
hard coral	<i>Astrangia lajollensis</i>												x		x
hydroid	<i>Aglaophenia</i> sp.			x			x				x				x
gorgonian	<i>Muricea californica</i>						x						x		x
gorgonian	<i>Muricea fruticosa</i>			x				x					x		x
anemone	<i>Pachycyathus fimbriatus</i>				x					x					x
polychaet flatworm	<i>Pseudoceros</i> sp.											x			x
polychaete	<i>Dioptera ornata</i>							x							x
polychaete	<i>Dodecaceria</i> sp.			x											x
polychaete	<i>Phragmatopoma californica</i>			x											x
polychaete	Sabellidae, unid.			x											x
polychaete	Spionidae, unid.			x									x		x
polychaete	Serpulidae, unid.			x											x
polychaete	Spirorbidae, unid.			x											x
barnacle	<i>Gthamalus fissus/dalli</i>			x			x		x				x		x
barnacle	<i>Balanus amphitrite</i>			x						x					x
barnacle	<i>Balanus glandula</i>			x			x			x					x
lined shore crab	<i>Pachygrapsus crassipes</i>			x											x
lobster	<i>Panirus interruptus</i>			x			x						x		x
snail	<i>Acanthina spirata</i>								x						x
limpet	<i>Collisella digitalis</i>														x
limpet	<i>Collisella scabra</i>						x		x						x
slipper shell	<i>Crepidula onyx</i>							x	x				x		x
Kelet's whelk	<i>Keletia keletii</i>									x					x
Gould's paper bubble	<i>Haminoea vesicula</i>								x						x
rock scallop	<i>Himantes giganteus</i>			x			x								x
limpet	<i>Lotia gigantea</i>						x								x
limpet	<i>Lotia limatula</i>						x		x						x
bay mussel	<i>Mytilus edulis</i>										x				x
bay mussel	<i>Mytilus galloprovincialis</i>			x											x
sea slug	<i>Navanax inermis</i>						x		x						x
octopus	<i>Octopus</i> sp.														x
snail	<i>Roperia pouisoni</i>							x					x		x

Common Name	Scientific Name	Epi Benthos		Marina Hard Scape	Youth Sailing Center Reefs	West Jetty Shoal and Channel Slope		West Main Channel	Temp Dock (South of Bait Barge)	Temp Dock (North of Bait Barge)	Youth Sailing Center Rip Rap	Bridge Bases	Harbor Patrol Basin*	Sportfishing		All
		Benthos	Beach			Dock Rap and Reef	Dry Stack and Shipyard Basins									
oyster	<i>Ostrea sp.</i>										x					x
sea cucumber	<i>Parastichopus peruvianensis</i>						x									x
reverse chama	<i>Pseudochama exogyra</i>			x	x									x		x
festive murex snail	<i>Pteropurpura festiva</i>			x				x						x		x
scaled tube worm	<i>Serpulorhis squamigerus</i>	x						x								x
trochid snail	<i>Tegula eisenii</i>							x		x						x
soft ectoproct	<i>Anguinella palmata</i>			x												x
ectoproct	<i>Bugula neritina</i>			x												x
ectoproct	Encrusting ectoprocts			x				x								x
colonial tunicate	<i>Botryllus/Botrylloides</i>			x												x
colonial tunicate	colonial tunicates			x				x								x
solitary tunicate	Ascideacea, unid.			x				x							x	x
solitary tunicate	<i>Styela plicata</i>			x				x				x				x
opaleye perch	<i>Girella nigricans</i>				x			x	x							x
ganibaldi	<i>Hypsypops rubicundus</i>				x			x								x
pile perch	<i>Damalichthys vacca</i>				x			x								x
blacksmith	<i>Chromis punctipinnis</i>				x			x								x
kelp bass	<i>Paralabrax clathratus</i>				x			x							x	x
unknown barred fish	juvenile, unid.				x			x								x
kelp fish	<i>Heterostichus rostratus</i>									x						x
senonita	<i>Oxyjulis caifornica</i>				x											x
flatfish	unid. flatfish	x														x
round sting ray	<i>Urolophus halleri</i>	x														x
<b>Total</b>		<b>9</b>	<b>3</b>	<b>36</b>	<b>31</b>	<b>5</b>	<b>49</b>	<b>10</b>	<b>25</b>	<b>15</b>	<b>12</b>	<b>6</b>	<b>25</b>	<b>0</b>	<b>88</b>	

**MARINE BIOLOGICAL FIELD SURVEY RESULTS  
FEBRUARY-MARCH 2007, OCTOBER-NOVEMBER 2007,  
AND JUNE 2010 SURVEYS**

**DANA POINT HARBOR MARINA IMPROVEMENT PROJECT  
DANA POINT, ORANGE COUNTY, CALIFORNIA**



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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1.0 INTRODUCTION</b> .....	1
1.1 Project Purpose.....	1
1.2 Project Location .....	1
1.3 Project Components.....	1
<b>2.0 SURVEY METHODS</b> .....	6
<b>3.0 SURVEY RESULTS</b> .....	9
3.1 Project Area.....	9
3.2 Physical Environment.....	10
3.3 Marine Biological Resources .....	11
3.4 Eelgrass.....	16
3.5 Invasive Algae.....	18
<b>4.0 LITERATURE CITED</b> .....	22

### LIST OF TABLES

1 Project Components.....	4
2 Areas Surveyed in Dana Point Harbor.....	9
3 Number of Taxa Observed During the CRM Marine Biological Surveys.....	12
4 Number of Taxa By Areas and Habitat Type in Dana Point Harbor.....	12

### LIST OF FIGURES

1 Project Area Location .....	2
2 Dana Point Harbor Study Regions .....	3
3 Proposed Dana Point Harbor Marina Layout .....	5
4 Survey Locations.....	8
5 Eelgrass, <i>Zostera marina</i> .....	17
6 Location of Eelgrass Near Baby Beach and the Youth Sailing Center.....	19
7 Invasive Algae ( <i>Caulerpa taxifolia</i> ).....	20
8 Invasive Algae ( <i>Undaria pinnatifida</i> ) .....	21

### LIST OF PHOTOGRAPHS

1 Deep Blue Splash Cam.....	7
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### LIST OF APPENDICES

1 Remote Underwater Video Survey Track Lines .....	23
2 Marine Plants and Animals Observed During the CRM Marine Biological Surveys .....	24
3 <i>Caulerpa taxifolia</i> Reporting Form.....	28

## **1.0 INTRODUCTION**

### **1.1 PROJECT PURPOSE**

Coastal Resources Management, Inc. (CRM) conducted marine biological resource surveys in Dana Point Harbor during February/March 2007, October/November 2007, and June 2010. The purposes of the investigation were to (1) determine if eelgrass (*Zostera marina*) or invasive algae (*Caulerpa taxifolia* or *Undaria pinnatifida*) were present in regions of the Harbor where proposed waterside improvement are proposed, (2) collect data on the presence/absence of other sensitive and non-sensitive species present in the Harbor on soft-bottom, piling, rip-rap and reef habitats that might be affected by marina improvements and (3) assess the potential environmental effects of construction and long-term operation of the marina on sensitive marine resources.

This report presents the results of detailed marine biological field surveys conducted by CRM. An environmental evaluation of the potential effects of the Harbor Waterside Improvement Project on marine resources is assessed in Coastal Resources Management, Inc. (2010a).

### **1.2 PROJECT LOCATION**

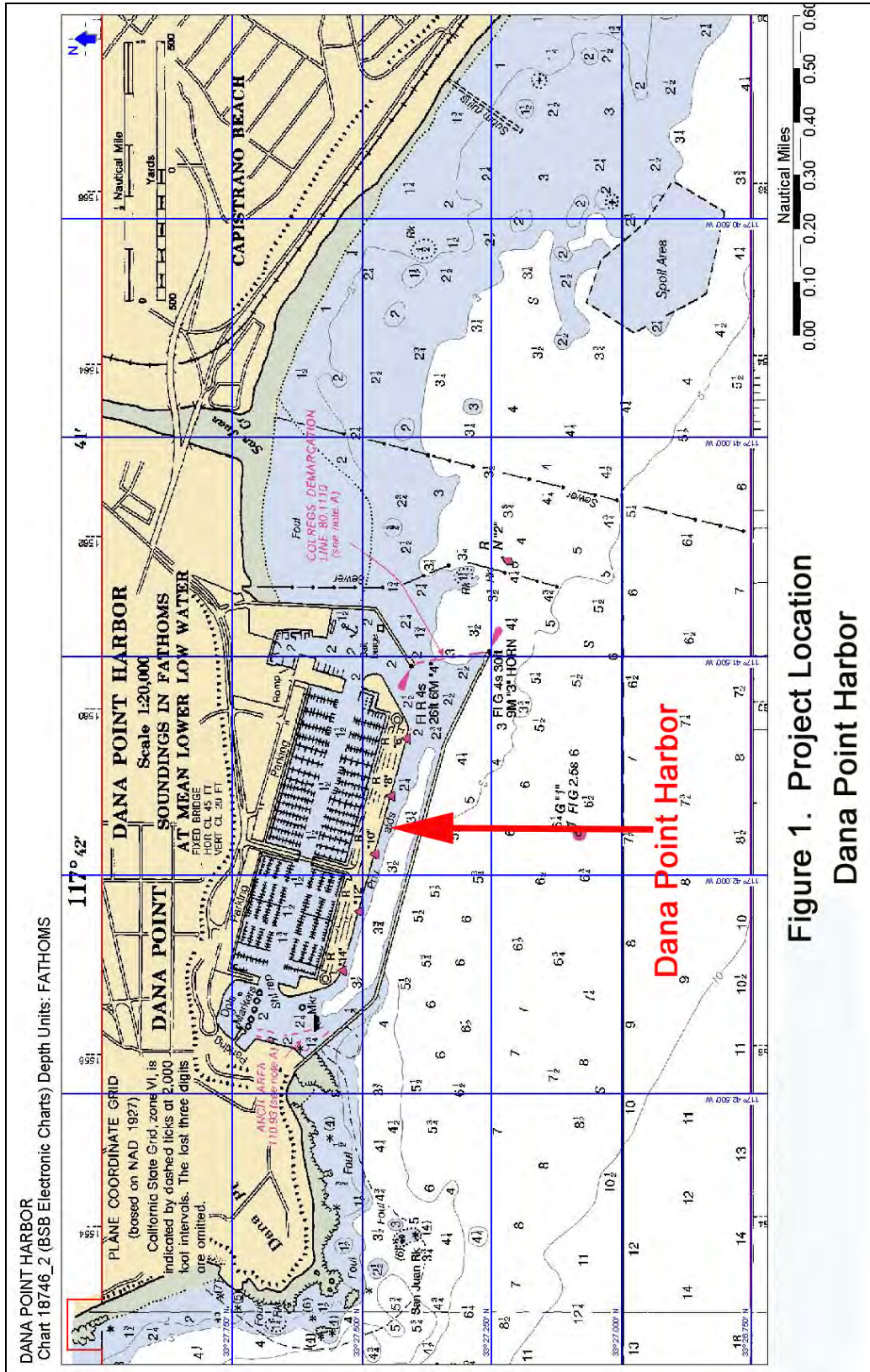
Dana Point Harbor, constructed between 1966 and 1970, is located in the City of Dana Point, Orange County, California about 40 miles south of Long Beach/Los Angeles Harbors (Figure 1). It lies in the lee (protected side) of Dana Point Headlands within Capistrano Bay and is also protected by a 1.7 mile long and 14 to 18 feet (ft) high breakwater. Harbor channel widths vary from 350 feet in the anchorage areas to 600 feet at the harbor entrance (Wiegel, 1993) The Harbor is subject to in-filling of sands that migrate through the quarry stone-breakwater requiring periodic maintenance dredging to maintain safe water depths.

The marina within Dana Point Harbor (“the Harbor”) is divided into two basins, the East Basin and West Basin (Figure 2). Figure 2 also lists the areas under discussion within this report. Each basin operates as a separate marina, with a total capacity of about 2,500 shallow-draft vessels. The boat launch ramp at the northeast corner of the Harbor is newly upgraded as of July 2007. Other facilities within the Harbor include the Dana Point Marine Institute, a dry boat storage hoist, fishing pier, shipyard, marine fuel dock, three yacht clubs, and a commercial sports fishing operation. Swimming is allowed at the west end of the Harbor, at Baby Beach. (<http://www.ocparks.com/danapointharbor/>).

### **1.3 PROPOSED PROJECT COMPONENTS**

Table 1 and Figure 3 describe and illustrate the proposed marina improvements, respectively. Waterside upgrades include (1) the renovation and re-orientation of the East and West marina basin dock systems by replacing old and deteriorating docks, slips and gangways with new facilities; (2) dock redesign and improvements for the Youth Sailing Center, the Harbor Patrol facilities, Commercial Fishing Dock, the Sport Fishing dock,



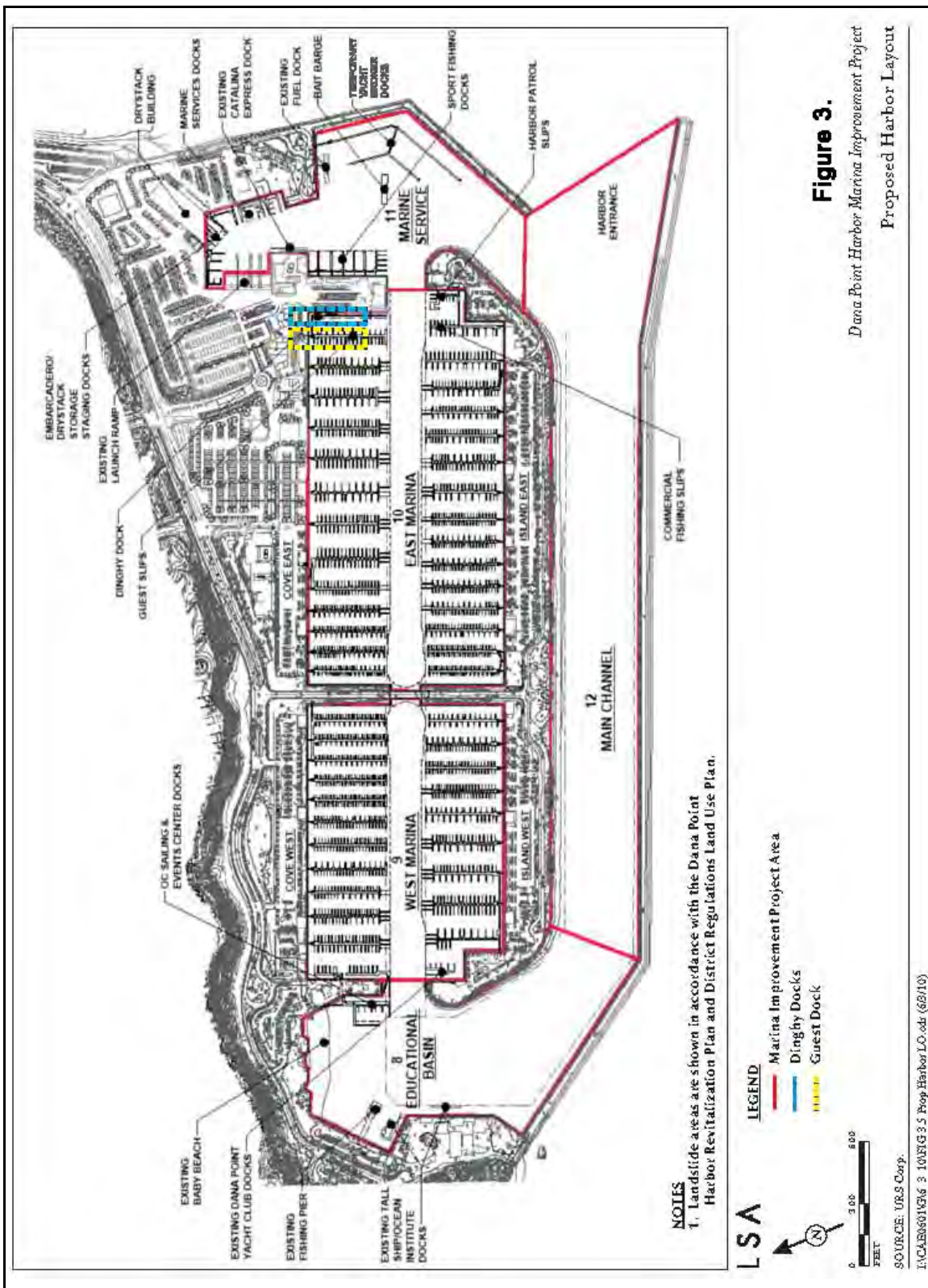




Dana Point Harbor Revitalization Project  
 Marine Biological Field Investigations 2007 and 2010 Surveys

**Table 1. Proposed Project Components. Source: LSA Associates, Inc.**

<b>Element</b>	<b>Existing Conditions</b>	<b>Proposed Project Improvements</b>
Floating Docks(East/West Marinas and Satellite Areas)	Floating docks supported by 1,306 concrete filled steel pipe piles  2,409 boat slips  Average slip length of 29.85 feet (ft). Majority of West Marina slips oriented west-east. East Marina slips oriented north-south  Approximately 492,530 square feet (sf) of area covered by floating docks	Remove existing piles and replace with 969 piles  2,293 boat slips (loss of 116 slips)  Average slip length not to exceed 32 ft  West Marina slips to be reoriented to a north-south direction. East Marina slips to remain oriented north-south  Approximately 459,540 sf <sup>1</sup> of area covered by floating docks
Access	52 existing gangways	59 gangways plus 9 ADA gangways, for a total of 68 gangways
Boat Services	3 sewage pump outs	4 upgraded sewage pump outs
Utilities	electrical service, water service, telephone and cable service  Dock Boxes	Upgraded electrical service, water service, telephone and cable service  New Dock Boxes
Embarcadero/Dry Stack Storage Staging Docks	766 linear feet (lf)	1,300 lf
Marine Services Docks	1,190 lf	896 lf
Sport Fishing Docks	1,350 lf	1,350 lf
Guest Slips	42 existing slips	46 proposed slips
Dinghy Dock	No existing dinghy dock	374 lf
Harbor Patrol Slips	8 existing slips plus 2 emergency side-ties	8 proposed slips plus 2 emergency side-ties
Commercial Fishing Slips	15 existing slips plus 1 end-tie for California Department of Fish and Game boat	15 proposed slips plus 1 end-tie for California Department of Fish and Game boat
OC Sailing and Events Center Docks	890 lf	893 lf
Temporary/Yacht Broker Docks	No existing temporary/yacht broker docks	1 dock located along the breakwater next to Doheny State Beach – approx. 2,590 lf



**Figure 3.**

Dana Point Harbor Marina Improvement Project  
Proposed Harbor Layout

the Dry Stack facility, and the Shipyard docks; (3) the construction of for vessels that will be displaced during marina reconstruction.; (4) the addition of handicap access at locations where it currently is not available; (5) upgrading vessel pump out facilities; and (6) upgrading electrical service water service.

The number of boat slips within the Harbor will decrease from 2,409 to 2,223 (a loss of 116 slips) although the average slip length will increase from 29.85 ft to a length not to exceed 32 ft. A total of 1,306 existing piles will be removed and 969 new piles will be emplaced.

## **2.0 FIELD SURVEY METHODS**

Underwater marine biological field surveys were conducted by CRM marine biologists Rick Ware, Stephen Whitaker, and Tom Gerlinger on February 20<sup>th</sup>, March 6<sup>th</sup>, March 16<sup>th</sup>, and November 2<sup>nd</sup>, 2007; October 31<sup>st</sup> and November 1<sup>st</sup>, 2007 (remote underwater video surveys to augment the diver-surveys, which allowed for larger areas of the bottom habitat to be covered); and June 7<sup>th</sup> and 8<sup>th</sup>, 2010. The surveys conducted in 2010 were conducted by Mr. Rick Ware and Mr. Mike Anghera, and focused on zones and depths in Dana Point Harbor that had the highest potential for the presence of eelgrass, *Zostera marina*. Surveys were conducted from the CRM vessels RV *Stacy-Ann*, RV *Macsam*, and a 14 ft Achilles inflatable vessel.

Underwater transect surveys were conducted using SCUBA. The surface support individual was in communication with the diving-biologists using an Ocean Technology Systems, Inc. (OTS) communication system due to the potential danger involved while conducting underwater surveys in the active vessel areas. Surveys were conducted in accordance with both the *Southern California Eelgrass Mitigation Policy* (National Marine Fisheries Service 1991 as amended) and the *Caulerpa Control Protocol* (National Marine Fisheries Service, Version 2.1, March 2006).

A total of 329 variable-length underwater transects (5 meters [m] to 258 m in length) were swam using SCUBA throughout Dana Point Harbor where waterside developments are planned (Figures 2 and 4) and in areas where eelgrass potentially can be found in shallow water habitat. Fourteen dock piles in the Cove East and the Island East marina basins were also surveyed to determine the types and relative abundances of marine organisms that might be affected by marina construction.

During the transect swims and the inspection of the dock support piles, divers recorded habitat types, common marine life, and the presence or absence of eelgrass and invasive algae. Depths were standardized to Mean Lower Low Water (ft, MLLW) based upon time of observation and tidal corrections for the NOAA San Clemente tidal survey station.

In addition to diver surveys, CRM also conducted Remote Underwater Video (RUV) surveys to determine the presence of eelgrass, invasive algae, other organisms, and habitat types due to the large area of harbor seafloor in the West Channel that needed to be surveyed. The camera system used for the surveys was an Ocean Systems, Inc. Deep Blue Professional Grade Underwater Video Camera (“Splash Cam”) attached to a

military-grade umbilical cable (Photograph 1). The camera dimensions are 3" diameter wide and 3.5" long. The unit's resolution is 540 TV lines, the CCD is a 1/3" Sony Super HAD, and the focus is fixed 1 inch to focal infinity. The light sensitivity index is extremely low, 0.15. The lens is a 3.6 mm wide angle lens. It is designed to operate in super low light conditions.



Photograph 1. Deep Blue Splash Cam

Real-time observations of the Harbor benthos were collected by conducting a running series of variable-length underwater video transects ranging in length from 0.16 to 1.67 miles long at all sites except for the East and West Marina Basins (Figure 4).

The tow speed of the camera varied from 0.3 knots to 0.9 knots and the camera elevation about the bayfloor varied from approximately 1 to 3 ft above the bottom, with a slightly down-angle field of view. Real-time observations were observed on board the vessel using a color monitor, integrated with a GPSBox Plus GPS Video Overlay Unit. Vessel track lines were recorded with a Thales Mobile Mapper Differential GPS Unit.

When a potential eelgrass, algae, or other significant target was observed on the video monitor, the information was recorded, and a closer inspection of the target was made with the camera. Representative bottom conditions covered during the remote video survey were recorded on a Sony DVD player that provided a summary of bottom habitat conditions throughout the Dana Point Harbors study area. Track lines of the RUV survey are provided in Appendix 1.

Caulerpa Survey Protocols. Dana Point Harbor is considered a “non-infected” system and requires a “surveillance level” monitoring effort for the presence of *Caulerpa*. The following information is extracted from the National Marine Service *Caulerpa Control Protocol* in regards to the level of survey effort required. “*Surveillance Level* – General survey coverage providing a systematic sub-sampling of the entire APE during which at least 20% of the bottom is inspected and widespread occurrences of *Caulerpa* would be expected to be identified if present. Surveys may be accomplished using diver transects, remote cameras, and acoustic surveys with visual ground truthing. Other proposed

methodologies may be approved on a case-by-case basis by NOAA Fisheries and CDFG”.



### 3.0 SURVEY RESULTS

#### 3.1 PROJECT AREA

The surveys covered 6.28 acres of harbor bottom habitat (Table 1 and Figure 4). Overall, the bottom area surveyed by both diving biologists and remote video averaged 24.7% of the total bottom habitat within the project survey limits, ranging from 13.9% in the East and West Marina basins to over 100% coverage in the at the Youth Sailing Center and the Harbor Patrol basin. Baby Beach areal cover (by divers and video in 2007 and 2010) encompassed a minimum of 187% of the survey area, and reflected a survey effort concentrated in a region where there was a probability of locating eelgrass since a very small patch of eelgrass (three turions) was located there in April 2005 (Chambers Group, Inc., 2005).

The eelgrass survey area in 2010 was concentrated along the eastern one-third of Baby Beach from depths of -3 to -12 ft MLLW beginning immediately west of the existing Sailing Center Dock and all of the basins at the Embarcadero and Dry Stack/Staging Area s north of the launch ramp (Figure 4).

**Table 2. Areas Surveyed in Dana Point Harbor\***

Location	Bottom Habitat Survey Area (Acres)	Area of Potential Biological Impact (Acres)	% Total Area Covered*	Depth Range (ft, MLLW)
Baby Beach	1.40	0.75	186.7	-3 to -10
Bridge Abutment Slopes	0.06	0.08	75.3	+3 to -10
Commercial Fishing Docks	0.12	0.58	20.3	+3 to -15.9
Dry stack/Shipyard Basins	0.30	0.36	83.5	-12.4
Harbor Patrol Basins	0.28	0.13	221.9	+3 to -15.9
Marina Basins	2.98	21.43	13.9	+3 to -11
Sport fishing Dock Basin (inner ½ to bulkhead) and immediately seaward of docks	0.35	0.36	97.6	+3 to -15.4
Temporary Dock Area, East Channel	0.88	2.04	43.0	+3 to -12
Youth Sailing Center	0.12	0.10	110.7	+3 to -12
<b>Total</b>	<b><u>6.28</u></b>	<b><u>25.28</u></b>	<b><u>24.7</u></b>	<b><u>+3 to -15.9</u></b>
<b>Other Regions Surveyed</b>				
West Jetty Channel Slope**	0.42	none**	**	-2 to -12
Main Channel**	1.9	none**	**	+3 to -20.4
* Includes both biologist/diver and remote video survey coverage				
** Not in project area				



## 3.2 PHYSICAL ENVIRONMENT

### 3.2.1 Survey Depths

The underwater field surveys were conducted throughout harbor at depth ranges between the +3 ft MLLW mid-intertidal (during high tides) to a maximum of -20.4 ft (MLLW) found in the Main Channel and the East Channel. Intertidal observations on bulkheads were at elevations between approximately +1 to +7 ft MLLW.

### 3.2.2 Substrate Types

**Unconsolidated sediments.** Surficial sediments within all the marina and harbor basins were fine sands to extremely fine silts although underlying sediments tend to be sandier (Geotechnical Inc., 2006). Unconsolidated sediments in the Turning Basin and the East Channel near the Youth Sailing Center were sandy silts but visually, increased in sand percentages closer to the Baby Beach shoreline. Sediments were coarsest in the West Basin near the Youth Sailing Center; and on the south side of the bait barge along the base of the East Breakwater (Temporary Dock area). In each of these areas, sediment sized decreased with depth. Significant amounts of trash and debris (cans, bottles, plastic bags, fishing lines, etc.) was also found on the bottom all along the base of the East Breakwater.

**Hard substrate.** Intertidal and subtidal rock quarry stone and smaller rip rap is present in many areas of Dana Point Harbor and serves as protection for bulkheads and shorelines. The breakwaters and the south side of the East and West Island marinas consist of larger quarry stone, whereas the rip rap that protects the bulkheads of the marinas in the vicinity of the Youth Sailing Center and the Sport Fishing Dock consist of small-to moderate-sized rip rap. Sloped, cement quay walls occur around the perimeter of the marina basins and at the bridge abutments. These cement slopes were covered by a light to moderate layer of fine sediments.

Pilings and docks are attachment surfaces for plants and invertebrates. This community of organisms is commonly referred to as the “biofouling community”. These hard surfaces extend between the highest high tide line and the Harbor bottom depths, supporting both an intertidal and subtidal complex of organisms. This habitat type is common throughout the Harbor.

Exposed natural reef is present within many areas of the Harbor, a remnant of the extensive reef habitat that was present prior to the construction of the Harbor. Isolated rock habitat in the marina basin that was observed during the subtidal surveys included three, single rock outcrops in the Island West Basin and one moderate relief (1 meter high) rock outcrop in Cove West Basin. These outcrops were at depths between -8 and -10 ft MLLW. Other outcrops are likely present but not observed during the surveys. Outside of the marina basins, scattered low to medium relief (<1 to 2 meter high) reef outcrops and isolated boulders were located in the Turning Basin west of the Youth Sailing Center docks at depths between -3 and -8 ft MLLW; in the Main Channel and East Channel at depths between -8 and -20 ft MLLW; in the East Channel seaward of the Sport Fishing Docks; and in the

Anchorage Area at the north end of the proposed temporary dock (north of the existing bait barge) at depths of -12 ft MLLW.

### **3.2.3 Underwater Visibility and Water Temperature Conditions During The Surveys**

Low underwater visibility conditions were encountered during the February and March 2007 survey and ranged between 1 and 3 ft within the marina basins and 1 to 4 ft in the vicinity of Baby Beach and the Youth Sailing Center. By comparison underwater visibility averaged about 3 ft near the boat launch ramp in August 2006 (Chambers Group, Inc 2006) and 8 feet at depths of 0.0 to -10 ft MLLW at Baby Beach in April 2005 (Chambers Group, Inc., 2005). During the October/November 2007 survey, underwater visibility was still limited within the marina basins, but was substantially better in the Main and West Channels where visibility approached 8 to 10 ft in the West Main Channel and in the East Channel on the south side of the bait barge in the vicinity of the proposed temporary docks. In June 2010, underwater visibility was approximately 2-3 feet near Baby Beach, 5-10 ft in the West Main Channel, and 2 feet in the East Channel near the bait barge and the dry stack storage area.

Water temperature ranged between 57 and 59 degrees Fahrenheit during the February/March 2007 survey; 62 and 66 degrees Fahrenheit survey during the October/November 2007 survey; and 65 and 67 degrees Fahrenheit during the June 2010 survey.

## **3.3 MARINE BIOLOGICAL RESOURCES**

Eight-seven (88) taxa of marine plants, invertebrates, and fishes were observed during the field surveys (Table 2 and Appendix 2). Marine plants contributed the highest number of taxa (33.3% of the total). Mollusks (octopus, snails and clams) contributed the second highest number (22.7 % of the total), followed by fish (11.5%), annelid worms (8.0) and arthropods (5.7%).

### **3.3.1 Soft-Bottom Benthic Habitat**

The soft-bottom epibenthic community (organisms that live on the sediment surface or protrude from the sediments) exhibited low species richness (10 species) throughout the Harbor (Table 3). Sediments within the East and West basins and other areas were lightly coated with a layer of benthic diatoms, and secondarily, spotty cover of the algae *Chaetomorpha aerea* and *Ulva intestinalis*. This was typical in areas of lower tidal current flows.

The most common occurring macro invertebrate on soft sediments was the predatory snail *Navanax inermis*, which was ubiquitous throughout the Harbor soft-bottom habitats. The burrowing anemone *Pachycerianthus fimbriatus* was common within the West Marina although found in many areas of both marina basins and in the Main Channel.

**Table 3. Number of Marine Taxa Observed During the CRM Dive Surveys, Feb/Mar 07, Oct/Nov 07, and June 2010.**

<b>Taxonomic Group</b>	<b>Total Taxa</b>	<b>% Total</b>
<b>Algae</b>	29	33.0
<b>Seagrasses</b>	1	1.1
<b>Porifera</b>	2	2.3
<b>Cnidaria</b>	6	6.8
<b>Platyhelminthes</b>	1	1.1
<b>Annelida</b>	7	8.0
<b>Arthropoda</b>	5	5.7
<b>Mollusca</b>	20	22.7
<b>Bryozoa</b>	3	3.4
<b>Tunicata</b>	4	4.5
<b>Fish</b>	10	11.4
<b>Total</b>	<b>88</b>	<b>100.0</b>

**Table 4. Number of plants, invertebrate, and fish taxa in the Dana Point Harbor Survey Areas-Feb/Mar, Oct/Nov 2007, and June 2010**

<b>Region of Harbor</b>	<b>Total Number of Taxa</b>
Island Way Bridge Abutment (north side)	12
Marina Pilings	36
Marina Quay Walls	18
Youth Sailing Center Rip Rap and Reefs, and Soft-benthos (epibiota)	41
<b>All Areas Within East and West Marina Basins</b>	<b>59</b>
Main Channel Reefs, Rip Rap, and Soft Epi- Benthos	49
Temporary Dock Area (Hard-bottom and Soft-bottom epi-benthos)	28
Sport Fishing Docks (Hard-bottom)	25
<b>All Soft-bottom Substrate in Survey Areas (epibiota)</b>	<b>11</b>
<b>All Hard Substrate in Survey Areas Outside West and East Marina Basins</b>	<b>68</b>
<b>All Hard Substrate in Survey Areas, Dana Point Harbor</b>	<b>81</b>
<b>All Soft and Hard Bottom Substrate in Survey Areas, Dana Point Harbor</b>	<b>88</b>

The tube-building polychaete *Diopatra ornata* the bubble snail *Haminoea vesicula* were observed where sediments were sandier in the East Channel near the southern section of the proposed temporary dock area. Notably, no marine invertebrates or algae were observed on the soft substrates within the Dry Stack or the Ship Yard basins.

Very few sightings of fish were observed over sedimentary habitats, likely due to low visibility. Of the two species observed, only the round sting ray (*Urolophus halleri*) was common. Other, unidentified flat fish were seen, but could not be identified. However, there are several other species of fish that occur in other bays and harbors in southern California that are likely to be present in Dana Point Harbor. These include gobies (*Clevelandia ios*), and flatfish (California halibut, *Paralichthys californicus*; diamond turbot, *Hypsopsetta guttulata*).

Water-column species such as topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), black surfperch (*Embiotoca jacksoni*), shiner surfperch (*Cymatogaster aggregata*), walleye surfperch (*Hyperprosopon argenteum*), white croaker (*Genyonemus lineatus*), queenfish (*Seriphus politus*) and white surfperch (*Phanerodon furcatus*) are also common within southern California marinas and are also expected to be present in Dana Point Harbor.

### **3.3.2 Rocky Intertidal and Subtidal Habitat (Pier Pilings, Rock Rip Rap, Cement Bulkheads, and Natural Reefs)**

Most plants and invertebrates were associated with harbor artificial hardscape and natural reef (81 of 88 taxa). Of the various hard-bottom habitat types, 59 were associated with East and West marina hard substrate, and 68 were present on hard substrate in the Main Channel, West Channel, and East Channel on larger quarry stones and natural reefs (Table 3). The most productive areas were reefs and quarry stone in the Main Channel (49), the hardscape of the Youth Sailing Center reefs (40), marina pilings (36), the hardscape of the East Breakwater quarry stone and isolated reefs near the temporary dock (25), and the hardscape of the Sport Fishing Dock bulkhead and rip rap (25).

**East Marina Basin Piling Community.** Thirty-six taxa were observed on 14 piles scattered throughout the East Marina (Table 3). While the cumulative number of taxa observed on pilings was 36 for all piles, the number of taxa on a single pile varied between five and 11. Species richness decreased with depth. The dominant organisms on the upper three feet of the pilings included a complex of green algae (*Ulva intestinalis*), a turf and filamentous red algae complex, brown algae (*Colpomenia perigrina*, *Dictyota flabellata*, and *Sargassum muticum*), hydroids (*Aglaophenia* sp.), serpulid polychaete worms, barnacles (*Balanus amphitrite* and *B. glandula*), and mussels (*Mytilus galloprovincialis*). The mid-depth piling community (-3 to -7 ft) was dominated by polychaete worms (serpulids and the calcareous tube-building *Dodecaceria fewksii*), mussels, solitary tunicates (*Styela plicata*), and ectoprocts (*Bugula neritina* and unid. encrusting ectoprocts). The bottom depth piling community (-7 to -10 ft MLLW) was dominated by tunicates, ectoprocts, and hydroids.

**Marina Basin Quay Walls.** The sloping, cement bulkhead around the perimeter of Cove East and West and Island East and West Basins (including the Harbor Patrol Basin) supported 18 species of algae and invertebrates. However, this habitat exhibited a low diversity of taxa and extremely low percent cover of marine life. The most conspicuous species was the calcareous, tube-building polychaete *Dodecaceria fewksii* that formed small colonies on most of the quay walls examined. Other common species included lined-shore crabs (*Pachygrapsus crassipes*), solitary ascidians, and scattered, juvenile mussels. A fine silt layer, approximately 1-2 cm deep, covered the substrate. Other than *Dodecaceria*, most of the flora and fauna were found in the depressions formed by the meeting of adjoining cement sections of quay wall.

**Island Way Bridge Abutments.** Twelve taxa were represented on the north bridge abutment at depths between +3 to -10 ft MLLW. This site consisted of a low-diversity assemblage of macrophytes and invertebrates due to a lack of sunlight and a coating of sediment over the concrete slope. Four macrophytes were observed—*Corallina pinnatifolia*, *Dictyota binghamiae*, *Dictyopteris undulata*, and *Colpomenia sinuosa*. The dominant invertebrates included acorn barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), bay mussels (*Mytilus galloprovincialis*), tunicates (*Styela plicata*), sponges (*Leucosolenia* sp.), and hydroids (*Aglaophenia* sp.); hydroids exhibited the highest cover.

### **Breakwater Quarry Stone and Natural Reef, Main Channel**

This area is located outside of any harbor improvements. Substrata at depths between the intertidal to -7 ft MLLW was primarily quarry stone rip-rap. Naturally occurring low-to moderate relief reefs were present throughout the area surveyed in the channel.

The most productive intertidal and subtidal habitats were those associated with large quarry stone and natural reef outcrops. These areas supported a diverse assemblage of macrophytes and invertebrates and fishes (49 taxa) characteristic of communities associated with a greater degree of wave exposure than protected marinas. The common red macrophytes include articulated corallines (*Corallina chilensis*, *C. pinnatifolia*, *Lithothrix aspergillum*, *Amphiroa zonata*, *Bossiella orbigniana*), coarsely branched red algae (*Gelidium purpurascens*), and crustose corallines (*Lithothamnion* spp.), while other less common red macrophytes included *Ceramium/Polysiphonia* spp., *Cryptopleura crista*, and *Laurencia pacifica*. This habitat also supported a rich brown macrophyte community including Dictyotales (*Dictyota binghamiae*, *Dictyopteris undulata*, *Zonaria farlowii*, *Taonnia lennebackerae*), the Fucales (*Sargassum muticum*, *Halidrys dioica*), and one member from both the Laminariales (*Eisenia arborea*) and the Scytosiphonales (*Colpomenia sinuosa*). Giant kelp (*Macrocystis pyrifera*) was also present, in very low abundances. Many of the plants observed had only a few number of thin stipes, and were in poor condition.

The most conspicuous lower-intertidal and subtidal invertebrates included limpets (*Lottia limatula*, *L. gigantea*, *L. scabra*), barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), scaly tube snail (*Serpulorbis squamigerus*), and trochiid snails (*Tegula eiseni*). Larger, but less abundant invertebrates included lobsters (*Panulirus interruptus*), gorgonians (*Muricea californica*), warty sea cucumbers (*Parastichopus parvimensis*), rock scallops

(*Crassedoma giganteum*), festive murex snails (*Pteropurpura festiva*), and tunicates (*Styela plicata*). No sensitive or listed species of plants, invertebrates, or fishes were documented from this site.

**Breakwater Quarry Stone and Isolated Reefs, East Basin Temporary Dock).** Similar to the area surveyed in the Main and West Channel, hardscape in the Anchorage Area near the breakwater supported many plant and invertebrate form in response to adequate tidal exchange and tidal currents, and suitable substrate. The East Breakwater provided the most extensive hard-bottom habitat. Common red macrophytes present in the low intertidal and shallow subtidal zone included articulated corallines (*Corallina chilensis*, *C. pinnatifolia*, *Amphiroa zonata*), crustose algae (*Lithothamnion* spp., *Peyssonneliaceae/Hildenbrandiaceae*) and secondarily, *Ceramium/Polysiphonia* spp. and *Laurencia pacifica*. Several species of brown macrophytes were also present-*Dictyota binghamiae*, *Dictyopteris undulata*, *Zonaria farlowii*, *Taonnia lennebackerae*) *Sargassum muticum*, *Halidrys dioica*, *Eisenia arborea* and *Colpomenia sinuosa*.

A fauna similar to the West Channel quarry stone community was also found at this site and included limpets (*Lottia limatula*, *L. scabra*, *Crepidula onyx*), barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), and trochiid snails (*Tegula eiseni*). The snails *Pteropurpura festiva* and *Acanthina spirata* were also present, but were not as common.

North of the bait barge, a few moderate relief (1.5-2 m high ) rocky reefs were located. These reefs supported few macrophytes and macro invertebrates than the East Breakwater. Species that were observed included the red algae complex *Ceramium/Polysiphonia* spp., and *Rhodomyenia californica*; brown macrophytes (*Sargassum muticum*, *Dictyopteris undulata*); slipper limpets (*Crepidula onyx*); and gorgonians (*Muricea fruticosa*).

A significant amount of trash was observed while surveying the East Breakwater biological communities. This debris was concentrated at the base of the breakwater lodged in the rocks as well as on the sediments at the base of the breakwater rocks.

**Youth Sailing Center Reefs and Rip Rap.** Rip rap behind the docks and low relief natural reef in the Turning Basin in front of the Youth Sailing Center docks supported a large number of species-40 taxa of plants and invertebrates similar in nature to those occurring in the marina piling community and the quarry stone/natural reef habitats in the West Channel and Main Channel. Dominants included the southern sea palm algae (*Eisenia arborea*) the brown seaweed *Sargassum muticum*, coralline turf algae, and invertebrates such as sponges, colonial polychaete worms, lobsters (*Panilurus interruptus*, snails (*Kelletia kelletii*), limpets (*Lottia digitalis*), slipper limpets (*Crepidula onyx*), and mussels (*Mytilus galloprovincialis*).

On the south side of the Youth Sailing Center, rip rap lined the cement bulkhead. The most commonly red algal forms included articulated corallines (*Corallina pinnatifolia*, *Amphiroa zonata*), coarsely branched red algae (*Gelidium purpurascens*), and crustose corallines (*Lithothamnion* spp.). Small, red turf algae (*Ceramium* and *Polysiphonia* spp.) were less common but present. The dominant brown macrophytes were *Dictyota*

*binghamiae*, *Dictyopteris undulata*, and *Sargassum muticum*. Barnacles (*Balanus glandula*, *Chthamalus fissus/dalli*), lobster (*Panulirus interruptus*), slipper limpets (*Crepidula onyx*), and tunicates (*Styela plicata*) were the most common-occurring invertebrates.

**Sport Fishing Dock Rip Rap.** The variable-sized rip rap in front of the Sport Fishing Docks supported a moderately diverse community of intertidal and subtidal plants and invertebrates typical of both the inner marina and the outer channels of the Harbor. The most common types of plants were filamentous red algal taxa, coralline turf algae, and macrophytes, particularly *Sargassum muticum* and *Dicytota flabellata*. The most conspicuous macro invertebrates were limpets (*Lottia* spp.), mussels (*Mytilus galloprovincialis*, sea fans (*Muricea californiensis* and *M. fruticosa*), lobsters (*Panulirus interruptus*), and colonies of the cup coral *Astrangia lajollensis*.

**Hard-Bottom Associated Fishes.** Nine species of fish and one unidentified juvenile were observed in the vicinity of hard-bottom habitat during the dive and remote video surveys. The most common fishes observed included garibaldi (*Hypsypops rubicundus*), kelp bass (*Paralabrax clathratus*), opaleye (*Girella nigricans*), pile surfperch (*Damalichthys vacca*), blacksmith (*Chromis punctipinnus*), señorita (*Oxyjulis californica*), and kelpfish (*Heterostichus rostratus*). Most fish were seen in the vicinity of the Youth Sailing Center Docks, the Sport Fishing Docks, the West Channel, Main Channel, and East Channel.

### 3.4 EELGRASS

#### 3.4.1 Importance of Eelgrass

Eelgrass (Figure 5) is a marine flowering plant that grows in soft sediments in coastal bays and estuaries, and occasionally offshore to depths of 50 feet (ft). Eelgrass canopy (consisting of shoots and leaves) enhances the abundance and the diversity of otherwise barren sediments. Many species of invertebrates (i.e., clams, crabs, and worms) live either on eelgrass or within the soft sediments that cover the root and rhizome mass system. Eelgrass is a nursery habitat for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass). They are also foraging centers for seabirds such as the endangered California least tern that seek out juvenile topsmelt that are attracted to the eelgrass cover. Lastly, eelgrass is an important contributor to the detrital (decaying organic) food web of bays as the decaying plant material is consumed by many benthic invertebrates (such as polychaete worms) and reduced to primary nutrients by bacteria.



Figure 5. Eelgrass, *Zostera marina*. One “shoot” and the cluster of “blades” arising from the shoot is considered a “turion unit”.

### 3.4.2 Results of Focused Eelgrass Field Surveys, 2005-2010

Studies conducted between 2005 and 2010 have documented the expansion of an eelgrass bed seaward of Baby Beach in the western section of Dana Point Harbor (Figure 6). Most recently, small-to-large patches of eelgrass were located 160 to 412 feet west of the existing bulkhead at the Youth Sailing Center (Figure 6) during surveys conducted by MBC Applied Environmental Sciences (2008 and 2009) and CRM (Coastal Resources Management, Inc. this document). The results of eelgrass surveys conducted to date in Dana Point Harbor are discussed below.

Chambers Group, Inc. located a single, three-turion plant at the eastern end of Baby Beach in 2005 (Chambers Group, Inc (2005) for the Dana Point Harbor Maintenance Dredging Project. MBC Applied Environmental Sciences conducted eelgrass and invasive algae surveys for the Dana Point Harbor Maintenance Dredging and Pipeline Corridor Project in August 2008 and February 2009 (MBC Applied Environmental Sciences, Inc. 2008) and 2009). A total of 14.5 square meters of eelgrass was located seaward of Baby Beach in 2008, and 70 square meters of eelgrass were located seaward of Baby Beach in 2009. Eelgrass turion density ranged between 48 and 56 turions per square meter during the 2009 survey. The locations of where MBC located eelgrass are shown in Figure 6. In addition to noting the presence of eelgrass at Baby Beach, MBC reported a small, 0.5 square meter patch of eelgrass northeast of the launch ramp in 2008 at the jet ski and kayak rental location.

Coastal Resources Management, Inc. did not located eelgrass within Dana Point Harbor during the February/March 2007 or the October/November 2007 surveys. On June 8th, 2010, CRM conducted diver transect surveys in the vicinity of the Youth Sailing Center Docks along the eastern one-third of Baby Beach at depths between -3 and -12 ft MLLW (Figure 6). A total of 457.3 square feet (42.5 square meters) of eelgrass was mapped by CRM within the survey area at depths between -2.5 and -4.5 ft MLLW in a mixture of silt



and scattered boulders (Figure 6). Eelgrass density was extremely low, ranging between 4 and 10 turions per square meter.

CRM could not relocate the eelgrass patch that MBC located in the Dry Stack Storage area docks during the 2010 survey. This location appeared to be located underneath jet ski platforms at the time of the survey.

### **3.5 INVASIVE ALGAE (*Caulerpa taxifolia*)**

#### **3.5.1 Importance**

Invasive algae (Figure 7) has a potential to cause ecosystem-level impacts on California's bays and nearshore systems due to its extreme ability to out-compete other algae and seagrasses. *Caulerpa taxifolia* grows as a dense smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a non-native marine habitat. Fish, invertebrates, marine mammals, and sea birds that are dependent on native marine vegetation are displaced or die off from the areas where they once thrived. It is a tropical-subtropical species that is used in aquariums. It was introduced into southern California in 2000 (Agua Hedionda Lagoon and Huntington Harbour) by way of individuals likely dumping their aquaria waters into storm drains, or directly into the lagoons. While outbreaks have been contained, the Water Resources Board, through the National Marine Fisheries Service and the California Department of Fish and Game require that projects that have potential to spread this species through dredging, and bottom-disturbing activities conduct pre-construction surveys to determine if this species is present using standard agency-approved protocols and by National Marine Fisheries Service/California Department of Fish and Game Certified Field Surveyors.

#### **3.5.2 Focused Survey for Invasive Algae**

*Caulerpa* algae was not observed within the 6.7 acre survey area within the areas proposed for harbor revitalization (Table 1 and Figure 4) during surveys conducted in 2007 and 2010. The amount of habitat covered during the survey averaged 25.8%, ranging from 13.9% in the East and West marina basins to over 100% coverage at the Youth Sailing Center and the Harbor Patrol basin. Diver-specific surveys in the vicinity of Baby Beach covered between 58 and 65 % of the total bottom habitat; this effort reflected a concentrated survey effort in a region where there was a greater probability of locating either eelgrass or *Caulerpa*, since a very small patch of eelgrass (three turions) was located there in April 2005 (Chambers Group, Inc., 2005). However, *Caulerpa* was not present in Dana Point Harbor during previous surveys (Chambers Group, Inc. 2005, 2006; MBC Applied Environmental Sciences, 2008).





Figure 7. The invasive algae, *Caulerpa taxifolia*. Source: NOAA/NMFS

The invasive algae reporting form, is provided in Appendix 3. Prior to marina construction, a pre-construction *Caulerpa* survey will need to be conducted that attains a minimum survey intensity level of 20% within each of the renovation areas to meet the standard of the Southern California Caulerpa Action Team (NMFS, 2008).

### 3.5.3 *Undaria pinnatifida*

*Undaria pinnatifida* (Figure 8) is a golden brown kelp native to the Japan Sea. It has been introduced in Australia, New Zealand, and Europe and has now spread to the California coastline. It has been found in several bodies of water including Santa Barbara Harbor, Long Beach Harbor, Anaheim Bay, San Diego Bay, and the waters surrounding Catalina Island.

In Japan it is known as wakame and is extensively cultivated as a fresh and dried food plant. However, it has the potential to become a major pest in our coastal waters. *Undaria* grows to between 3 to 7 feet (1 and 2 m) tall and is found in sheltered harbor waters on rocks, breakwaters, and marine debris from the low-tide mark to 50 feet (15 m). A mature plant has a distinctive, spiraled (frilly), spore-producing structure at its base. It also has an obvious central stem to 4 inches (10 cm) wide that extends for the length of the plant (Figure 8). The blade may be up to 3.1 feet (1 m) wide and extends from the tip of the plant for half the length of the plant.

#### **Focused Survey for *Undaria***

*Undaria* was not observed during dive surveys or remote video surveys in Dana Point Harbor between 2007 and 2010.

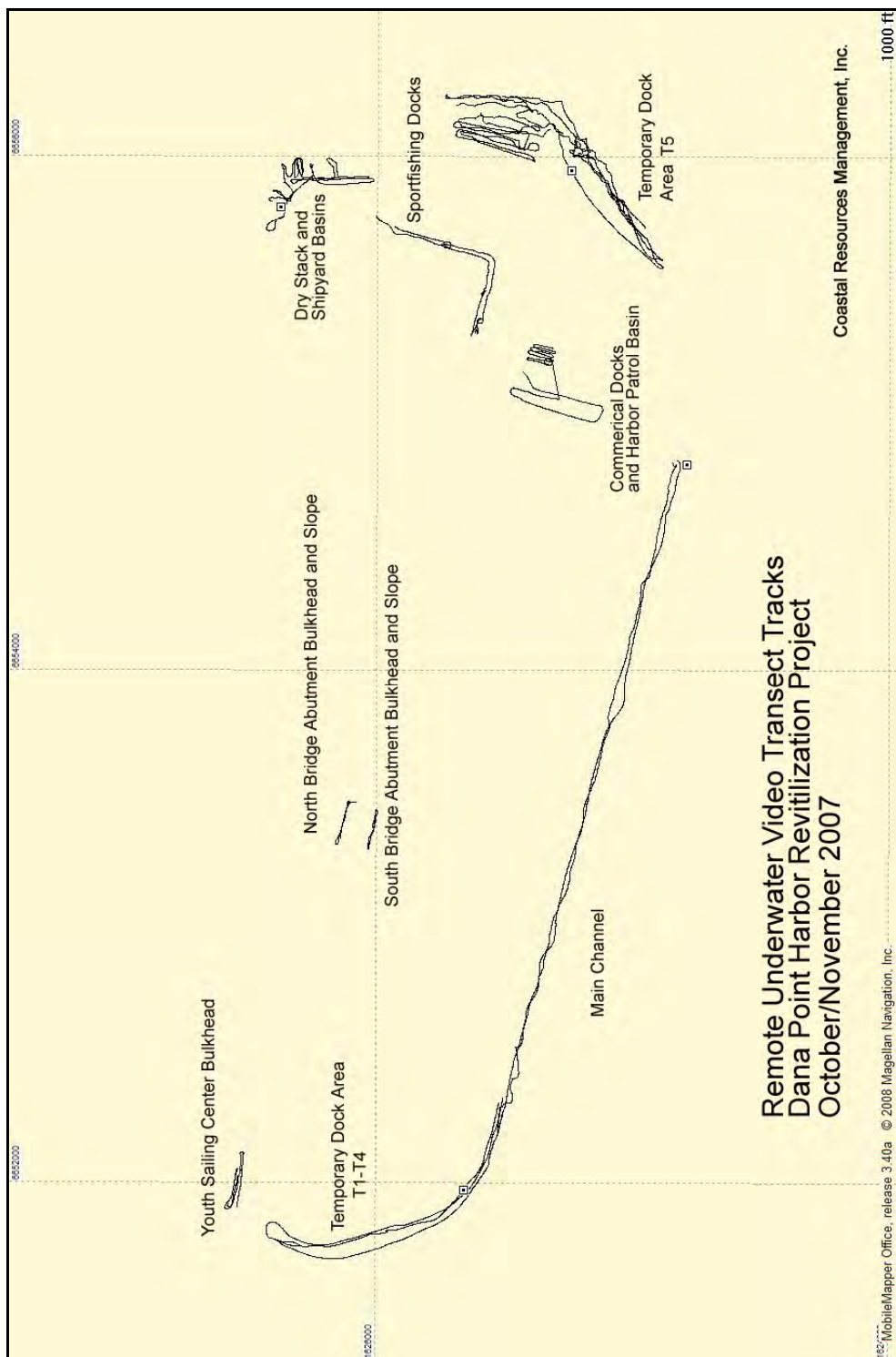


Figure 8. *Undaria pinnatifida*

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### APPENDIX 1. REMOTE UNDERWATER VIDEO SURVEY TRACK LINES OCTOBER/NOVEMBER 2006 SURVEY



**APPENDIX 2.**

**MARINE PLANTS AND ANIMALS OBSERVED  
DURING SURVEYS OF DANA POINT HARBOR**

**FEBRUARY/MARCH 2007  
OCTOBER/NOVEMBER 2007  
JUNE 2010**

Common Name	Scientific Name	Epi Benthos		Baby Beach	Marina Hard Scape	Youth Sailing		West Jetty		Temp Dock (South of Bait Barge)	Temp Dock (North of Bait Barge)	Youth Sailing Center Rip	Bridge Bases	Harbor Patrol Basin*	Sportfishing		All
		Benthos	Benthos			Shoal and Channel Slope	Main Channel	Dock Rip	Dry Stack and Shipyard Basins								
diatom mat	Bacillariophyceae	x		x	x	x	x	x									x
green algae	<i>Chaetomorpha linza</i>	x			x												x
green algae	<i>Ulva intestinalis</i>	x		x	x										x		x
brown algae	<i>Colpomenia perigrinus</i>				x												x
brown algae	<i>Colpomenia sinuosa</i>							x									x
brown algae	<i>Dictyopteris undulata</i>				x												x
brown algae	<i>Dictyota flabellata</i>				x												x
brown algae	<i>Dictyoneura</i> sp.				x												x
brown algae	<i>Eisenia arborea</i>				x												x
brown algae	<i>Haldys dioica</i>				x												x
brown algae	<i>Macrocystis pyrifera</i>																x
brown algae	<i>Sargassum muticum</i>				x												x
brown algae	<i>Taonia lennebacheriae</i>																x
brown algae	<i>Zonaria farlowii</i>																x
red algae	<i>Amphiroa zonata</i>																x
red algae	<i>Bossiella orbigniana</i>																x
red algae	<i>Coralina chilensis</i>																x
red algae	<i>Coralina pinnatifolia</i>																x
red algae	<i>Coralina vancouverensis</i>				x												x
red algae	<i>Cryptopleura crispa</i>																x
red algae	Filamentous red algae				x												x
red algae	<i>Gelidium purpurascens</i>																x
red algae	<i>Laurencia pacifica</i>																x
red algae	<i>Lithothamnion</i> sp.																x
red algae	<i>Lithothrix aspergillum</i>																x
red algae	encrusting red, unid.																x
red algae	<i>Polysiphonia</i> sp.				x												x
red algae	<i>Rhodomenia californica</i>																x
red algae	red turf algae																x
seagrass	<i>Zostera marina</i>																x
sponge	<i>Leucosolenia</i> sp.																x



Common Name	Scientific Name	Epi Benthos	Baby Beach	Marina Hard Scape	Youth Sailing Center Reefs	West Jetty Shoal and Channel Slope	West Main Channel	Temp Dock (South of Bait Barge)	Temp Dock (North of Bait Barge)	Youth Sailing Center Rip Rap	Bridge Bases	Harbor Patrol Basin*	Sportfishing Dock Rip Rap and Reef	Dry Stack and Shipyard Basins	All
sponge	Porifera, Unid.	x		x	x		x				x				x
anemone	<i>Anthopleura sola</i>			x			x						x		x
hard coral	<i>Astrangia lajollensis</i>												x		x
hydroid	<i>Aglaophenia</i> sp.			x			x				x				x
gorgonian	<i>Muricea californica</i>						x						x		x
gorgonian	<i>Muricea fruticosa</i>			x	x			x					x		x
anemone	<i>Pachycerianthus fimbriatus</i>									x					x
polychaet flatworm	<i>Pseudoceros</i> sp.											x			x
polychaete	<i>Diopatra ornata</i>							x							x
polychaete	<i>Dodecaceria</i> sp.			x											x
polychaete	<i>Pirengmatopoma californica</i>			x	x										x
polychaete	Sabellidae, unid.			x											x
polychaete	Spionidae, unid.			x	x								x		x
polychaete	Serpulidae, unid.			x	x										x
polychaete	Spirorbidae, unid.			x	x										x
bamacle	<i>Cthamalus fissus/dalii</i>			x			x		x				x		x
bamacle	<i>Balanus amphitrite</i>			x	x										x
bamacle	<i>Balanus glandula</i>			x	x		x				x				x
lined shore crab	<i>Pachygrapsus crassipes</i>			x	x										x
lobster	<i>Panulirus interruptus</i>			x	x		x						x		x
snail	<i>Acanthina spirata</i>								x						x
limpet	<i>Collisella digitalis</i>														x
limpet	<i>Collisella scabra</i>				x		x		x				x		x
slipper shell	<i>Crepidula onyx</i>				x			x							x
Kellet's whelk	<i>Kelletia kelletii</i>				x										x
Gould's paper bubble	<i>Haminoea vesicula</i>								x						x
rock scallop	<i>Hinnites giganteus</i>			x			x								x
limpet	<i>Lottia gigantea</i>						x								x
limpet	<i>Lottia limatula</i>						x								x
bay mussel	<i>Mytilus edulis</i>								x						x
bay mussel	<i>Mytilus galloprovincialis</i>			x	x						x				x
sea slug	<i>Navanax inermis</i>	x					x					x			x
octopus	<i>Octopus</i> sp.	x													x
snail	<i>Roperia pouisoni</i>							x					x		x

Common Name	Scientific Name	Epi Benthos	Baby Beach	Marina Hard Scape	Youth Sailing Center Reefs	West Jetty Shoal and Channel Slope	West Main Channel	Temp Dock (South of Bait Barge)	Temp Dock (North of Bait Barge)	Youth Sailing Center Rip Rap	Bridge Bases	Harbor Patrol Basin*	Sportfishing Dock Rip Rap and Reef	Dry Slack and Shipyard Basins	All
oyster	<i>Ostrea sp.</i>									x					x
sea cucumber	<i>Parastichopus parvimensis</i>					x	x								x
reverse chama	<i>Pseudochama exogyra</i>		x	x									x		x
festive murex snail	<i>Pteropurpura festiva</i>	x					x	x					x		x
scaled tube worm	<i>Serpulorbis squamigerus</i>						x		x						x
trochid snail	<i>Tegula eisenii</i>														x
soft ectoproct	<i>Anguineila palmata</i>			x											x
ectoproct	<i>Bugula neritina</i>			x											x
ectoproct	Encrusting ectoprocts			x											x
colonial tunicate	<i>Botryllus/Botrylloides</i>			x											x
colonial tunicate	colonial tunicates			x											x
solitary tunicate	Ascideacea, unid.			x			x								x
solitary tunicate	<i>Styela plicata</i>			x			x						x		x
opaleye perch	<i>Girella nigricans</i>			x			x						x		x
garibaldi	<i>Hypsypops rubicundus</i>			x			x						x		x
pile perch	<i>Damalichthys vacca</i>			x			x								x
blacksmith	<i>Chromis punctipinnis</i>			x			x								x
kelp bass	<i>Paralabrax clathratus</i>			x			x						x		x
unknown barred fish	juvenile, unid.			x			x								x
kelp fish	<i>Heterostichus rostratus</i>			x			x								x
senonita	<i>Oxyjulis californica</i>			x			x								x
flatfish	unid. flatfish	x													x
round sting ray	<i>Urolophus halleri</i>	x													x
<b>Total</b>		<b>9</b>	<b>3</b>	<b>36</b>	<b>31</b>	<b>5</b>	<b>49</b>	<b>10</b>	<b>25</b>	<b>15</b>	<b>12</b>	<b>6</b>	<b>25</b>	<b>0</b>	<b>88</b>

**APPENDIX 3. *CAULERPA TAXIFOLIA* REPORTING FORM  
(PER NATIONAL MARINE FISHERIES SERVICE AND CALIFORNIA  
DEPARTMENT OF FISH AND GAME REQUIREMENTS)**

***Caulerpa taxifolia* Survey Reporting Form**  
**Dana Point Harbor Marina Renovation Project,**  
**Dana Point, CA**

**Prepared for:**  
**LSA Associates, Inc.**  
**20 Executive Park, Suite 200, Irvine, California**  
**Contact: Rob Balen**  
**(949) 533-0666**

**Prepared by:**  
**Coastal Resources Management, Inc.**  
**PMB 327, 3334 E. Coast Highway, Corona del Mar, CA 92625**  
**Contact: Rick Ware, Senior Marine Biologist**  
**(949) 412-9446**

**June 15<sup>th</sup>, 2007**  
**Revised July 8<sup>th</sup>, 2010**



This form is required to be submitted for any surveys conducted for the invasive exotic alga *Caulerpa taxifolia* that are required to be conducted under federal or state permits and authorizations issued by the U.S. Army Corps of Engineers or Regional Water Quality Control Boards (Regions 8 & 9). The form has been designed to assist in controlling the costs of reporting while ensuring that the required information necessary to identify and control any potential impacts of the authorized actions on the spread of *Caulerpa*. Surveys required to be conducted for this species are subject to modification through publication of revisions to the *Caulerpa* survey policy. It is incumbent upon the authorized permittee to ensure that survey work is following the latest protocols. For further information on these protocols, please contact: Robert Hoffman, National Marine Fisheries Service (NOAA Fisheries), (562) 980-4043, or William Paznokas, California Department of Fish & Game, (858) 467-4218).

<b>Report Date:</b>	January 6 <sup>th</sup> , 2007; Revised 8 July 2010
<b>Name of bay, estuary, lagoon, or harbor:</b>	Dana Point Harbor, Dana Point, Orange County, California. See Figure 1.
<b>Specific Location Name:</b>	Dana Point Marina Basins and the vicinity of Baby Beach/Youth Sailing Center. See Figures 2-4.
<b>Site Coordinates:</b> (UTM, Lat./Long., datum, accuracy level, and an electronic survey area map or hard copy of the map <b>must</b> be included).	Center of Marina Basins: 33.45983 ° N; 118.69817 ° W Accuracy: 1 m, WGS 84
<b>Survey Contact:</b> (name, phone, e-mail)	Rick Ware, Senior Marine Biologist, Coastal Resources Management, Inc. , (949) 412-9446, <a href="mailto:rware.crm@earthlink.net">rware.crm@earthlink.net</a>
<b>Personnel Conducting Survey (if other than above): name, phone, email</b>	Mr. Rick Ware (Certified Caulerpa Surveyor) Mr. Stephen Whitaker (Certified Caulerpa Surveyor) Mr. Tom Gerlinger (vessel skipper/dive tender)
<b>Permit Reference:</b> (ACOE Permit No., RWQCB Order or Cert. No.)	Pending.
<b>Is this the first or second survey for this project?</b>	Initial Survey for Dana Point Harbor Revitalization Project.
<b>Was <i>Caulerpa</i> Detected?:</b> (if <i>Caulerpa</i> is found, please immediately contact NOAA Fisheries or CDFG personnel identified above)	<u>XX</u> No, <i>Caulerpa</i> was not found at this site.

<p><b>Description of Permitted Work:</b> (describe briefly the work to be conducted at the site under the permits identified above)</p>	<p>Waterside upgrades are proposed for Dana Point Harbor and include (1) the renovation and re-orientation of the East and West marina basin dock systems by replacing old and deteriorating docks, slips and gangways with new facilities; (2) dock redesign and improvements for the Youth Sailing Center, the Harbor Patrol facilities, Commercial Fishing Dock, the Sport Fishing dock, the Dry Stack facility, and the Shipyard docks; (3) the construction of for vessels that will be displaced during marina reconstruction.; (4) the addition of handicap access at locations where it currently is not available; (5) upgrading vessel pump out facilities; and (6) upgrading electrical service water service.</p> <p>The number of boat slips within the Harbor will decrease from 2,409 to 2,223 (a loss of 116 slips) although the average slip length will increase from 29.85 ft to a length not to exceed 32 ft. A total of 1,306 existing piles will be removed and 969 new piles will be emplaced.</p>	
<p><b>Description of Site:</b> (describe the physical and biological conditions within the survey area at the time of the survey and provide insight into variability, if known. Please provide units for all numerical information).</p>	<p><i>Depth range:</i></p>	<p>0.0 ft to -24.2 ft MLLW.</p>
	<p><i>Substrate type:</i></p>	<p>Silt sediments in most part of areas surveyed. Silty sand sediments west of basins near Baby Beach. Reef in the Main Channel, and scattered in the East Channel.</p>
	<p><i>Temperature:</i></p>	<p>57 (Feb 2007) to 67 degrees F (June 2010);</p>
	<p><i>Salinity:</i></p>	<p>25-35 ppt</p>
	<p><i>Dominant flora:</i></p>	<p>Twenty-nine algal taxa were recorded. Dominant algae species on the soft sediments included diatom mat, <i>Chaetomorpha aerea</i> and <i>Ulva intestinalis</i>. Common hard-substrate algal taxa associated with hard substrate on marina rip rap, pilings, docks, bulkheads, jetty quarry rock and natural reef habitats outside of the marina basins. included <i>Colpomenia sinuosa</i>, <i>Dictyopteris undulata</i>, <i>Dictyota flabellata</i>, <i>Eisenia arborea</i>, <i>Sargassum muticum</i>, <i>Corallina</i> spp., and filamentous red algae.</p>
<p><i>Dominant fauna:</i></p>	<p>Fifty-six taxa of invertebrates, and fishes were observed during the surveys. Of this total, only six were observed by biologists on marina basin sediments. The most common species was <i>Navanax inermis</i>.</p>	

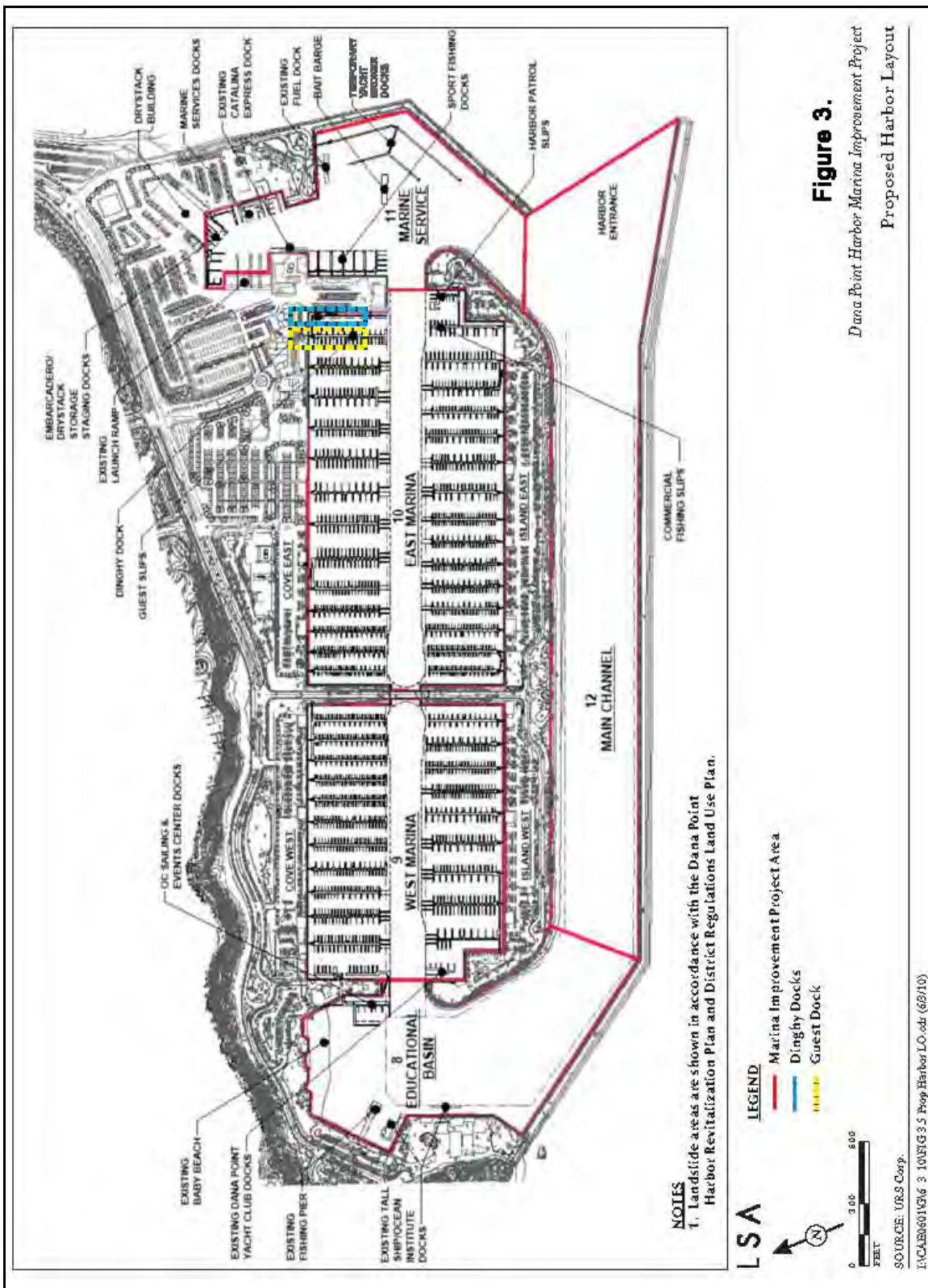
	<i>Exotic species encountered (including any other Caulerpa species):</i>	<i>Sargassum muticum</i>
	<i>Other site description notes:</i>	Eelgrass was located near Baby Beach during the June 2010 survey.
<b>Description of Survey Effort:</b>	<i>Survey date and time period:</i>	February 20 <sup>th</sup> , March 6 <sup>th</sup> , and March 16 <sup>th</sup> , 2007; October 31 <sup>st</sup> , November 1 <sup>st</sup> , and November 2 <sup>nd</sup> , 2007; and June 7 <sup>th</sup> -8 <sup>th</sup> , 2010
<b>Description of Survey Effort:</b> please describe the surveys conducted including type of survey (SCUBA, remote video, etc.) and survey methods employed, date of work, and survey density (estimated percentage of the bottom actually viewed).	<i>Horizontal visibility in water:</i>	Visibility was highly variable depending on the area of the harbor being surveyed and ranged between 1 and 10 feet on each side of the center line.
	<i>Survey type and methods:</i>	<p>A total of 329 variable-length underwater transects (5 meters [m] to 258 m in length) were swam using SCUBA throughout Dana Point Harbor where waterside developments are planned and in areas where eelgrass potentially can be found in shallow water habitat. Fourteen dock piles in the Cove East and the Island East marina basins were also surveyed to determine the types and relative abundances of marine organisms that might be affected by marina construction.</p> <p>Remote Underwater Video (RUV) surveys were also conducted to determine the presence of eelgrass, invasive algae, other organisms, and habitat types. The camera system used for the surveys was an Ocean Systems, Inc. Deep Blue Professional Grade Underwater Video Camera (“Splash Cam”) attached to a military-grade umbilical cable. Real-time observations of the harbor benthos were collected by conducting a running series of variable-length underwater video transects ranging in length from 0.16 to 1.67 miles long at all sites except for the East and West Marina Basins.</p> <p>The surveys covered 6.28 acres of harbor bottom habitat. Overall, the bottom area surveyed by both diving biologists and remote video averaged 24.7% of the total bottom habitat within the</p>



		<p>project survey limits, ranging from 13.9% in the East and West Marina basins to over 100% coverage in the at the Youth Sailing Center and the Harbor Patrol basin. Baby Beach areal cover (by divers and video in 2007 and 2010) encompassed a minimum of 187% of the survey area, and reflected a survey effort concentrated in a region where there was a probability of locating eelgrass since a very small patch of eelgrass (three turions) was located there in April 2005 (Chambers Group, Inc., 2005).</p> <p>The total area of open water habitat and water habitat underneath the docks (Area of Potential Effect) in the project area was 25.28 acres.</p> <p>Bottom types, common marine life, and the presence or absence of <i>Caulerpa taxifolia</i> and <i>Zostera marina</i> were noted. Depths were standardized to Mean Lower Low Water (MLLW) based upon time of observation and tidal corrections for the San Clemente Pier tidal survey station.</p>
Describe any limitations encountered during the survey efforts.	<i>Survey personnel:</i>	Rick Ware, Steve Whitaker and Tom Gerlinger, Coastal Resources Management, Inc.
	<i>Survey density:</i>	Underwater Remote Video tracklines covered 7,899 meters of harbor seafloor (4.91 miles). For both survey methods, a total of 6.28 acres of bottom habitat out of a total APE of 25.28 acres were surveyed (24.7% of the total bottom habitat in the survey area).
	<i>Survey limitations:</i>	Vessel movement within the project area.
<b>Other Information:</b> (use this space to provide additional information or references to attached maps, reports, etc.)	<p>Figure 1- Project Location, Regional</p> <p>Figure 2- Proposed Location</p> <p>Figure 3. Project Layout</p>	



**FIGURE 2.**  
**DANA POINT HARBOR STUDY LOCATIONS**  
 COASTAL RESOURCES MANAGEMENT, INC.



**MARINE BIOLOGICAL RESOURCES: FOCUSED SURVEY REPORT  
FOR EELGRASS (*ZOSTERA MARINA*) AND  
INVASIVE ALGAE (*CAULERPA TAXIFOLIA* AND *UNDARIA PINNATIFIDA*)  
FEBRUARY-MARCH 2007 SURVEYS  
DANA POINT HARBOR MARINA RENOVATION PROJECT  
DANA POINT, CALIFORNIA**



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(949) 412-9446**

**July 3<sup>rd</sup>, 2007**



## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1.0 INTRODUCTION</b> .....	1
1.1 Project Purpose .....	1
1.2 Project Location .....	1
1.3 Project Components.....	1
<b>2.0 SURVEY METHODS</b> .....	4
<b>3.0 SURVEY RESULTS</b> .....	7
3.1 Project Area.....	7
3.2 Physical Environment.....	7
3.3 Eelgrass.....	8
3.4 Invasive Algae.....	9
3.5 Other Marine Organisms .....	11
<b>4.0 IMPACT ASSESSMENT</b> .....	15
4.1 Proposed Construction Methods .....	15
4.2 Construction Impacts .....	15
4.3 Long-Term Impacts of Marina Operations.....	18
<b>5.0 MITIGATION MEASURES AND BEST MANAGEMENT PRACTICES</b> .....	19
5.1 Water Quality .....	19
5.2 Eelgrass .....	19
5.3 Invasive Species .....	21
<b>6.0 LITERATURE CITED</b> .....	22

## LIST OF TABLES

1 Number of Taxa Observed During the CRM Marine Biological Surveys.....	11
2 List of Organisms Observed During the CRM Marine Biological Surveys .....	12

## LIST OF FIGURES

1 Dana Point, California Project Area Location .....	2
2 Location of Marina Basins .....	3
3 Proposed Dana Point Harbor Marina Layout .....	5
4 Survey Locations.....	6
5 Eelgrass, <i>Zostera marina</i> .....	8
6 Invasive Algae ( <i>Caulerpa taxifolia</i> ).....	10
7 Invasive Algae ( <i>Undaria pinnatifida</i> ).....	10

## LIST OF APPENDICES

1 Invasive Algae ( <i>Caulerpa taxifolia</i> ) Reporting Form.....	23
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## **1.0 INTRODUCTION**

### **1.1 PROJECT PURPOSE**

Coastal Resources Management, Inc. (CRM) conducted marine biological resource surveys in Dana Point Harbor on February 20<sup>th</sup>, March 6<sup>th</sup>, and March 16<sup>th</sup>, 2007. The purposes of the investigation were to (1) determine if eelgrass (*Zostera marina*) or invasive algae (*Caulerpa taxifolia* or *Undaria pinnatifida*) were present in regions of the harbor where proposed marina improvements are planned, (2) to collect data on the presence/absence of other species present in the Harbor on piling, rip-rap and low-relief habitats that might be affected by marina improvements and (3) assess the potential environmental effects of construction and long-term operation of the marina on sensitive marine resources.

### **1.2 PROJECT LOCATION**

Dana Point Harbor, constructed between 1966 and 1970, is located in the City of Dana Point, Orange County, California about 40 miles south of Long Beach/Los Angeles Harbors (Figure 1). It lies in the lee (protected side) of Dana Point Headlands within Capistrano Bay and is also protected by a 1.7 mile long and 14 to 18 feet high breakwater. Harbor channel widths vary from 350 feet in the anchorage areas to 600 feet at the harbor entrance (Wiegel, 1993) The harbor is subject to in-filling of sands that migrate through the quarry rock-breakwater requiring periodic maintenance dredging to maintain safe water depths.

The marina within Dana Point Harbor is divided into two basins, the East Basin and West Basin (Figure 2). Each basin operates as a separate marina, with a total capacity of about 2,500 shallow-draft vessels. The boat launch ramp at the northeast corner of the harbor is newly upgraded as of July 2007. Other facilities within the harbor include the Dana Point Marine Institute, a dry boat storage hoist, fishing pier, shipyard, marine fuel dock, three yacht clubs, and a commercial sports fishing operation. Swimming is allowed at the west end of the Harbor, at Baby Beach. (<http://www.ocparks.com/danapointharbor/>)

### **1.3 PROPOSED PROJECT COMPONENTS**

The County of Orange proposes upgrade landside and waterside facilities within Dana Point Harbor. Waterside-upgrades include the renovation of the marina basin dock systems by replacing old and deteriorating docks, slips and gangways with new facilities (Figure 3). The number of boat slips will decrease to 2,009 (Marina Layout 2 with channel encroachment). A total of 1,163 existing piles will be removed and approximately 933 new piles will be emplaced. In addition, the proposed project includes adding handicap access at locations that is currently not available; Bulkheads will not be affected by the project. This report only addresses the waterside upgrade of the marina dock systems

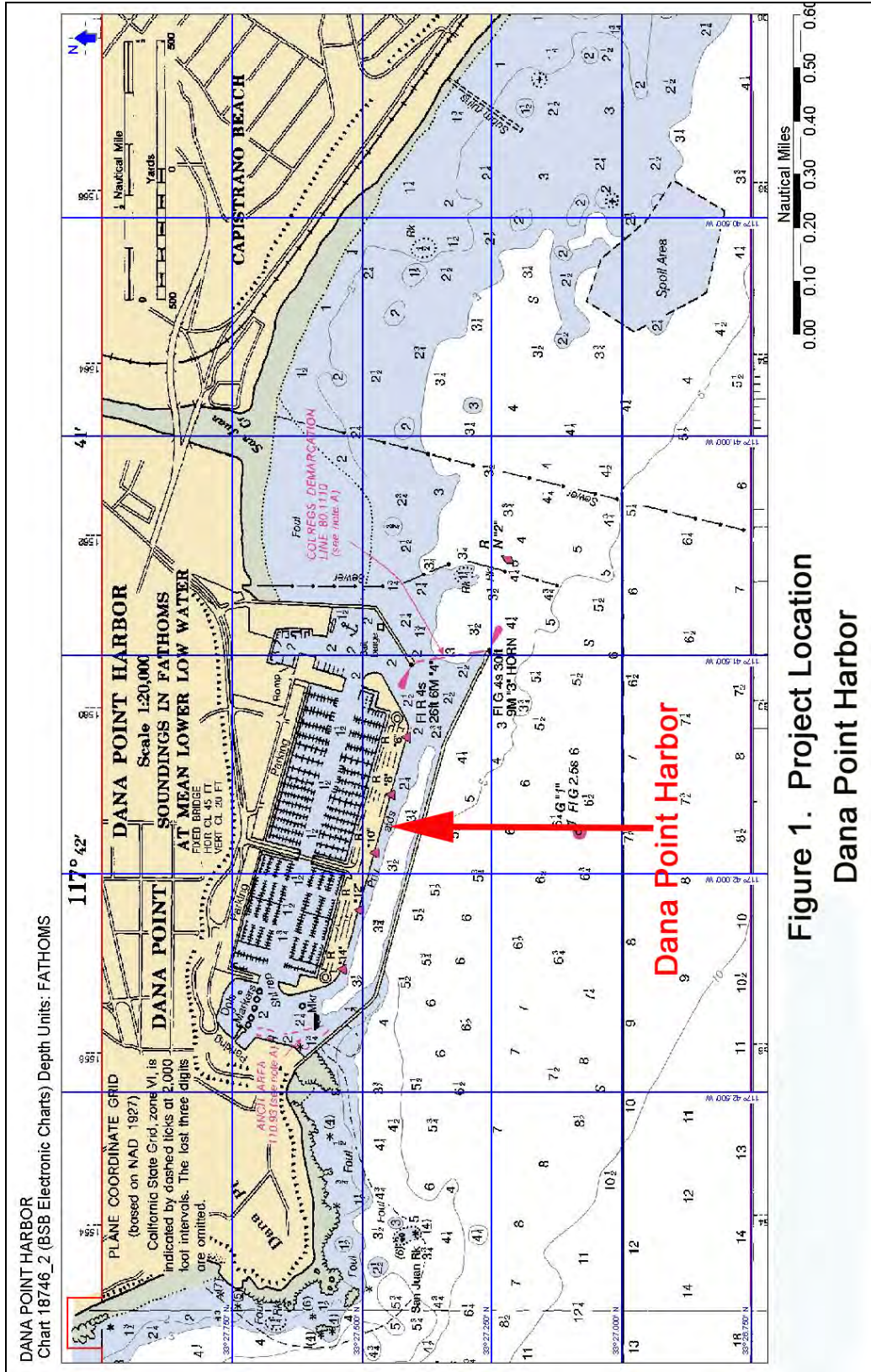


Figure 1. Project Location  
Dana Point Harbor



**Figure 2. Location of Marina Basins and Baby Beach**



## **2.0 FIELD SURVEY METHODS**

Underwater marine biological field surveys were conducted by CRM marine biologists Rick Ware, Stephen Whitaker, and Tom Gerlinger on February 20<sup>th</sup>, March 6<sup>th</sup>, and March 16<sup>th</sup>, 2007 between 0800 and 1430 hours. Surveys were conducted from the RV *Stacy Ann* and a 14 ft Achilles Inflatable vessel.

Underwater surveys were conducted using SCUBA. The surface support individual was in communication with the diving-biologists using an Ocean Technology Systems, Inc. (OTS) communication system due to the potential danger involved while conducting underwater surveys in the active vessel areas. Surveys were conducted in accordance with both the *Southern California Eelgrass Mitigation Policy* (National Marine Fisheries Service 1991 as amended) and the *Caulerpa Control Protocol* (National Marine Fisheries Service, Version 2.1, March 2006).

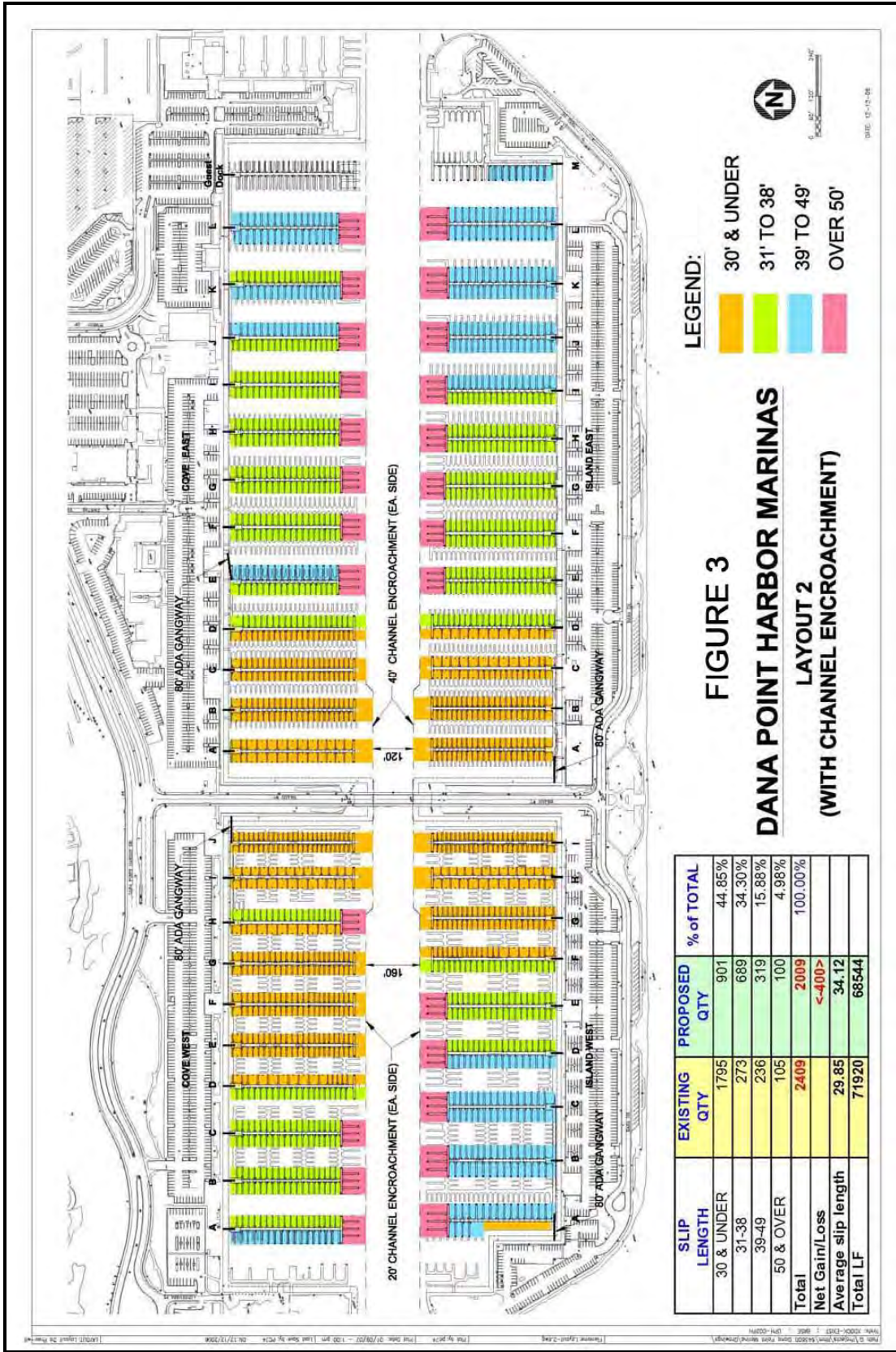
A total of 70, variable-length underwater transects (15 meters [m] to 153 m in length) were swam using SCUBA in the Cove East and West and the Island East and West marina basins (Figure 4). In addition, 43 transects varying in length between 50 m and 100 m long were swam in front of the sailing center and Baby Beach. Fourteen dock piles in the Cove East and the Island East marina basins were also surveyed to determine the types and relative abundances of marine organisms that might be affected by marina construction.

During the transect swims and the inspection of the dock support piles, divers recorded habitat types, common marine life, and the presence or absence of eelgrass and invasive algae. Depths were standardized to Mean Lower Low Water (ft, MLLW) based upon time of observation and tidal corrections for the NOAA San Clemente tidal survey station.

Caulerpa Survey Protocols. Dana Point Harbor is considered a “non-infected” system and requires a “surveillance level” monitoring effort for the presence of *Caulerpa*. The following information is extracted from the National Marine Service *Caulerpa Control Protocol* in regards to the level of survey effort required.

- 1) *Surveillance Level* – General survey coverage providing a systematic sub-sampling of the entire APE during which at least 20% of the bottom is inspected and widespread occurrences of *Caulerpa* would be expected to be identified if present. Surveys may be accomplished using diver transects, remote cameras, and acoustic surveys with visual ground truthing. Other proposed methodologies may be approved on a case-by-case basis by NOAA Fisheries and CDFG.

The results of the *Caulerpa* Survey are provided in Appendix 1 of this report.





## **3.0 SURVEY RESULTS**

### **3.1 PROJECT AREA**

The dive surveys covered a total of 12,228 sq m (3 acres) of bayfloor habitat within the east and west marina basins and a total of 6,650 sq m (1.64 acres) in the vicinity of Baby Beach and the Youth Sailing Center (Figure 4). Overall, the bottom area of cover surveyed by biologist was 14% in the marina basins and between 58% and 65% at Baby Beach and the Youth Sailing Center. The higher intensity surveys within Baby Beach and the Youth Sailing Center reflected a survey effort concentrated in a region where there was a greater probability of locating either eelgrass or *Caulerpa*, since a very small patch of eelgrass (three turions) was located there in April 2005 (Chambers Group, Inc., 2005).

### **3.2 PHYSICAL ENVIRONMENT**

#### **3.2.1 Survey Depths**

The survey within the marina basins was conducted at depths between +1 ft to – 8 ft on the along the bulkhead retaining walls and at depths between -8 and -11 ft MLLW within the fairways of each of the marina basins. Depths surveyed at Baby Beach ranged between 0.0 and -10 ft MLLW, while depths in the vicinity of the Youth Sailing Center varied between -2 ft MLLW near the bulkhead to depths of -12 ft MLLW, 50 meters west of the dock.

#### **3.2.2 Substrate Types**

Surficial substrate types within the marina basins and in the marina channel were generally silty, although deeper sediments tend to be sandier (Geotechnical Inc., 2006). Isolated rock outcrops were also present. The isolated rock patches include three, single rock outcrops in the Island West Basin and one moderate (1 meter high) relief rock outcrop in Cove West Basin. These outcrops were at depths between -8 and -10 ft MLLW. More extensive low-to-medium reef outcrops were located within 50 meters of the Youth Sailing Center Docks at depths between -3 and -8 ft MLLW. Unconsolidated sediments in the vicinity of Baby Beach and the Youth Sailing Center were predominantly sandy silts but increased in sand percentages with a decrease in depth. Sloped, cement bulkheads around the perimeter of the marina basins were covered with a fine sediment layer.

#### **3.2.3 Underwater Visibility and Water Temperature**

Underwater visibility was generally limited throughout the three day survey and ranged between 1-3 ft on each side of the underwater transect line within the marina basins and 1-4 ft in the vicinity of Baby Beach and the Youth Sailing Center. By comparison underwater visibility averaged about 3 ft near the boat launch ramp in August 2006 (Chambers Group, Inc 2006) and eight feet at depths of 0.0 to -10 ft MLLW at Baby Beach in April 2005 (Chambers Group, Inc., 2005). Water temperature during the February and March 2007 surveys ranged between 57 and 59 degrees Fahrenheit.

### **3.3 EELGRASS**

#### **3.3.1 Importance of Eelgrass**

Eelgrass (Figure 5) is a marine flowering plant that grows in soft sediments in coastal bays and estuaries, and occasionally offshore to depths of 50 feet (ft). Eelgrass canopy (consisting of shoots and leaves added vegetation and the vertical relief it provides enhances the abundance and the

diversity approximately two to three ft long attracts many marine invertebrates and fishes and the of the marine life compared to areas where the sediments are barren. A diverse community of bottom-dwelling invertebrates (i.e., clams, crabs, and worms) live on eelgrass or within the soft sediments that cover the root and rhizome mass system. The vegetation also serves a nursery function for many juvenile fishes, including species of commercial and/or sports fish value (California halibut and barred sand bass). Eelgrass meadows are critical foraging centers for seabirds (such as the endangered California least tern) that seek out baitfish (i.e., juvenile topsmelt) attracted to the eelgrass cover. Lastly, eelgrass is an important contributor to the detrital (decaying organic) food web of bays as the decaying plant material is consumed by many benthic invertebrates (such as polychaete worms) and reduced to primary nutrients by bacteria.



Figure 5. Eelgrass, *Zostera marina*. One “shoot” and the cluster of “blades” arising from the shoot is considered a “turion unit”.

Because of the high ecological value of eelgrass meadows, it is important to document the location and amount of eelgrass in areas of proposed waterside developments and to mitigate any losses by avoiding, reducing, or compensating for any adverse effects on eelgrass habitats and communities.

### **3.3.2 Results of the February/March 2007 Eelgrass Field Survey**

No eelgrass was observed during the underwater biological investigations within the marina basins of Dana Point Harbor or at Baby Beach. In a previous survey, Chambers Group, Inc (2005) found a single, three-turion plant at the eastern end of Baby Beach in April 2005.

## **3.4 INVASIVE ALGAE (*CAULERPA TAXIFOLIA*)**

### **3.4.1 Importance of *Caulerpa taxifolia***

Invasive algae (Figure 6) has a potential to cause ecosystem-level impacts on California's bays and nearshore systems due to its extreme ability to out-compete other algae and seagrasses. *Caulerpa taxifolia* grows as a dense smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a non-native marine habitat. Fish, invertebrates, marine mammals, and sea birds that are dependent on native marine vegetation are displaced or die off from the areas where they once thrived. It is a tropical-subtropical species that is used in aquariums. It was introduced into southern California in 2000 (Agua Hedionda Lagoon) and (Huntington Harbour) by way of individuals likely dumping their aquaria waters into storm drains, or directly into the lagoons. While outbreaks have been contained, the Water Resources Board, through the National Marine Fisheries Service and the California Department of Fish and Game require that projects that have potential to spread this species through dredging, and bottom-disturbing activities conduct pre-construction surveys to determine if this species is present using standard agency-approved protocols and by National Marine Fisheries Service/California Department of Fish and Game Certified Field Surveyors.

### 3.4.2 Focused Survey for Invasive Algae

No *Caulerpa* was found within the Dana Point marina basins or in the vicinity of Baby Beach. It has not been reported to have been present in Dana Point Harbor in previous surveys (Chambers Group, Inc. 2005, 2006). As noted in Section 3.1, the combined *Caulerpa*-eelgrass dive surveys covered a total of 12,228 sq m (3 acres) of bayfloor habitat within the east and west marina basins and a total of 6,650 sq m (1.64 acres) in the vicinity of Baby Beach and the Youth Sailing Center. Overall, the bottom area of cover surveyed by biologist was 14% in the marina basins and between 58% and 65% at Baby Beach and the Youth Sailing Center. The higher intensity surveys were conducted at Baby Beach and the Youth Sailing Center because the area had a greater probability of locating either eelgrass or *Caulerpa*, since a very small patch of eelgrass (three turions) was located there in April 2005 by Chambers Group, Inc. (Chambers Group, Inc. 2005). The invasive algae reporting form, submitted to the National Marine Fisheries Service and the California Department of Fish and Game is provided in Appendix A. Prior to marina construction, a pre-construction *Caulerpa* survey will need to be conducted that attains a minimum survey intensity level of 20% to meet the standard of the Southern California *Caulerpa* Action Team (NMFS 2006).



Figure 6. The invasive algae, *Caulerpa taxifolia*. Source: NOAA/NMFS

### 3.4.3 *Undaria pinnatifida*

*Undaria pinnatifida* (Figure 7) is a golden brown kelp native to the Japan Sea. It has been introduced in Australia, New Zealand, and Europe and has now spread to the California coastline. It has been found in Santa Barbara Harbor, Long Beach Harbor, Anaheim Bay, San Diego Bay, and on Catalina Island. *Undaria* was not observed during dive surveys in Dana Point Harbor in February or March, 2007.



Figure 7. *Undaria pinnatifida*

In Japan it is known as wakame and is extensively cultivated as a fresh and dried food plant. However, it has the potential to become a major pest in our coastal waters. *Undaria* grows to between 3 to 7 feet (1 and 2 m) tall and is found in sheltered harbor waters on rocks, breakwaters, and marine debris from the low-tide mark to 50 feet (15 m). A mature plant has a distinctive, spiraled (frilly), spore-producing structure at its base. It also has an obvious central stem to 4 inches (10 cm) wide that extends for the length of the plant (Figure 7). The blade may be up to 3.1 feet (1 m) wide and extends from the tip of the plant for half the length of the plant.

## 3.5 OTHER MARINE ORGANISMS OBSERVED DURING THE SURVEY

A total of 46 taxa of marine plants, invertebrates, and fishes were observed by biologists during the February and March 2006 field surveys (Table 1 and Table 2). Habitats that were surveyed included subtidal soft benthos (silt and sand sub-habitats), the hardscape of dock pilings, sloped cement bulkheads, and low-to-moderate relief rocky reefs. Limited underwater visibility, which ranged from 1-3 ft was a factor that likely resulted in the under-quantification of the faunal constituents in the harbor, particularly for the fish community.

Overall, marine plants contributed the highest number of taxa (28.3% of the total). Mollusks (snails and clams) were the second most abundant phyla (21.7% of the total), followed by annelid

worms (10.9%) and crustacean arthropods (8.7%). A discussion of the flora and fauna constituents, by habitat, is provided below.

**Table 1. Number of Marine Taxa Observed During the CRM Dive Surveys, Feb-Mar 2007.**

Group	Number of Taxa	% Total
Algae	13	28.3
Porifera	1	2.2
Cnidaria	2	4.3
Annelida	5	10.9
Arthropoda	4	8.7
Mollusca	10	21.7
Ectoprocta	3	6.5
Tunicata	4	8.7
Fish	4	8.7
<b>Total</b>	<b>46</b>	<b>100</b>

**Table 2. List of Organisms Observed During Subtidal Surveys in Dana Point Harbor, February/March 2007**

Common Name	Scientific Name	Marina Epibenthos	Marina Pilings and Bulkhead	Youth Sailing Center Reefs and Rip Rap	All Areas
diatom mat	Bacillariophyceae	x	x	x	x
green algae	<i>Chaetomorpha aerea</i>	x	x		x
green algae	<i>Ulva intestinalis</i>	x	x	x	x
brown algae	<i>Colpomenia perigrina</i>		x	x	x
brown algae	<i>Dictyopteris undulata</i>		x		x
brown algae	<i>Dictyota flabellata</i>		x		x
brown algae	<i>Dictyoacea</i> , unid.		x	x	x
brown algae	<i>Eisenia arborea</i>		x	x	x
brown algae	<i>Sargassum muticum</i>		x	x	x
red algae	<i>Corallina vancouverensis</i>		x	x	x
red algae	Filamentous Red Algae		x	x	x
red algae	<i>Polysiphonia</i> sp.		x		x
red algae	red turf algae (complex)		x		x
sponge	<i>Haliclona</i> sp.	x	x	x	x
hydroid	<i>Aglaophenia</i> sp.		x		x
white gorgonian	<i>Muricea fructicosa</i>		x	x	x
polychaete	<i>Dodecaceria fewksii</i>		x		x
polychaete	<i>Phragmatopoma californica</i>		x	x	x



polychaete	Sabellidae, unid.		x		x
polychaete	Serpulidae, unid.		x	x	x
polychaete	Spirorbidae, unid.		x	x	x
barnacle	<i>Balanus amphitrite</i>		x	x	x
barnacle	<i>Balanus glandula</i>		x	x	x
lined shore crab	<i>Pachygrapsus crassipes</i>		x	x	x
lobster	<i>Panilurus interruptus</i>			x	x
limpet	<i>Lottia digitalis</i>				x
limpet	<i>MacClintokea (Collisella) scabra</i>			x	x
slipper shell	<i>Crepidula onyx</i>			x	x
Kellet's whelk	<i>Kelletia kelletii</i>			x	x
rock scallop	<i>Crassedoma giganteum</i>		x		x
bay mussel	<i>Mytilus galloprovincialis</i>		x	x	x
sea slug	<i>Navanax inermis</i>	x			x
octopus	<i>Octopus bimaculoides</i>	x			x
reverse chama	<i>Pseudochama exogyra</i>		x	x	x
festive murex snail	<i>Pteropurpura festiva</i>	x	x		x
soft ectoproct	<i>Anguinella palmata</i>		x		x
moss animal	<i>Bugula neritina</i>		x		x
moss animal	encrusting ectoprocts		x		x
colonial tunicate	<i>Botrylloides</i> sp.		x		x
colonial tunicate	colonial tunicates		x		x
<b>Common Name (continued)</b>	<b>Scientific Name</b>	<b>Marina Epibenthos</b>	<b>Marina Pilings and Bulkhead</b>	<b>Youth Sailing Center Reefs and Rip Rap</b>	<b>All Areas</b>
solitary tunicate	Ascideacea, unid.		x	x	x
solitary tunicate	<i>Styela plicata</i>		x		x
opaleye perch	<i>Girella nigricans</i>			x	x
garibaldi	<i>Hypsypops rubicundus</i>			x	x
flatfish	unid. Flatfish	x			x
round sting ray	<i>Urolophus halleri</i>	x			x
	<b>Total Taxa</b>	<b>9</b>	<b>35</b>	<b>25</b>	<b>46</b>

### 3.5.1 Soft-Bottom Benthic Epiflora and Epifauna.

Seven soft-bottom benthic algae and macro-invertebrate taxa were observed by divers in the marina basins (Table 2). Of these, none were common. The basin sediments were lightly coated with a layer of diatoms, and secondarily, spotty cover of the algae *Chaetomorpha aerea* and *Ulva intestinalis*. In addition, the round sting ray (*Urolophus halleri*) and other unidentified flatfish were occasionally observed, but were not common. The lack of an extensive benthic epibiota is not uncommon in unvegetated (i.e., seagrass) environments. Species richness is considerably higher for infaunal-dwelling community that consists of a diverse assemblage of groups such as polychaete worms, micro-crustaceans, mollusks, and echinoderms.

### 3.5.2 Hardscape (Pier Pilings, Cement Bulkheads, and Isolated Rocky Outcrops)

The majority of plants and invertebrates observed by biologists were associated with harbor hardscape (42 of 46 taxa), divided into marina pilings and bulkheads in the marina basins (35 species) and secondarily isolated rocks and rip rap (25 species) in the vicinity of the Youth Sailing Center (Table 2). Of the various habitats surveyed, the piling community exhibited the highest cumulative richness because of the combined intertidal and subtidal nature of the structures although the number of taxa on a single pile only varied between 5 and 11. Species richness decreased with depth. The dominant organisms on the upper three feet of the pilings included a complex of green algae (*Ulva intestinalis*), a turf and filamentous red algae complex, brown algae (*Colpomenia perigrina*, *Dictyota flabellata*, and *Sargassum muticum*), hydroids (*Aglaophenia* sp.), serpulid polychaete worms, barnacles (*Balanus amphitrite* and *B. glandula*), and mussels (*Mytilus galloprovincialis*). The mid-depth piling community (-3 to -7 ft) was dominated by a polychaete worms (serpulids and the calcareous tube-building *Dodecaceria fewksii*), mussels, solitary tunicates (*Styela plicata*), and ectoprocts (*Bugula neritina* and unid. encrusting ectoprocts). The lower-depth piling community (-7 to -10 ft MLLW) was colonized primarily by tunicates, ectoprocts, and hydroids.

The sloping, cement bulkhead around the perimeter of Cove East and West and Island East and West Basins was notable for a very low diversity of marine life. Although not abundant, the calcareous, tube-building polychaete *Dodecaceria fewksii* was one of the most conspicuous species present, along with lined-shore crabs (*Pachygrapsus crassipes*), solitary ascidians, and scattered, small-sized mussels. A fine silt layer, approximately 1-2 cm deep covered the substrate and the cover of algae was low in all areas surveyed. Most of the fauna observed was associated with the depressions formed by the meeting of adjoining cement sections.

Protective rock rip rap lining the cement bulkhead and low relief natural reef (remnant reef prior to the construction of the harbor) in the vicinity of the Youth Sailing Center supported similar types of plants and invertebrates that lived on the pilings, although larger species such as the southern sea palm algae (*Eisenia arborea*), and mobile macro invertebrates such as lobsters (*Panilurus interruptus*, snails (*Kelletia kelletii*), limpets (*Lottia digitalis*), and slipper limpets (*Crepidula onyx*) were present within this western section of the harbor, likely an indication of conducive rock habitat, better tidal circulation, and wind-wave energy motion compared to the enclosed marina basins.

The types of fishes which commonly occur in protected marinas and harbors of southern California are a combination of species that are associated with both soft-bottom habitat and hardscape of pilings, docks, cement bulkheads, and jetties.

Few species of fish were actually observed within the marina or the harbor, partially due to limited underwater visibility. The species observed included unidentified flatfish and round stingray (*Urolophus halleri*) in the marina basins, and opaleye perch (*Girella nigricans*) and garibaldi (*Hypsypops rubicundus*) in the vicinity of the rip rap and reef outcrops near the Youth Sailing Center, west of the marina basins.

Soft bottom associates that are likely to occur in Dana Point Harbor include gobies (*Clevelandia ios*), and flatfish (California halibut, *Paralichthys californicus*; diamond turbot, *Hypsopsetta guttulata*), Water-column species such as topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), black surfperch (*Embiotoca jacksoni*), shiner surfperch (*Cymatogaster aggregata*), walleye surfperch (*Hyperprosopon argenteum*), white croaker (*Genyonemus lineatus*), queenfish (*Seriphus politus*) and white surfperch (*Phanerodon furcatus*) are also common within southern California Marinas and expected to be present in Dana Point Harbor.

Marinas provide additional types of habitats (pilings, docks, and jetties) that attract a different groups of fish that prefer hard substrate (Coastal Resources Management 1993). Hard substrate in marinas offer cover, protection, or new sources of food for fishes such as pile perch (*Damalichthys vacca*), pipefish (*Sygnathus* spp.), kelpfish (*Heterostichus* spp.), and opaleye (*Girella nigricans*), while the jetty riprap protecting the harbor provides a habitat for additional species, such as barred sand bass (*Paralabrax nebulifer*), kelp bass (*P. clathratus*), sargo (*Anisotremus davidsoni*), halfmoon (*Medialuna californiensis*), and cryptic species such as blennies and sculpins.

## 4.0 IMPACT ASSESSMENT

### 4.1 PROPOSED CONSTRUCTION METHODS

The proposed Dana Point Marina dock layout is shown in Figure 3. New floating docks systems will consist of prefabricated, lightweight aggregate concrete modules. No creosote treated wood products will be included in the new concrete dock system. Marina improvements would be made over eight phases, in which between 250-350 vessels per phase would be moved to temporary docks. Within each area, the phases will include the removal of the existing dock and piles, and the installation of the new dock and piles. Piles will be removed by vibratory extraction equipment mounted to a crane operating from a barge. However, if piles break off at the mudline, they will be manually cut two to three feet below the mudline. The old piles and floating docks will be lifted from the water using a crane and then trucked off-site.

The last phase would be the placement of the prefabricated docks. Piles will be placed using impact pile driving or jetting techniques, based upon the amount of rock encountered.

### 4.2 CONSTRUCTION IMPACTS

#### 4.2.1 Water Quality

**Pile and Dock Emplacement.** These construction activities have a potential to cause a short-term increase in turbidity and resuspension of fine sediments as the piles are removed and then new piles driven or jetted into the sediments. Pile removal and installation of new piles near the 60 inch storm drain has a potential to resuspend sediments that are higher in organics, copper, and total DDTs than other areas due to elevated levels of contaminants within this zone. This has a potential to result in a potentially short-term adverse, significant impact to water quality within the East Basin. Mitigation measures to reduce the level of impact to less-than-significant is provided in Section 5, Mitigation Measures.

**Oil and Fuel Discharges.** Accidental oil or fuel spills that could potentially occur during the pile removal and dock emplacement operations could result in significant effects on water quality, and subsequently, the fish and wildlife of the harbor depending on the severity of the spill. Such events are likely to be localized spills of lighter, refined diesel fuels, gasoline, and lubricating oils

that are highly toxic to marine life. The potential for the occurrence of petroleum-product leaks or spills would be low but the potential for significant, long-term effect on marine resources would be moderate to high. The inclusion and implementation of a Marina Construction Management Plan for the project will assist in preventing accidental spills and providing the necessary guidelines to follow in case of an oil or fuel spill and reduce the potential for a significant long term impact to less than significant.

Mitigation measures and Best Management Measures (BMPs) to avoid water quality degradation are provided in Section 5. With the inclusion of avoidance/mitigation measures, there will be no adverse environmental impacts on water quality.

The inclusion and implementation of a Marina Construction Management Plan for the project will assist in preventing accidental spills and providing the necessary guidelines to follow in case of an oil or fuel spill and reduce the potential for a significant long term impact to be mitigated to less than significant.

#### **4.2.2 Eelgrass**

There is no eelgrass at the project site, therefore there will be no short-or-long term impacts on eelgrass.

#### **4.2.3 California Halibut**

Juvenile halibut occur likely occur within Dana Point Harbor, although their presence within the Marina Basins is a less likely occurrence. During pile installation, any juveniles in the immediate area of pile driving activity will swim to areas outside the immediate impacted zone. No mortality is anticipated as a result of construction activities.

#### **4.2.4 Invasive Species**

*Caulerpa* algae is not present at the site of the proposed marina which precludes the potential for the spread of this species. However, a *Caulerpa* algae survey will be conducted according to the National Marine Fisheries Service Control Protocol (<http://swr.ucsd.edu/hcd/CaulerpaControlProtocol.htm>) prior to marina construction. If this species is found, then protocols for the eradication of *Caulerpa* will be implemented to remove this species from the project area.

*Undaria pinnatifida* is not currently growing within the marina basins in the vicinity of proposed modifications. Should it be found during pre-construction surveys, then it should be removed prior to marina modifications to prevent its spread during the pile and dock removal process. No eradication process however, is defined by the National Marine Fisheries Service or the California Department of Fish and Game.

### **4.3 LONG TERM IMPACTS ON MARINA OPERATION**

#### **4.3.1 Water Quality**

**Marina Operations.** Water quality within the marina will be governed by the practices of the tenants relative to their compliance with ordinances, laws, and guidelines related to discharges, vessel maintenance and marina maintenance. Periodic and/or uncontrolled discharges of various pollutants, oils, greases, and wastes would potentially in a long-term significant adverse effects

on water quality with subsequent adverse impacts on local marine life. Surface runoff from the marina will be regulated by the NPDES permit for storm water discharges. To prevent long-term impacts on local water quality, a Marina Management Plan should be developed to provide tenants and boaters with reasonable BMPs, safety guidelines, and steps to take in response to accidental spills, leakages and fires to reduce the potential for water quality degradation. Implementation of the creation and the implementation of a Marina Management Plan will reduce potential long-term water quality impacts to less than significant.

Maintenance dredging may be periodically required (at an assumed 10 year interval) to remove trapped sediments during the long-term operation of the marina. Maintenance dredging programs, conducted under a permit from the Army Corps of Engineers would result in the periodic removal of soft bottom benthic organisms, the resuspension of bottom sediments that will increase water column turbidity, and periodic releases of trace metals and organic contaminants into the water column. Dissolved oxygen levels will be reduced slightly because of the resuspension of organic materials in the dredged sediments.

#### **4.3.2 Eelgrass**

There is no eelgrass at the project site, therefore there will be no long term impacts on eelgrass.

#### **4.3.3 California Halibut**

As a consequence of the reconfiguration of the docks and piles within Dana Point Harbor, there will likely be a slight increase (175 sq ft) or slight decrease (84 sq ft) in the amount of soft bottom habitat within the marina basins depending upon the ratio of 14 and 18 inch diameter piles that will be placed. These predicted changes in the amount of benthic soft bottom habitat is not expected to result in a significant impact to halibut nursery habitat, either positive or negative. Most halibut are likely to occur within areas outside of the marina, in the main entrance channel and open areas west of the marina basins.

#### **4.3.4 Invasive Species**

*Caulerpa* algae is not expected to be present in Dana Point Harbor during marina operations which precludes the potential for the spread of this species. However, if *Caulerpa* is found during the long-term operation of the marina, a *Caulerpa* algae eradication program will be required (National Marine Fisheries Service 2006; <http://swr.ucsd.edu/hcd/CaulerpaControlProtocol.htm>).

*Undaria pinnatifida* is not currently growing within the marina basins in the vicinity of proposed modifications; however, if during the operation of the marina it should be present, then thought should be given to its eradication, based on recommendations from the California Department of Fish and Game and the National Marine Fisheries Service.

## **5.0 MITIGATION MEASURES AND BEST MANAGEMENT PRACTICES**

### **5.1 WATER QUALITY**

#### **5.1.1 Construction**

The following mitigation measures and Best Management Practices (BMPs) are recommended to prevent water quality degradation and to reduce potential adverse impacts on marine resources during the renovation of the Dana Point Harbor Marina.

- All debris and trash shall be disposed in suitable trash containers on land or on the work barge at the end of each construction day;
- Discharge of any hazardous materials into Dana Point Harbor will be prohibited; and
- Where feasible, silt curtains should be deployed around the dredge zones, work barges, and the pile removal and placement operations to minimize the spread of turbid waters outside the project area;
- Federal and State permit conditions related to the maintenance of water quality standards shall be implemented throughout the term of construction; and
- Hazardous waste and oil spill contingency plans and spill response equipment should be kept on site or nearby the harbor during marina construction.

### **5.1.2 Marina Operations**

Best Management Practices for marina operation and management should be implemented to reduce the potential for water quality and benthic habitat degradation at the Dana Point Harbor Marina. These BMPs include, but are not limited to:

- The project applicant should provide each marina tenant with a copy of all applicable regulations regarding vessel discharges of wastes, antifouling paint use, and refuse management (including handling of hazardous wastes) as part of the lease materials;
- The project applicant should provide each marina tenant with information regarding procedures for notifying appropriate authorities regarding spills of hazardous materials, containment measures, and applicable penalties for violations as a part of lease materials;
- The project applicant should provide regular cleaning of the marina dock facilities and vacuum sweeping of the parking lots;
- Adequate signs should be posted to identify the location off pump-out stations, and hours of operation;
- The pump-out facility should be user friendly;
- The project applicant should develop and adhere to a regular inspection and maintenance schedule for the pump-out facility;
- The project applicant shall provide educational information about the pump out station to tenant boaters;
- The project applicant shall enforce existing local, state and federal regulations pertaining to marine sanitation devices and the illegal discharge of boat sewage; and;

- The project applicant shall post and make available to boaters a list of other local pump out locations.

To prevent long-term impacts on local water quality, a Marina Management Plan should be developed to provide tenants and boaters with reasonable BMPs, safety guidelines, and steps to take in response to accidental spills, leakages and fires to reduce the potential for water quality degradation. In addition, two pamphlets *The Guide to Clean, Green Boating* (California Department of Fish and Game 1999) and *Clean Boating* (California Department of Boating and Waterways (undated material) should be distributed and made available to both hotel management and marina tenants.

Clean Marinas California Program (2006) has developed a guidebook for to making marinas environmentally clean facilities and to help protect the state's waterways from pollution. This guidebook is available at <http://cleanmarinascalifornia.org>. It is recommended that a copy of this document be kept onsite in the Dana Point Marina Office.

## **5.2 EELGRASS BED RESOURCES**

### **5.2.2 Operation**

Eelgrass does not occur within the project area. No BMPs or mitigation measures required.

## **5.3 INVASIVE SPECIES**

### **5.3.1 Construction**

*Caulerpa* nor *Undaria* occurs within the project area. No BMPs or mitigation measures required. However, pre-construction surveys will be required to document the presence/absence of these species per ACOE permit conditions.

### **5.3.2 Operation**

In the event that *Caulerpa* or *Undaria* are found within the Dana Point Marina, eradication mitigation measures will have to be implemented per agency requirements. It is not known if eradication of *Undaria* will be required in the event it is found.

## **6.0 LITERATURE CITED**

Chambers Group, Inc. 2005. Letter report to the County of Orange RDMD re: the completion of eelgrass surveys at Baby Beach in April 2005. 1 pp.

Chambers Group, Inc. 2006. Letter report to the Dana Point Harbor Department re: the completion of launch ramp *Caulerpa taxifolia* survey in August, 2006. 1 pp.

Clean Marinas California. 2006. Clean Marinas California Program. <http://cleanmarinascalifornia.org>. Rev. June 2006.

Coastal Resources Management. 1993. *Upper Newport Bay environmental evaluation*. Appendix E, Marine and Estuarine Resources in: Upper Newport Bay Reconnaissance Study. Final Report. Prepared by R. Ware for Coastal Frontiers Corporation and the U.S. Army Corps of Engineers. 202 pp.

Geotechnical Inc., 2006. Appendix B. Particle size testing results. in: Kinnetic Laboratories, Inc. and Moffatt and Nichol, 2007. Dredge material evaluation. Dana Point Harbor maintenance dredging report. Prepared for the Dana Point Harbor Department and the County of Orange.

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National Marine Fisheries Service. 2006. *Caulerpa Control Protocol*. <http://swr.nmfs.noaa.gov/hcd/caulerpa/ccp.pdf>. 7 pp.

National Marine Fisheries Service. 1991 (as amended). *Southern California eelgrass mitigation policy*. 4 pp. Revision 11, 30 August, 2005.

Robert Bein, William Frost Associates and MBC Applied Environmental Sciences 2003. Dana Point Harbor Revitalization Plan EIR. Marine Oceanographic and Biological Assessment. Prepared for the County of Orange Department of Harbors, Beaches, and Parks. (no date).

Wiegel, Robert L. 1993. Dana Point Harbor, California. *Shore and Beach* 61 (3):37-55.



**APPENDIX 1. *CAULERPA TAXIFOLIA* REPORTING FORM  
(PER NATIONAL MARINE FISHERIES SERVICE AND CALIFORNIA DEPARTMENT  
OF FISH AND GAME REQUIREMENTS)**

***Caulerpa taxifolia* Survey Reporting Form**  
**Dana Point Harbor Marina Renovation Project,**  
**Dana Point, CA**

Prepared for:  
**LSA Associates, Inc.**  
**20 Executive Park, Suite 200, Irvine, California**  
**Contact: Rob Balen**  
**(949) 533-0666**

Prepared by:  
**Coastal Resources Management, Inc.**  
**PMB 327, 3334 E. Coast Highway, Corona del Mar, CA 92625**  
**Contact: Rick Ware, Senior Marine Biologist**  
**(949) 412-9446**

**June 15<sup>th</sup>, 2007**



This form is required to be submitted for any surveys conducted for the invasive exotic alga *Caulerpa taxifolia* that are required to be conducted under federal or state permits and authorizations issued by the U.S. Army Corps of Engineers or Regional Water Quality Control Boards (Regions 8 & 9). The form has been designed to assist in controlling the costs of reporting while ensuring that the required information necessary to identify and control any potential impacts of the authorized actions on the spread of *Caulerpa*. Surveys required to be conducted for this species are subject to modification through publication of revisions to the *Caulerpa* survey policy. It is incumbent upon the authorized permittee to ensure that survey work is following the latest protocols. For further information on these protocols, please contact: Robert Hoffman, National Marine Fisheries Service (NOAA Fisheries), (562) 980-4043, or William Paznokas, California Department of Fish & Game, (858) 467-4218).

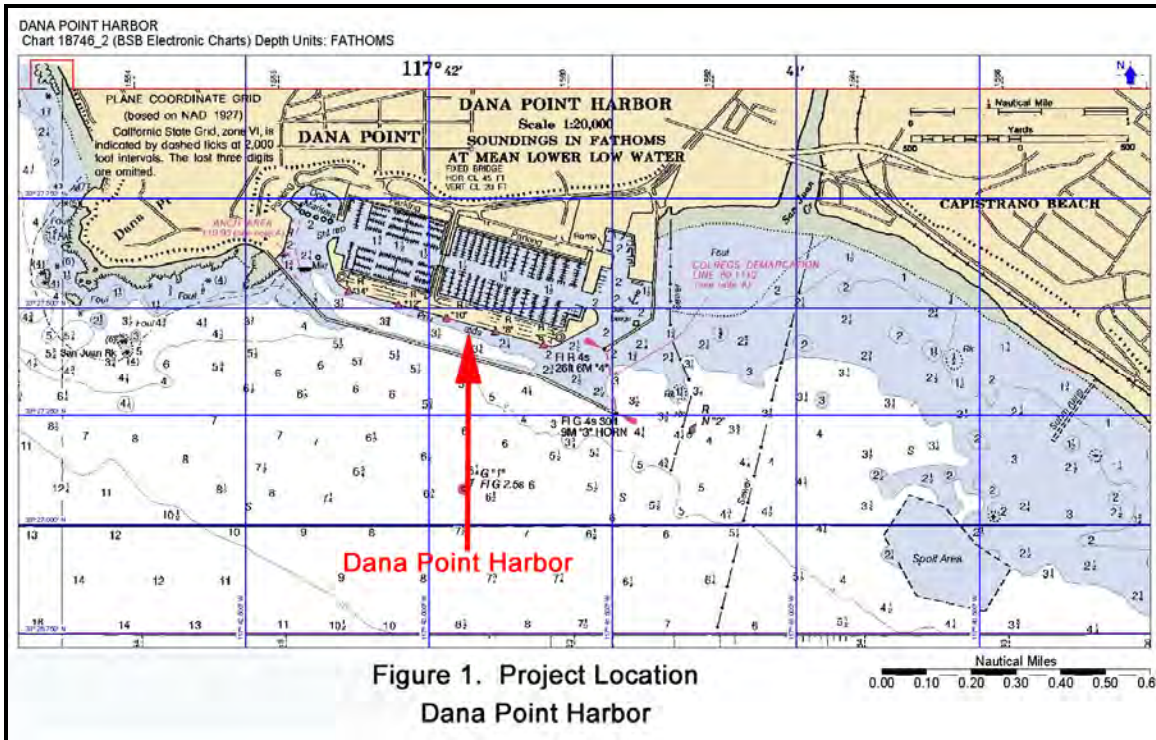
<b>Report Date:</b>	April 9 <sup>th</sup> , 2007
<b>Name of bay, estuary, lagoon, or harbor:</b>	Dana Point Harbor, Dana Point, Orange County, California. See Figure 1.
<b>Specific Location Name:</b>	Dana Point Marina Basins and the vicinity of Baby Beach/Youth Sailing Center. See Figures 2-4.
<b>Site Coordinates:</b> (UTM, Lat./Long., datum, accuracy level, and an electronic survey area map or hard copy of the map <b>must</b> be included).	Center of Marina Basins: 33.45983 ° N; 118.69817 ° W Accuracy: 1 m, WGS 84
<b>Survey Contact:</b> (name, phone, e-mail)	Rick Ware, Senior Marine Biologist, Coastal Resources Management, Inc. , (949) 412-9446, <a href="mailto:rware.crm@earthlink.net">rware.crm@earthlink.net</a>
<b>Personnel Conducting Survey (if other than above): name, phone, email</b>	Mr. Stephen Whitaker (Certified Caulerpa Surveyor) Mr. Tom Gerlinger (vessel skipper/dive tender)
<b>Permit Reference:</b> (ACOE Permit No., RWQCB Order or Cert. No.)	Pending.
<b>Is this the first or second survey for this project?</b>	Initial Survey for Marina Basins.
<b>Was <i>Caulerpa</i> Detected?:</b> (if <i>Caulerpa</i> is found, please immediately contact NOAA Fisheries or CDFG personnel identified above)	<u>  XX  </u> No, <i>Caulerpa</i> was not found at this site.

<p><b>Description of Permitted Work:</b> (describe briefly the work to be conducted at the site under the permits identified above)</p>	<p>The County of Orange proposes upgrade landside and waterside facilities within Dana Point Harbor. Waterside-upgrades include the renovation of the marina basin dock systems by replacing old and deteriorating docks, slips and gangways with new facilities. The number of boat slips will decrease to 2009 (Marina Layout 2 with channel encroachment). A total of 1,163 existing piles will be removed and approximately 933 new piles will be placed. In addition, the proposed project includes adding handicap access at locations that is currently not available; renovating the Dana Point Harbor Launch Ramp (recently completed), spot-dredging with Cove East Marina, and larger scale dredging in the western (Baby Beach) and southern (jetty) sections of the Harbor (Figures 2 and 3). Bulkheads will not be affected by the project. This report addresses the waterside upgrade of the marina dock systems.</p>	
<p><b>Description of Site:</b> (describe the physical and biological conditions within the survey area at the time of the survey and provide insight into variability, if known. Please provide units for all numerical information).</p>	<p><i>Depth range:</i></p>	<p>0.0 ft to -15 ft MLLW.</p>
	<p><i>Substrate type:</i></p>	<p>Silt sediments in most part of areas surveyed. Silty sand sediments west of basins near Baby Beach.</p>
	<p><i>Temperature:</i></p>	<p>57- 59 degrees F</p>
	<p><i>Salinity:</i></p>	<p>25-35 ppt</p>
	<p><i>Dominant flora:</i></p>	<p>See Table 1 for a list of species observed. Dominant algae species included <i>Chaetomorpha aerea</i> and <i>Ulva intestinalis</i>.</p>
	<p><i>Dominant fauna:</i></p>	<p>Few benthic invertebrates were observed on soft-bottom habitats. Most organisms were observed on dock pilings and isolated rock outcrops near the Youth Sailing Center. The dominants in the upper three feet of the piling community included a complex of green algae (<i>Ulva intestinalis</i>), a turf and filamentous red algae complex, brown algae (<i>Colpomenia perigrina</i>, <i>Dictyota undulata</i>, and <i>Sargassum muticum</i>), hydroids (<i>Aglaophenia</i> sp.), serpulid polychaete worms, barnacles (<i>Balanus amphitrite</i> and <i>B. glandula</i>), and mussels (<i>Mytilus galloprovincialis</i>). The mid-depth piling community (-3 to -7 ft) was dominated by a mixture of polychaete worms (serpulids and the calcareous tube-building <i>Dodecaceria fewksii</i>), mussels, solitary tunicates (<i>Styela plicata</i>), and ectoprocts (<i>Bugula neritina</i> and unid. encrusting forms). The lower-depth piling community (-7 to -10 ft MLLW) was colonized primarily by tunicates, ectoprocts, and hydroids. Fish were not commonly observed during the survey.</p>
	<p><i>Exotic species encountered (including any other Caulerpa species):</i></p>	<p><i>Sargassum muticum</i></p>
	<p><i>Other site description notes:</i></p>	<p>No eelgrass was found.</p>

<b>Description of Survey Effort:</b>	<i>Survey date and time period:</i>	February 20 <sup>th</sup> , March 6 <sup>th</sup> , and March 16 <sup>th</sup> , 2007 0800-1600
<b>Description of Survey Effort:</b> please describe the surveys conducted including type of survey (SCUBA, remote video, etc.) and survey methods employed, date of work, and survey density (estimated percentage of the bottom actually viewed).	<i>Horizontal visibility in water:</i>	Visibility was 3 ft on each side of the center line.
	<i>Survey type and methods:</i>	<p>A total of 70, variable-length underwater transects (15 meters to 153 meters in length) were swam using SCUBA (1) in the Cove East and West and the Island East and West marina basins (Figure 4). In addition, 43 transects varying in length between and 50 m long were swam in front of the sailing center and Baby Beach. Fourteen dock piles in the Cove East and the Island East marina basins were also surveyed to determine the types and relative abundances of marine organisms (Figure 4) that might be affected by marina construction.</p> <p>The dive surveys covered a total of 12,228 sq m (3 acres) of bayfloor habitat within the east and west marina basins and a total of 6,650 sq m (1.64 acres) in the vicinity of Baby Beach and the Youth Sailing Center (Figure 4). Overall, the bottom area of cover surveyed by biologist was 14% in the marina basins and between 58% and 65% at Baby Beach and the Youth Sailing Center. The higher intensity surveys within Baby Beach and the Youth Sailing Center reflected habitat that had a greater probability of locating either eelgrass or Caulerpa, since a very small patch of eelgrass (three turions) was located there in April 2005 (Chambers Group, Inc. 2005).</p> <p>The total area of open water habitat and water habitat underneath the docks (Area of Potential Effect) in the project area was 62,859 sq ft (1.44 acres)</p> <p>Bottom types, common marine life, and the presence or absence of Caulerpa taxifolia and Zostera marina were noted. Depths were standardized to Mean Lower Low Water (MLLW) based upon time of observation and tidal corrections for the San Clemente Pier tidal survey station.</p>
Describe any limitations encountered during the survey efforts.	<i>Survey personnel:</i>	Rick Ware, Steve Whitaker and Tom Gerlinger, Coastal Resources Management, Inc.
	<i>Survey density:</i>	A total of 70, variable-length underwater transects (15 meters to 153 meters in length) were swam using SCUBA (1) in the Cove East and West and the Island East and West marina basins (Figure 4). In addition,

		43 transects varying in length between and 50 m long were swam in front of the sailing center and Baby Beach.
	<i>Survey limitations:</i>	Vessel movement within the project area.
<b>Other Information:</b> (use this space to provide additional information or references to attached maps, reports, etc.)	See attached project maps and tables. Figure 1- Project Location Figure 2-Marina Basin Layout Figure 3- Proposed Dock Layout Plan Figure 4-Transect Locations Table 1- Organisms Observed During the Survey	

Caulerpa Survey Reporting Form (version 1.2, 10/31/04)







**Figure 2. Location of Marina Basins and Baby Beach**

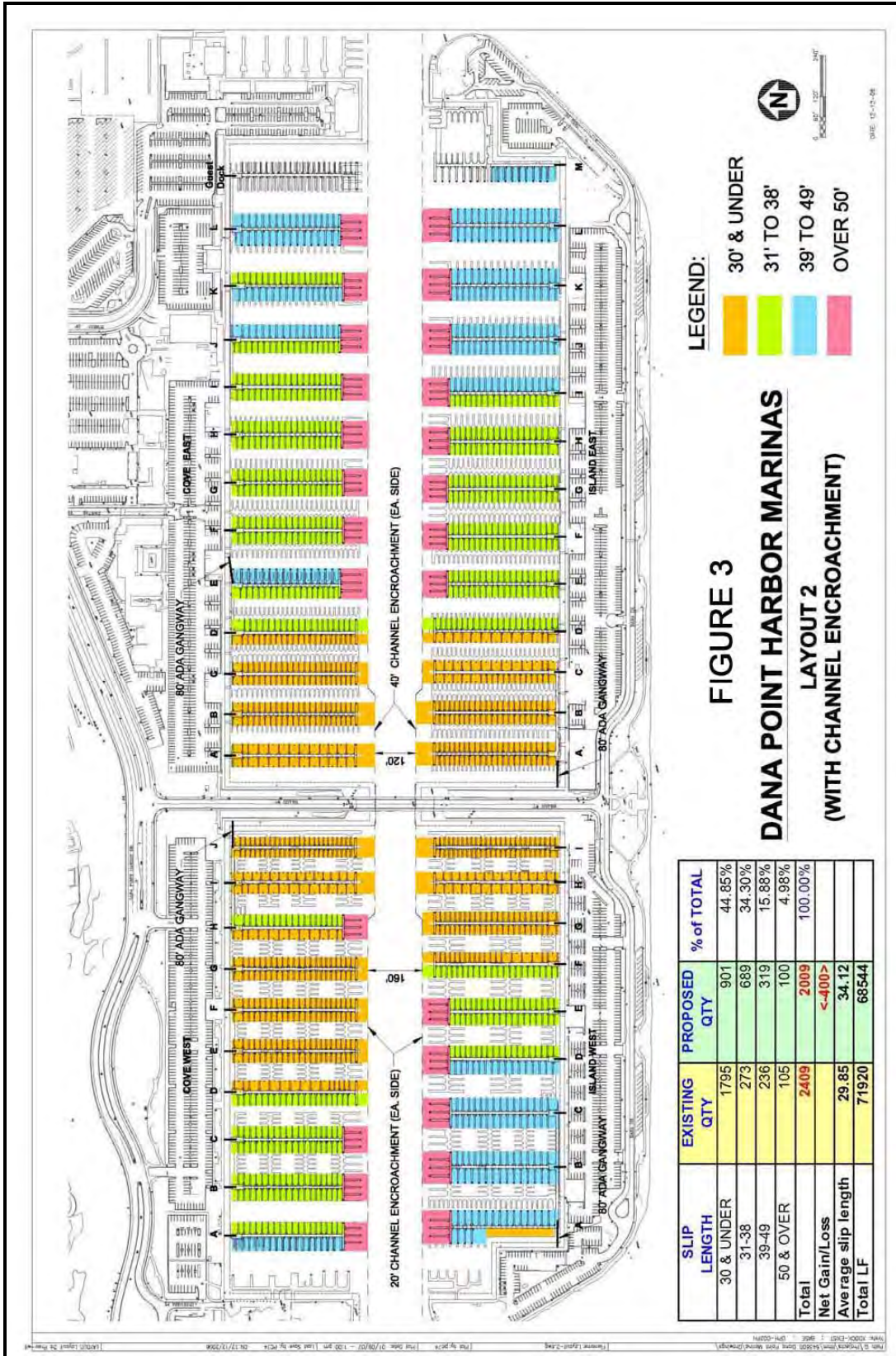




Table 1. List of Organisms Observed During Subtidal Surveys, Feb-Mar 2007

Common Name	Scientific Name	Marina Epibenthos	Marina Pilings and Bulkhead	Youth Sailing Center Reefs and Rip Rap	All Areas
diatom mat	Bacillariophyceae	x	x	x	x
green algae	<i>Chaetomorpha aerea</i>	x	x		x
green algae	<i>Ulva intestinalis</i>	x	x	x	x
brown algae	<i>Colpomenia perigrina</i>		x	x	x
brown algae	<i>Dictyopteris undulata</i>		x		x
brown algae	<i>Dictyota flabellata</i>		x		x
brown algae	<i>Dictyoacea</i> , unid.		x	x	x
brown algae	<i>Eisenia arborea</i>		x	x	x
brown algae	<i>Sargassum muticum</i>		x	x	x
red algae	<i>Corallina vancouverensis</i>		x	x	x
red algae	Filamentous Red Algae		x	x	x
red algae	<i>Polysiphonia</i> sp.		x		x
red algae	red turf algae (complex)		x		x
sponge	<i>Haliclona</i> sp.	x	x	x	x
hydroid	<i>Aglaophenia</i> sp.		x		x
white gorgonian	<i>Muricea fruticosa</i>		x	x	x
polychaete	<i>Dodecaceria fewksii</i>		x		x
polychaete	<i>Phragmatopoma californica</i>		x	x	x
polychaete	Sabellidae, unid.		x		x
polychaete	Serpulidae, unid.		x	x	x
polychaete	Spirorbidae, unid.		x	x	x
barnacle	<i>Balanus amphitrite</i>		x	x	x
barnacle	<i>Balanus glandula</i>		x	x	x
lined shore crab	<i>Pachygrapsus crassipes</i>		x	x	x
lobster	<i>Panilurus interruptus</i>			x	x
limpet	<i>Lottia digitalis</i>				x
limpet	<i>MacClintokea (Collisella) scabra</i>			x	x
slipper shell	<i>Crepidula onyx</i>			x	x
Kellet's whelk	<i>Kelletia kelletii</i>			x	x
rock scallop	<i>Crassedoma giganteum</i>		x		x
bay mussel	<i>Mytilus galloprovincialis</i>		x	x	x
sea slug	<i>Navanax inermis</i>	x			x
octopus	<i>Octopus bimaculoides</i>	x			x
reverse chama	<i>Pseudochama exogyra</i>		x	x	x
festive murex snail	<i>Pteropurpura festiva</i>	x	x		x
soft ectoproct	<i>Anguinella palmata</i>		x		x
moss animal	<i>Bugula neritina</i>		x		x
moss animal	encrusting ectoprocts		x		x
colonial tunicate	<i>Botrylloides</i> sp.		x		x
colonial tunicate	colonial tunicates		x		x

Common Name (continued)	Scientific Name	Marina Epibenthos	Marina Pilings and Bulkhead	Youth Sailing Center Reefs and Rip Rap	All Areas
solitary tunicate	Ascideacea, unid.		x	x	x
solitary tunicate	<i>Styela plicata</i>		x		x
opaleye perch	<i>Girella nigricans</i>			x	x
garibaldi	<i>Hypsypops rubicundus</i>			x	x
flatfish	unid. Flatfish	x			x
round sting ray	<i>Urolophus halleri</i>	x			x
	<b>Total Taxa</b>	<b>9</b>	<b>35</b>	<b>25</b>	<b>46</b>

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April 16, 2007

Mr. Rick Ware

## **COASTAL RESOURCES MANAGEMENT**

*PMB 327, 3334 East Coast Highway*

*Corona del Mar, CA 92625*

### **Subject: Dana Point Harbor Bird Survey**

Dear Rick,

On March 24, Robb Hamilton, ornithologist with Keane Biological Consulting, completed a nesting bird survey at Dana Point Harbor in southern Orange County, California. This survey was conducted as a component of mitigation measures specified in the Dana Point Harbor Revitalization Project Program EIR (PEIR) prepared for the County of Orange by Robert Bein, William Frost, and Associates (RBF) in 2006. This letter report describes the methods and provides the results of our survey.

### **Methods**

Before starting the survey, Mr. Hamilton reviewed the relevant sections of the PEIR, including Appendix C, the "Marine Biological and Oceanographic Assessment" prepared by RBF and MBC Applied Environmental Sciences. He also read Section 4.7 of the PEIR, "Biological Resources." The survey extended from 9:15 a.m. to 2:15 p.m. under partly cloudy skies, with temperatures between 66 and 74° F and winds of up to three miles per hour. Mr. Hamilton searched all portions of the harbor, as specified on Exhibit 4.7-1, the "Map of Native Trees and Sensitive Bird Areas" from the PEIR. Mr. Hamilton searched for all types of birds, recorded every bird he encountered, and took note of any indications that a bird may have been nesting at the harbor (e.g., courtship behavior, singing). Mr. Hamilton specifically searched for Black-crowned Night-Herons (*Nycticorax nycticorax*) that are known to nest in eucalyptus trees located at the end of Puerto Place at the harbor's eastern end. He also searched for and Snowy Egrets (*Egretta thula*), which reportedly nest "in trees on the east side of the Harbor" (Page 4.7-33 of the PEIR). He used a GPS unit accurate to approximately 12 feet in order to plot the locations of birds that showed signs of nesting or potential nesting (see Figure 1). A list of all bird species detected during the survey is included at the end of this report.

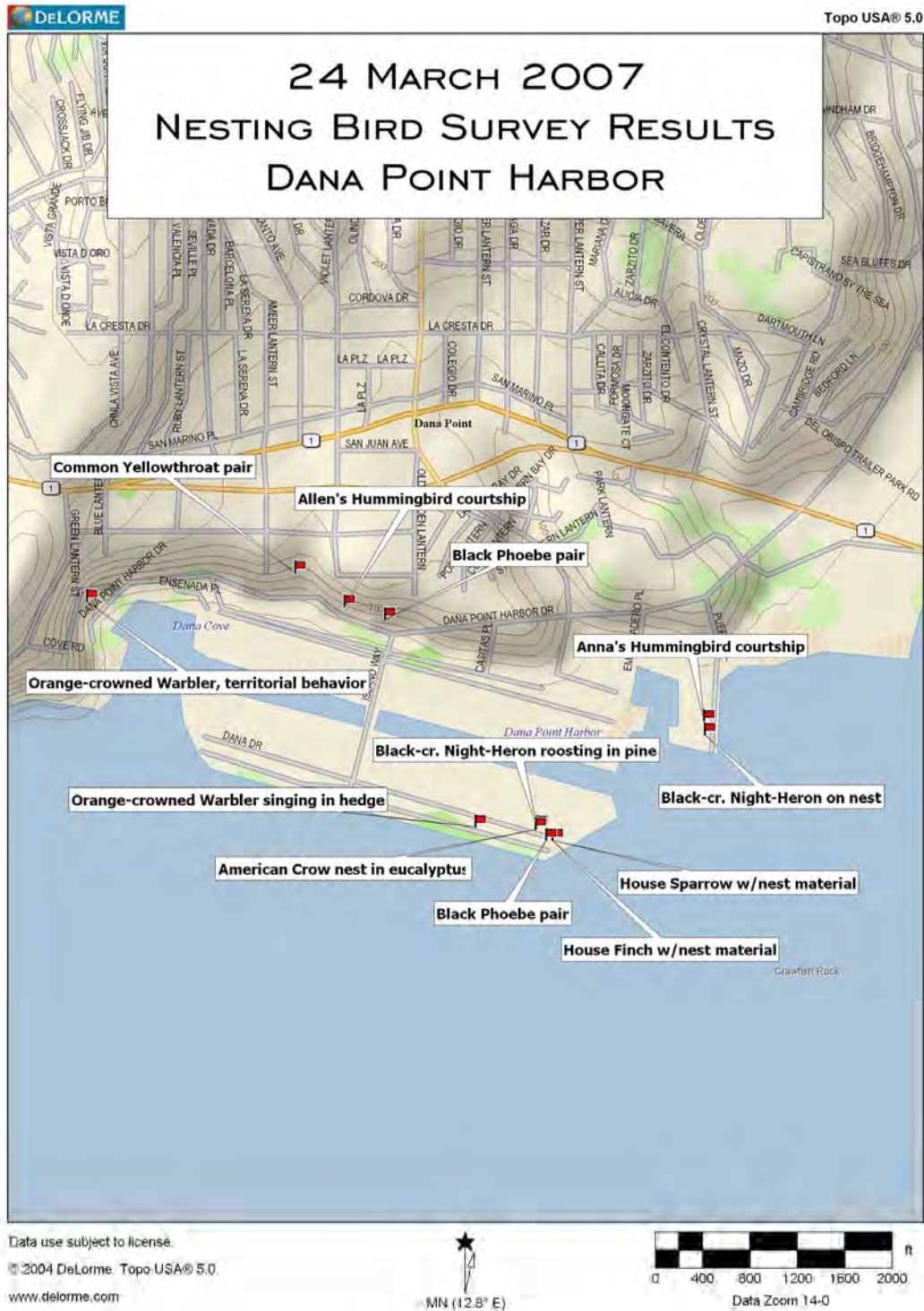


Figure 1. Evidence of definite or potential bird nesting (and heron roosting) detected during the March 24 survey (each point was mapped with a GPS unit accurate to approximately 12 feet)

## Results

As detailed below and in the attached species list, Mr. Hamilton detected 34 native and three non-native bird species during the survey. The following discussions are not meant to identify all species that potentially nest within the harbor study area, but only to provide basic information on the known or likely nesting status of each species that he observed during the one-day survey. Within the study area, Mr. Hamilton considered 14 of the observed species to be known or likely breeders, eight to be potential breeders, and the remaining 15 species to be non-breeding winter visitors or migrants passing through the area.

### Species Known or Likely to Nest in the Harbor Study Area

In eucalyptus trees at the end of Puerto Place, Mr. Hamilton observed approximately 20 nests of **Black-crowned Night-Herons** and/or **Snowy Egrets** (see Figure 1). Page 4.7-33 of the PEIR states that Snowy Egrets nest “in trees on the east side of the Harbor” and are “subject to construction disturbance that may disrupt nesting,” although Page 4.7-14 of the same document states, with reference to this species, “There is no suitable nesting habitat present in the Harbor or Off-Site areas.” Mr. Hamilton’s survey was not intended to conclusively answer the question of whether both species nest in these trees, but only to record the species that were nesting within the study area at the time of his survey. Mr. Hamilton saw two adult Black-crowned Night-Herons in one of the trees—one on a nest and the other calling from beside a nest—suggesting that at least the Black-crowned Night-Herons had initiated nesting at this location. In his opinion, these trees provide potentially suitable habitat for Snowy Egrets, as well, and some of the unoccupied nests may have belonged to Snowy Egrets. If it is important to determine whether Snowy Egrets nest at this location, Mr. Hamilton recommends that a follow-up survey be conducted between late May and the end of June. In a parking lot off Dana Drive, one adult Black-crowned Night-Heron was observed roosting in a 20-foot tall pine tree (see Figure 1).

Mr. Hamilton observed courtship flights by males of both **Anna’s** and **Allen’s Hummingbirds** (*Calypte anna*, *Selasphorus sasin*), and it is to be expected that both of these species nest in the harbor study area, with Allen’s Hummingbird being about three times more numerous. Most of the Allen’s Hummingbirds were along Dana Point Harbor Drive, where coastal scrub on the adjacent hillside to the north provides appropriate nesting habitat.

Mr. Hamilton observed two pairs of **Black Phoebes** (*Sayornis nigricans*), one near the eastern end of Dana Drive and the other along Dana Point Harbor Drive (see Figure 1). This is a very adaptable species, and Mr. Hamilton assumes that both pairs will nest within the study area. They often choose locations under bridges, in culverts, or under the eaves of structures, typically close to water.

Mr. Hamilton found **American Crows** (*Corvus brachyrhynchos*) to be common in the harbor, including about 20 birds in and around the eucalyptus trees at the end of Puerto Place, where the herons are nesting. Mr. Hamilton expects that many crows nest in the harbor’s various tall trees but observed only one pair at a nest, in a eucalyptus tree growing in a parking lot toward the eastern end of Dana Drive (see Figure 1).



The **Barn Swallow** (*Petrochelidon rustica*) tends to nest in areas comparable to those described above for the Black Phoebe, usually near the coast. Mr. Hamilton observed eight of these birds foraging low over the study area during the survey and expects that this species routinely nests at the harbor.

**Bushtits** (*Psaltriparius minimus*) are abundant residents of the region that nest in a variety of dense trees and shrubs, often in developed areas. Mr. Hamilton observed approximately 16 of these birds along Dana Point Harbor Drive, and expects that several pairs nest in this part of the study area.

The non-native **European Starling** (*Sturnus vulgaris*) is an abundant and ubiquitous species in Orange County. They nest in a great variety of cavities, often in artificial situations such as traffic signals, telephone poles, and in structures. Mr. Hamilton made a rough count of 60 of these birds during our survey and assumes that many nest within the harbor study area.

The **Common Yellowthroat** (*Geothlypis trichas*) is found commonly in the local area, often in wet areas with dense understory. The harbor study area includes only one such area—the hidden dripping spring located north of Dana Point Harbor Drive (see Figure 1). Mr. Hamilton saw a pair of these birds at this spring and presumes that they nest there.

Toward the end of the survey Mr. Hamilton observed a single male **Hooded Oriole** (*Icterus cucullatus*), a migratory species that starts arriving back in southern California around mid-March. This species nests most commonly in palm trees, but will also use sycamores and eucalyptus, both of which occur in the harbor study area.

The **House Finch** (*Carpodacus mexicanus*) is one of southern California's commonest and most human-tolerant native species. Mr. Hamilton made an approximate count of 80 of these birds during the survey, including a pair that was carrying nesting material at the Beach House restaurant near the eastern end of Dana Drive (see Figure 1). Mr. Hamilton expects that this is among the most abundant breeding species within the harbor study area.

Another common resident is the **Lesser Goldfinch** (*Carduelis psaltria*). Mr. Hamilton observed approximately 16 birds in tall pine and eucalyptus trees along Dana Point Harbor Drive, and the birds almost certainly nest in these trees.

Mr. Hamilton found eight non-native **House Sparrows** (*Passer domesticus*) during the survey, which is a modest number for this ubiquitous species. A pair of them was building a nest at the Beach House restaurant near the eastern end of Dana Drive (see Figure 1).

### **Other Species that Potentially Nest in the Harbor Study Area**

The non-native **Rock Pigeon** (*Columba livia*) occurs commonly throughout developed portions of Orange County, including cities and agricultural areas. These birds nest on natural cliffs, under bridges, and in buildings. Mr. Hamilton estimated a count of roughly 25 Rock Pigeons in the harbor study area. He did not see any obvious nesting sites during his survey, but these pigeons are very adaptable and there is potential for them to nest in the study area.

**Nuttall's Woodpecker** (*Picoides nuttallii*) is a non-migratory species that usually occupies native oak and willow-riparian woodlands. Mr. Hamilton heard a single bird calling from non-native trees along Dana Point Harbor Drive. It seems unlikely, but not impossible, that the harbor supports a breeding pair of this species.

Mr. Hamilton observed a single **Cassin's Kingbird** (*Tyrannus vociferans*) in eucalyptus trees in the pay parking lot adjacent to Doheny State Beach. Mr. Hamilton expects that this species nests in tall trees either within the harbor study area or at Doheny State Beach.

In a parking lot near the western end of Dana Point Harbor Drive, Mr. Hamilton observed single individuals of the following resident species: **Western Scrub-Jay** (*Aphelocoma californica*), **Northern Mockingbird** (*Mimus polyglottos*), and **California Towhee** (*Pipilo crissalis*). It is likely these birds nest in scrubby habitat just west of there, outside of the harbor study area.

Mr. Hamilton observed one **Common Raven** (*Corvus corax*) flying over the study area. This species prefers to nest on cliffs or tall structures, or in tall trees. They tend to be found in more open areas, but some nest in urban settings and may breed in the harbor area.

The "Dusky" subspecies of the **Orange-crowned Warbler** (*Vermivora celata sordida*) breeds in low vegetation on the Channel Islands and along the adjacent coast of southern California. Other subspecies occur as regular migrants and winter visitors along the coast. Mr. Hamilton observed seven Orange-crowned Warblers during the survey, at least a two of which appeared to be the local breeders. As shown on Figure 1, one of these birds was singing and another exhibited territorial behavior, chipping excitedly and aggressively flying out toward Mr. Hamilton when he "pished" in its direction. Either of these birds may have been on breeding territories, as both were in the type of low, dense vegetation preferred by this species. This species can, however, sing and respond aggressively to pishing even during migration or on the wintering grounds.

**Brewer's Blackbirds** (*Euphagus cyanocephalus*) nest in dense shrubbery, often close to water and sometimes in urban or suburban settings. Mr. Hamilton observed two males of this species during the survey and considers it possible that they nest in the harbor study area.

### **Additional Comments**

During the course of the survey, Mr. Hamilton observed a few scattered bulky stick nests built high in eucalyptus trees. These may have been old nests of American Crows or possibly Black-crowned Night-Herons, but Mr. Hamilton did not see any birds currently associated with them.

Mr. Hamilton observed a single Great Blue Heron (*Ardea herodias*) foraging within the harbor study area. Page 9 of PEIR Appendix C states, "Although nesting seems likely, great blue heron (*Ardea herodias*) nests have not been observed in the area." From the end of Puerto Place Mr. Hamilton could see a large, flat-topped pine tree a short distance inland to the northwest where it appears that a few pairs of this species do currently nest (see Figure 2). He did not go off site to inspect this tree but believes it is located at the northwestern end of Heritage Park, at the end of Old Golden Lantern. Great Blue Herons in coastal southern California utilize a great variety of nesting substrates, including many exotic tree species and man-made structures. Proximity to human activity does not seem to deter these

birds once they decide to nest in a certain area. Although Mr. Hamilton did not observe any nests of this species during his survey, and it appeared to him that the species had chosen to nest in the nearby pine tree shown in Figure 2, he concluded that the harbor study area includes numerous tall trees that constitute potentially suitable habitat for Great Blue Herons.

## **Conclusion**

Attachment A to this letter lists all bird species detected during the survey, including breeders, non-breeding winter visitors, and migrants. Please note that Mr. Hamilton's single-day survey was not intended to identify all bird species that potentially nest within the harbor study area, and that additional species not detected during Mr. Hamilton's survey could nest there.

During his survey, Mr. Hamilton confirmed nesting by three native and one non-native bird species in the Dana Point Harbor study area:

Black-crowned Night-Heron  
American Crow  
House Finch  
House Sparrow (non-native)

Mr. Hamilton observed an additional nine native and one non-native species that he considers likely to nest in the harbor study area:

Snowy Egret  
Anna's Hummingbird  
Allen's Hummingbird  
Black Phoebe  
Barn Swallow  
Bushtit  
European Starling (non-native)  
Common Yellowthroat  
Hooded Oriole  
Lesser Goldfinch

Another ten native and one non-native species observed during Mr. Hamilton's survey could potentially nest in the harbor study area, because this area lies within their ranges and potentially suitable nesting habitat exists there, but he considered the likelihood of nesting to be less than 50%:

Great Blue Heron  
Rock Pigeon (non-native)  
Nuttall's Woodpecker  
Cassin's Kingbird  
Western Scrub-Jay  
Northern Mockingbird  
California Towhee  
Common Raven

Orange-crowned Warbler  
Brewer's Blackbird

The remaining bird species observed during Mr. Hamilton's survey, such as the Brown Pelican (*Pelecanus occidentalis*), Double-crested Cormorant (*Phalacrocorax auratus*), Western Gull (*Larus occidentalis*), Ruby-crowned Kinglet (*Regulus calendula*), and White-crowned Sparrow (*Zonotrichia leucophrys*), do not include Dana Point within their breeding ranges and/or require nesting habitat that is absent from the harbor study area. Thus, they are considered very unlikely to nest within the harbor study area.

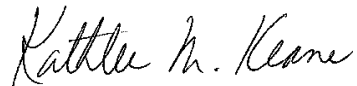
### **Recommendations**

- 1) Depending on project timing, construction may destroy one or more nests of native birds, thus violating the MBTA and/or related provisions of the California Fish and Game Code. Limiting project grubbing and other construction activities to the non-breeding season for most birds (approximately September 1 through March 1) would avoid this impact. If grubbing and grading cannot be limited to this period, a survey of the construction zone by a qualified ornithologist prior to the initiation of grubbing/grading activity shall be conducted. If the ornithologist detects any occupied nests of native birds within the construction zone, a minimum buffer of 100 feet between the nest and limits of construction shall be established, and the construction crew shall be instructed to avoid all activities in this zone until the nest(s) is/are no longer occupied, per a subsequent survey by the qualified ornithologist.
- 2) In order to avoid potential removal of, disturbance to, or abandonment of, heron or egret nests, if any project construction activities are to occur during the period from January 1 through July 30, a survey of the project site and areas within 100 feet shall be conducted by a qualified ornithologist to determine if active heron or egret nests are present within 100 feet of the construction zone. If any heron or egret nests are present within the construction zone, a buffer of 100 feet around the nest shall be flagged and maintained until construction is complete or until the nest is no longer active, per a subsequent survey by the qualified ornithologist. If any heron or egret nests are located outside the project site but within 100 feet of the project site, and any construction activities will occur within 100 feet of the nest(s), a qualified ornithologist shall monitor the nest(s) for 2 hours per day while construction activities are within 100 feet of the nest, following a "control" period of monitoring a minimum of two hours when no construction is occurring within 100 feet of the nest(s). If after five days of monitoring, no observable differences between heron or egret behavior before and during construction are noted, monitoring of the nest(s) need not continue.

Thank you for requesting the services of Keane Biological Consulting. If we can be of further assistance in this matter, please do not hesitate to call.

Sincerely,

**KEANE BIOLOGICAL CONSULTING**



Kathleen M. Keane



Figure 2. View from the end of Puerto Place, facing northwest. Several Great Blue Herons appeared to be nesting in the top of the tall, flat-topped pine in the background of this image.

## Attachment A BIRD SPECIES DETECTED

Mr. Hamilton detected the following birds at Dana Point Harbor on 24 March 2007. Presence may be noted if a species is seen or heard. The number of individuals detected, or a general indication of abundance, is denoted in parentheses after the common name.

\*Introduced species

### Aves

#### Podicipedidae

*Aechmophorus occidentalis*

#### Pelecanidae

*Pelecanus occidentalis*

#### Phalacrocoracidae

*Phalacrocorax auritus*

#### Ardeidae

*Ardea herodias*

*Egretta thula*

*Nycticorax nycticorax*

#### Rallidae

*Fulica americana*

#### Laridae

*Larus heermanni*

*Larus delawarensis*

*Larus californicus*

*Larus occidentalis*

#### Columbidae

\* *Columba livia*

#### Trochilidae

*Calypte anna*

*Selasphorus sasin*

#### Picidae

*Picoides nuttallii*

#### Tyrannidae

*Sayornis nigricans*

*Tyrannus vociferans*

### Birds

#### Grebes

Western Grebe (1)

#### Pelicans

Brown Pelican (69)

#### Cormorants

Double-crested Cormorant (7)

#### Hérons

Great Blue Heron (1)

Snowy Egret (3)

Black-crowned Night-Heron (3)

#### Rails, Gallinules

American Coot (1)

#### Gulls, Terns

Heermann's Gull (1)

Ring-billed Gull (many flying over)

California Gull (many flying over)

Western Gull (many flying over)

#### Pigeons, Doves

Rock Pigeon (~25)

#### Hummingbirds

Anna's Hummingbird (5)

Allen's Hummingbird (17)

#### Woodpeckers

Nuttall's Woodpecker (1)

#### Tyrant Flycatchers

Black Phoebe (4)

Cassin's Kingbird (1)

**Corvidae**

*Aphelocoma californica*  
*Corvus brachyrhynchos*  
*Corvus corax*

**Hirundinidae**

*Petrochelidon rustica*

**Aegithalidae**

*Psaltriparus minimus*

**Regulidae**

*Regulus calendula*

**Mimidae**

*Mimus polyglottos*

**Sturnidae**

\* *Sturnus vulgaris*

**Parulidae**

*Vermivora celata*  
*Dendroica petechia*  
*Dendroica coronata*  
*Geothlypis trichas*

**Emberizidae**

*Pipilo crissalis*  
*Zonotrichia leucophrys*  
*Junco hyemalis*

**Icteridae**

*Euphagus cyanocephalus*  
*Icterus cucullatus*

**Fringillidae**

*Carpodacus mexicanus*  
*Carduelis psaltria*

**Passeridae**

\* *Passer domesticus*

**Jays, Crows**

Western Scrub-Jay (1)  
 American Crow (~40)  
 Common Raven (1)

**Swallows**

Barn Swallow (8)

**Bushtits**

Bushtit (~16)

**Kinglets, Gnatcatchers, Thrushes, Babblers**

Ruby-crowned Kinglet (2)

**Thrashers**

Northern Mockingbird (1)

**Starlings**

European Starling (~60)

**Wood Warblers**

Orange-crowned Warbler (7)  
 Yellow Warbler (1)  
 Yellow-rumped Warbler (~50)  
 Common Yellowthroat (2)

**Sparrows and Buntings**

California Towhee (1)  
 White-crowned Sparrow (15)  
 Dark-eyed Junco (1)

**Meadowlarks, Blackbirds and Orioles**

Brewer's Blackbird (2)  
 Hooded Oriole (1)

**Finches**

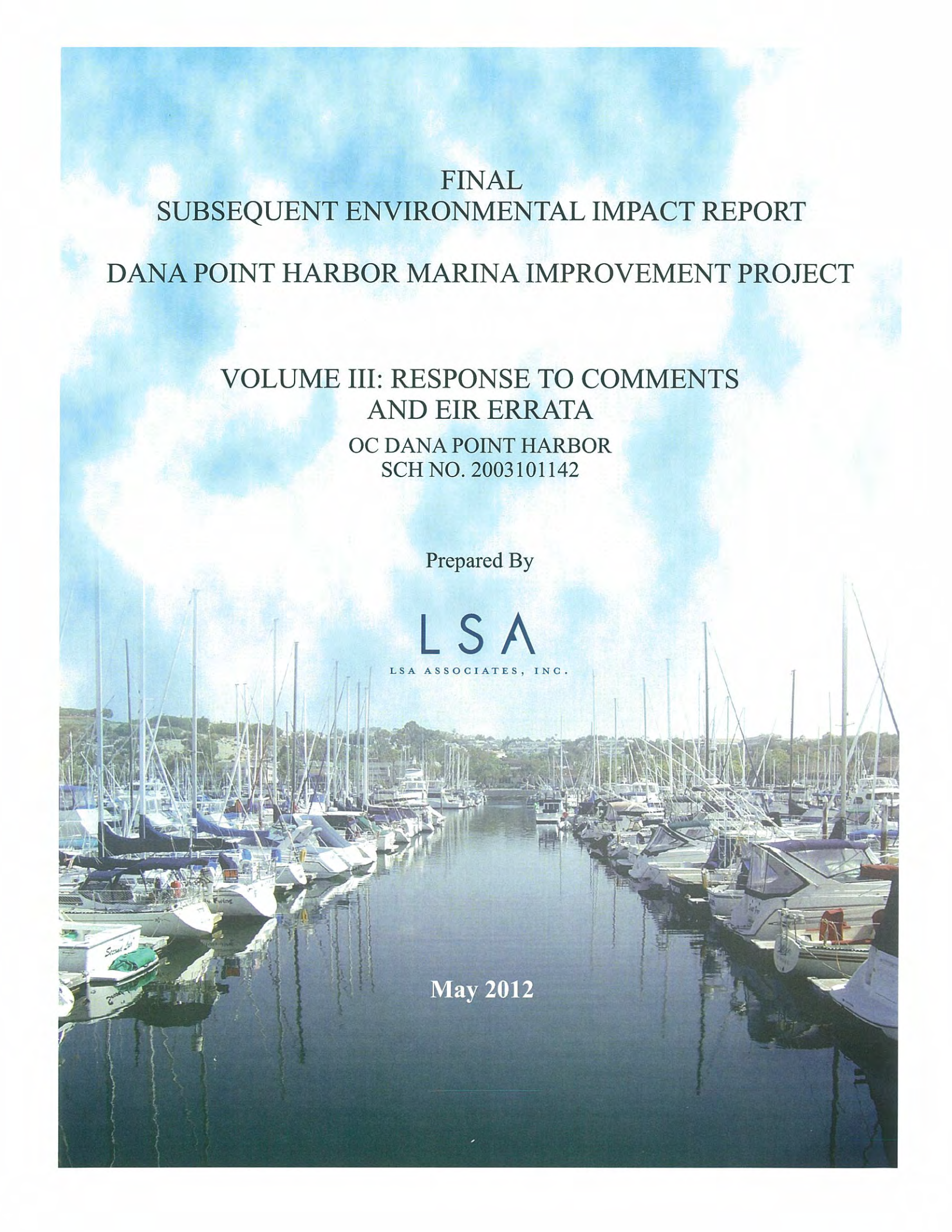
House Finch (~80)  
 Lesser Goldfinch (~14)

**Old World Sparrows**

House Sparrow (8)

**References**

American Ornithologists' Union. 1998. *Check-list of North American Birds*. Seventh ed. Washington, D.C. plus supplements.



FINAL  
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT

VOLUME III: RESPONSE TO COMMENTS  
AND EIR ERRATA

OC DANA POINT HARBOR  
SCH NO. 2003101142

Prepared By

LSA

LSA ASSOCIATES, INC.

May 2012



FINAL  
SUBSEQUENT ENVIRONMENTAL IMPACT  
REPORT

DANA POINT HARBOR MARINA  
IMPROVEMENT PROJECT

VOLUME III: RESPONSE TO COMMENTS  
AND ERRATA

OC DANA POINT HARBOR

SCH NO. 2003101142

LSA

May 2012

## TABLE OF CONTENTS

INTRODUCTION.....	1
INDEX OF COMMENTS RECEIVED.....	2
FORMAT OF RESPONSES TO COMMENTS.....	4
PROJECT REFINEMENTS .....	4
COMMON RESPONSES.....	10
STATE AND LOCAL AGENCIES.....	14
NATIVE AMERICAN HERITAGE COMMISSION.....	15
CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 12.....	18
DEPARTMENT OF TOXIC SUBSTANCES CONTROL .....	19
STATE CLEARINGHOUSE .....	20
CALIFORNIA COASTAL COMMISSION .....	21
OC PUBLIC WORKS .....	23
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT.....	28
PUBLIC AND INTERESTED PARTIES.....	29
BILL PRESTRIDGE .....	30
VALERIE BURCHFIELD RHODES .....	31
WILLIAM C. PALMER.....	32
SOUTH COAST SAILING TEAM.....	34
HABIB HOSSEINY .....	37
LESLIE NELSON .....	38
KATHLEEN, DAVID, JACKIE, TIM SPENCE AND AARON WETZEL.....	39
BEVERLY LEYMAN.....	41
JOSH SMOLENAK.....	42
KENDALL BAILEY .....	43
STEVE WYMAN.....	44
RON COOK.....	45
TONI FLORES.....	46
LEAH FETAH.....	48
BECKY LEETCH.....	49
DONNA AND ARTHUR CARTER .....	50
CYNTHIA FLETCHER .....	51
BILLY KHO .....	52
JAMES TALAY .....	53
DOUG ABRAMSON .....	54
DOUG BLACK .....	56
JACQUELINE PRICE.....	58
MAX MONAHAN .....	59
DEBRA MONAHAN .....	60
WORLD PADDLE ASSOCIATION - BYRON KURT .....	61
BILL AND JOAN CVENGROS .....	62
MICHAEL MAURI.....	63
THERESE HALL .....	64
TERRI PLUNKETT .....	66
JILL CUPPVICKERY .....	67
NICOLE HALL .....	68

ELIZABETH HARRINGTON.....	69
MARY ELLEN AND DAVE BROWN.....	71
MICHAEL HALL.....	73
ANDREW AND CYNTHIA MOUACDIE.....	75
NICHOLAS E. FLORES.....	76
PENNY ELIA.....	77
SURFERS ENVIRONMENTAL ALLIANCE.....	78
THOMAS SHAHINIAN.....	79
WILLARD SOMERS.....	80
PAUL GALVEZ.....	81
MARCIE FROLOV.....	82
YVONNE HEUSLER GALVEZ.....	83
KRISTIN THOMAS.....	84
CHUCK PATTERSON.....	85
CALIFORNIA SHIPS TO REEFS.....	86
DANA POINT BOATERS ASSOCIATION.....	88
JEFF JOHNSON.....	90
MARY JANE JOHNSON.....	91
STEPHEN HILL.....	92
WESTWIND SAILING – DIANE WENZEL.....	93
DANA POINT AQUATIC FOUNDATION – DIANE J WENZEL.....	94
MIRACLES FOR KIDS – TOM SWANECAMP.....	96
BARBARA MERRIMAN.....	97
DOUGLAS HEIM.....	99
STEVE BOEHNE.....	100
SURFERS ENVIRONMENTAL ALLIANCE – ANDREW MENCINSKY.....	101
LIS DUBOIS.....	102
JOSEPH AND BARBARA GILDNER.....	103
HUMAN POWERED WATERCRAFT ASSOCIATION.....	104
PAMELA PATTERSON.....	105
BOATERS FOR DANA POINT HARBOR.....	107
DAVID AND AUDREY ZINKE.....	111
APRIL SALEM AND FAMILY.....	113
CHOC – KRISTIN M HAWKING, MSW.....	115
STAND UP PADDLE ALLIANCE – MIKE MUIR.....	116
SAVE BABY BEACH COALITION.....	117
LORI J VAN HOVE.....	125
ALLEANNA CLARK.....	126
JOHN CLARK.....	127
TOM NULTY, JR.....	129
SHIRLEY ZANTON.....	130
WILLIAM J KINDEL.....	131
MICKY AND PEGGY MUNOZ.....	132
TOM JONES.....	133
DAN AND CAROL PELKEY.....	134
SUPLOVE – DEB JOHNSTON.....	135
ED AND ELAINE RAUTERKUS.....	136

RYAN AND LAUREN HARRINGTON.....	137
SURFERS ENVIRONMENTAL ALLIANCE.....	139
EIR ERRATA .....	140
INTRODUCTION .....	140
PAGE 4.3-1 OF THE DRAFT SEIR .....	142
PAGE 4.3-3 OF THE DRAFT SEIR .....	143
PAGE 4.3-7 OF THE DRAFT SEIR .....	144

**FIGURE**

Figure 1: Project Revisions - OC Sailing and Event Center Docks .....	6
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**ATTACHMENTS**

- A: CODED COMMENT LETTERS
- B: LATE COMMENT LETTERS

## INTRODUCTION

This document comprises the Comments and Responses volume of the Final Subsequent Environmental Impact Report (SEIR) for the proposed Dana Point Harbor Marina Improvement project. The purpose of this document is to respond to all comments received by OC Dana Point Harbor regarding the environmental information and analyses contained in the Draft SEIR.

As required by the California Environmental Quality Act (CEQA) Guidelines Section 15087, a Notice of Completion (NOC) of the Draft SEIR for the Dana Point Harbor Marina Improvement project was filed with the State Clearinghouse on September 20, 2011, and the Notice of Availability (NOA) of the Draft SEIR was filed with the County Clerk on September 20, 2011.

The Draft SEIR was circulated for public review for a period of 45 days, from September 20, 2011 to November 4, 2011. Copies of the Draft SEIR were distributed to all Responsible Agencies and to the State Clearinghouse in addition to various public agencies, citizen groups and interested individuals. Copies of the Draft SEIR were also made available for public review at OC Dana Point Harbor, County Offices, the City of Dana Point, four area libraries and on the internet. Due to a request from concerned stakeholders to have additional time to review the Draft SEIR, OC Dana Point Harbor extended the public review period to November 21, 2011, for a total of 62 days. The NOA advising of the extended review period was re-issued and filed with the County Clerk on October 22, 2011.

A total of 88 comment letters were received during the public review period. Comments were received from 5 State agencies, 2 local agencies, and 81 private individuals/interested parties. It should be noted that the Save Baby Beach Coalition (identified below as Comment Letter P-68) submitted over 600 form letters all expressing the same concerns. These form letters have been addressed as one comment letter for the ease of readers reviewing this document. A table listing all the persons submitting the form letters is attached to Comment Letter P-68. Comments that address environmental issues are thoroughly responded to. Comments that (1) do not address the adequacy or completeness of the Draft SEIR; (2) do not raise environmental issues; or (3) do request the incorporation of additional information not relevant to environmental issues do not require a response, pursuant to Section 15088(a) of the State CEQA Guidelines.

Section 15088 of the State CEQA Guidelines, Evaluation of and Response to Comments, states:

- a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft SEIR and shall prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.
- b) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail, giving the reasons that specific

comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

- c) The response to comments may take the form of a revision to the Draft SEIR or may be a separate section in the Final SEIR. Where the response to comments makes important changes in the information contained in the text of the Draft SEIR, the lead agency should either:
1. Revise the text in the body of the Draft SEIR; or
  2. Include marginal notes showing that the information is revised in the responses to comments.

Information provided in this Response to Comments document clarifies, amplifies or makes minor modifications to the Draft SEIR. No significant changes have been made to the information contained in the Draft SEIR as a result of the responses to comments and no significant new information has been added that would require recirculation of the document.

An Errata to the Draft SEIR has been prepared to make minor corrections and clarifications to the Draft SEIR as a result of OC Dana Point Harbor review and comments received during the public review period. Therefore, this Response to Comments document, along with the Errata is included as part of the Final SEIR for consideration by the Orange County Board of Supervisors prior to taking any action on certification of the Final SEIR.

## INDEX OF COMMENTS RECEIVED

The following is an index list of the agencies, organizations and individuals that commented on the Draft SEIR prior to the close of the public comment period or thereafter. The comments received have been organized by date received and in a manner that facilitates finding a particular comment or set of comments. Each comment letter received is indexed with a number below.

Comment Code	Signatory	Date
<b>State</b>		
S-1	Native American Heritage Commission	9-29-11
S-2	California Department of Transportation	11-3-11
S-3	Department of Toxic Substances Control	11-3-11
S-4	State Clearinghouse Office of Planning and Research	11-7-11
S-5	California Coastal Commission	11-21-11
<b>Local</b>		
L-1	OC Public Works	11-1-11
L-2	SCAQMD	11-18-11
<b>Public/Interested Groups</b>		
P-1	Bill Prestridge	10-14-11
P-2	Valerie Burchfield Rhodes	10-25-11
P-3	William C. Palmer	10-27-11
P-4	South Coast Sailing Team	10-29-11
P-5	Habib Hosseiny	10-30-11

Comment Code	Signatory	Date
P-6	Leslie Nelson	10-30-11
P-7	Kathleen, David, Jackie, Tim Spence and Aaron Wetzel	11-1-11
P-8	Becki Kolander	11-2-11
P-9	Beverly Leyman	11-3-11
P-10	Josh Smolenak	11-3-11
P-11	Kendall Bailey	11-4-11
P-12	Steve Wyman	11-6-11
P-13	Ron Cook	11-6-11
P-14	Toni Flores	11-7-11
P-15	Leah Fetah	11-7-11
P-16	Becky Leetch	11-7-11
P-17	Donna and Arthur Carter	11-7-11
P-18	Cynthia Fletcher	11-8-11
P-19	Billy Kho	11-10-11
P-20	James E. Talay	11-11-11
P-21	Doug Abramson	11-11-11
P-22	Doug Black	11-12-11
P-23	Jacqueline Price	11-12-11
P-24	Max Monahan	11-13-11
P-25	Debra Monahan	11-14-11
P-26	World Paddle Association - Byron Kurt	11-15-11
P-27	Bill and Joan Cvengros	11-15-11
P-28	Michael Mauri	11-15-11
P-29	Therese Hall	11-15-11
P-30	Terri Plunkett	11-16-11
P-31	Jill Cupp Vickery	11-16-11
P-32	Nicole Hall	11-16-11
P-33	Elizabeth Harrington	11-17-11
P-34	Mary Ellen and Dave Brown	11-17-11
P-35	Michael Hall	11-17-11
P-36	Andrew and Cynthia Mouacdie	11-17-11
P-37	Nicholas E. Flores	11-18-11
P-38	Penny Elia	11-18-11
P-39	Surfers Environmental Alliance	11-18-11
P-40	Thomas Shahinian	11-18-11
P-41	Willard Somers	11-18-11
P-42	Paul Galvez	11-18-11
P-43	Marcie Frolov	11-18-11
P-44	Yvonne Heusler Galvez	11-18-11
P-45	Kristin Thomas	11-18-11
P-46	Chuck Patterson	11-18-11
P-47	California Ships to Reefs	11-19-11
P-48	Dana Point Boaters Association	11-19-11
P-49	Jeff Johnson	11-19-11
P-50	Mary Jane Johnson	11-19-11
P-51	Stephen Hill	11-19-11
P-52	Westwind Sailing - Diane Wenzel	11-19-11
P-53	Dana Point Aquatic Foundation - Diane J. Wenzel	11-19-11
P-54	Miracles for Kids - Tom Swanecamp	11-20-11

Comment Code	Signatory	Date
P-55	Barbara Merriman	11-20-11
P-56	Douglas Heim	11-20-11
P-57	Steve Boehne	11-20-11
P-58	Surfers Environmental Alliance - Andrew Mencinsky	11-20-11
P-59	Lis DuBois	11-20-11
P-60	Joseph and Barbara Gildner	11-21-11
P-61	Human Powered Watercraft Association	11-21-11
P-62	Pamela Patterson	11-21-11
P-63	Boaters for Dana Point Harbor	11-21-11
P-64	David and Audrey Zinke	11-21-11
P-65	April Salem and Family	11-21-11
P-66	CHOC - Kristin M. Hawking MSW	11-21-11
P-67	Stand Up Paddle Alliance – Mike Muir	11-21-11
P-68	Save Baby Beach Coalition	11-21-11
P-69	Lori J. Van Hove	11-21-11
P-70	Alleanna Clark	11-21-11
P-71	John Clark	11-21-11
P-72	Tom Nulty Jr.	11-21-11
P-73	Shirley Zanton	11-21-11
P-74	William J. Kindel	11-21-11
P-75	Mickey and Peggy Munoz	11-21-11
P-76	Tom Jones	11-21-11
P-77	Dan and Carolyn Pelkey	11-21-11
P-78	SUPLOVE - Deb Johnston	11-22-11
P-79	Ed and Elaine Rauterkus	11-21-11
P-80	Ryan and Lauren Harrington	11-21-11
P-81	Surfers Environmental Alliance	12-11-11

## FORMAT OF RESPONSES TO COMMENTS

Responses to each of the comment letters are provided on the following pages. The comment letters are contained in Attachment A of this document. The comment index numbers are provided in the upper right corner of each comment letter, and individual points within each letter are numbered along the right-hand margin. OC Dana Point Harbor’s responses to each comment letter are referenced by the index numbers in the margins. Some of the comment letters were received several weeks after the close of the public comment period. These letters are included in Attachment B to this document as part of the public record. A memo addressing the late comments is also included in Attachment B. An Errata, with text revisions, has been prepared to provide corrections and clarifications to the Draft SEIR where required.

## PROJECT REFINEMENTS

A majority of the comments received in response to the Draft SEIR were related to the design of the proposed replacement docks located west of and adjacent to the OC Sailing and Events Center Facility docks (refer to Figure 3.11 in Section 3.0 of the Draft SEIR).

A primary purpose of review and comment process on a Draft EIR or SEIR is to identify ways a project’s significant effects might be reduced or avoided. The CEQA Guidelines recognize that such



comments can be particularly helpful if they suggest additional alternatives or mitigation measures which can be addressed in the Responses to Comments. CEQA gives an agency authority to adopt a project alternative rather than the proposed project if the agency finds that the alternative will be less environmentally damaging than the proposed project [Public Resources Code 21002-21002.1, 21004; CEQA Guidelines 15002(a)]. CEQA encourages agencies to require changes in projects, including the approval of alternatives [CEQA Guidelines 15102 (a), (h), 15021 (a)]. The lead agency is not required to grant blanket approval of the proposed project. Decision makers have the flexibility to implement that portion of a project that satisfies their environmental concerns.

CEQA Guidelines, Section 15002.1(h) provides in part that, "The EIR itself does not control the way in which a project can be built or carried out. Rather, when ... a project could cause substantial adverse changes... the agency must respond... by one or more of the following changes:

- 1) Changing a proposed project.
- 4) Choosing an alternative way of meeting the same need."

CEQA Guidelines section 15088.5(d) provides that, "The response to comments may take the form of a revision to the draft EIR... Where the response makes important changes... the lead agency should either: (1) Revise the text in the body of the EIR, or (2) Include marginal notes showing that the information is revised in the response to comments."

In response to these comments, and as allowed under CEQA, OC Dana Point Harbor has made a modification to the proposed project design and is proposing to reduce the amount of new docks in the areas adjacent to Baby Beach (see Figure 1, Project Revisions). The proposed dock revisions will not replace any existing docks or slips and will not significantly alter the existing uses and activities associated with this area of the West Basin. The following project refinements, as illustrated in Figure 1 and described below, are hereby incorporated into the proposed project:

- The new dock area will be provided on the southernmost side of the facility near the inner channel of the Harbor. It is anticipated that the new dock will be utilized by boaters to access two new pump-out stations, which will be provided on the dock and for commercial charter passengers.
- The new ADA accessible gate and ramp will provide access to the new dock as well as the existing dock on the east side of the OC Sailing and Events Center.
- The docks on the western and eastern side of the OC Sailing and Events Center will remain unchanged.
- The new dock area will be an expansion into an area not currently occupied by docks and will create additional sewer pump-out locations as well as slip space for a commercial charter vessel, currently located at the end of the existing guest dock in the West Marina.

In addition to the proposed dock, OC Dana Point Harbor is proposing that the ultimate project design should include no channel narrowing, and no realignment of the West Basin. The proposed revised project would result in a net loss of no more than 155 slips, consistent with the Land Use Plan (LUP) approved with suggested modifications by the California Coastal Commission (CCC) on October 8,



2009. In addition, the revised project design is intended to be consistent with all applicable policies and requirements of the certified Dana Point Harbor Revitalization Plan and District Regulations.

The modified project as described herein incorporates design elements considered in several of the Draft SEIR Alternatives, including Alternatives 2 and 3, and would meet most of the project objectives. This project refinement was developed in response to comments received on the Draft SEIR and in an effort to reduce potential impacts of the proposed project. Although the revisions would not eliminate the unavoidable adverse impacts identified for the proposed project, the changes to the OC Sailing and Events Center dock area, elimination of channel narrowing and the elimination of the realignment of the West Basin does not result in additional or increased impacts as addressed in the Draft SEIR.

The revised project's potential impacts as compared to the proposed project analyzed in the Draft SEIR are described below.

### **Land Use**

The revised project would continue to provide Marina-related recreation uses on the project site and would therefore be consistent with the existing marine and water-related recreational uses at the site and the Revitalization Plan Local Coastal Plan Amendment (LCPA). Therefore, impacts for the revised project related to consistency with the Harbor Revitalization Plan and District Regulations are considered less than significant, similar to the project addressed in the Draft SEIR. As discussed in the Draft SEIR, all waterside improvements must be approved as part of a Coastal Development Permit (CDP) by the CCC prior to project construction. The waterside improvements associated with the revised project would still require approval of a CDP by the CCC due to the improvements being proposed within the waterside areas. Therefore, the planning effects (plan consistency) would be the same as under the proposed project because this alternative would require a CDP approval, similar to the proposed project. Therefore, land use impacts for the revised project are considered to be less than significant and the same as for the project analyzed in the Draft SEIR.

### **Geology and Soils**

Impacts related to geology and soils focus primarily on soil disturbance related to the construction of the ADA gangway platforms and potential impacts related to liquefaction. The revised project slightly reduces the amount of dock construction within the Harbor and reduces the number of ADA gangways by one; therefore, the revised project would result in slightly less soil disturbance and fewer potential geology-related impacts as compared to the project analyzed in the Draft SEIR. Impacts for the revised project, similar to the project addressed in the Draft SEIR, are considered less than significant with mitigation.

Similar to the proposed project, the revised project neither contributes to nor lessens the impacts associated with liquefaction. In the event of an earthquake that is capable of producing liquefied conditions, the potential for liquefaction to impact the seawall, gangways, and platforms is considered potentially significant. This impact is not a direct project impact, but rather an existing condition because the project area is subject to liquefaction in the event of an earthquake. Therefore, although the revised project disturbs less soil than the proposed project, potential liquefaction impacts are still deemed to be similar to the project analyzed in the Draft SEIR. Cumulative impacts due to existing liquefaction conditions remain significant and adverse, as they do for the proposed project.

## **Hydrology and Water Quality**

Similar to the project analyzed in the Draft SEIR, the revised project would not increase the capacity of the Marina or add a new uses and therefore, operational impacts related to the drainage pattern, runoff volumes, and pollutants from on and off site would remain essentially the same as in the existing condition. Therefore, operational drainage impacts for the revised project related to hydrology and water quality are similar to the project addressed in the Draft SEIR and are considered less than significant. Similar to the project analyzed in the Draft SEIR, the potential water quality construction impacts associated with the revised project can be mitigated to a less than significant level.

## **Transportation and Circulation**

Similar to the project analyzed in the Draft SEIR, the revised project would result in a reduction in the overall number of slips in the East and West Basins. Neither the project analyzed in the Draft SEIR nor the revised project increases the overall capacity of the Harbor, and neither would have impacts on the surrounding circulation system. In addition, operational impacts associated with this alternative, similar to the project analyzed in the Draft SEIR are considered to be less than significant, as there is adequate parking for operation of the Marinas.

Similar to the project analyzed in the Draft SEIR, the revised project would require the use of a construction staging area in the West Cove parking lot which would result in the loss of approximately 150 parking spaces for the duration of construction. Additional staging areas would be utilized as necessary and construction-related parking impacts to these areas, similar to the project analyzed in the Draft SEIR, are considered less than significant with mitigation.

The results of the Dana Point Harbor Boat Traffic Study (Moffatt and Nichol, November 2007) indicated that the project analyzed in the Draft SEIR would result in a slight decrease in the boating level of service for both basins. However, the study concluded that the magnitude of these changes is considered to be so minimal that the net result would be considered to have no change from existing conditions. The revised project would result in the loss of more slips than the project analyzed in the Draft SEIR (but no more than the 155 slip loss as recommended by the CCC), and would not include any channel narrowing. Therefore, operational boat traffic impacts would be reduced as compared to the project analyzed in the Draft SEIR. Boat traffic impacts for the revised project, similar to the project addressed in the Draft SEIR, are considered less than significant.

## **Air Quality**

The revised project would include the majority of the improvements included in the project analyzed in the Draft SEIR, with the exception of the OC Sailing and Events Center Docks near Baby Beach. Because construction would be essentially the same as for the project analyzed in the Draft SEIR, the duration of the project construction emissions would likewise be similar. The peak construction emissions generated during slip and pile removal and installation periods during construction for the project analyzed in the Draft SEIR would result in NO<sub>x</sub> and ROC emissions that would exceed the SCAQMD-established daily emissions threshold for those pollutants. The revised project would similarly exceed these thresholds because similar construction activities would take place in similar phases for construction of the improvements in the East and West Basins. Therefore, air quality

construction impacts would remain significant and adverse, which is the same as for the project analyzed in the Draft SEIR.

As with the project analyzed in the Draft SEIR, the revised project would not result in any substantive changes in long-term on-site stationary sources or result in changes to off-site vehicle trips and therefore would not have any significant long-term operational air quality impacts.

Similar to the project analyzed in the Draft SEIR, construction and operation of the revised project would result in GHG emissions; however, implementation would not result in GHG emission levels that would substantially conflict with implementation of the GHG reduction goals under AB 32 Governor's Executive Order S-3-05, or other strategies to help reduce GHGs to the levels proposed by the Governor. Therefore, the revised project impacts related to global climate change are considered less than cumulatively significant, similar to the project analyzed in the Draft SEIR.

### **Noise**

The revised project would not substantially reduce the duration of the construction operations or eliminate the pile driving required as compared to the project analyzed in the Draft SEIR. Therefore, the length of the construction-related noise impacts is similar to those of the project analyzed in the Draft SEIR. Implementation of the revised project is still expected to result in significant construction noise impacts due to the number of phases of construction still required and the duration of construction activities, including pile driving. As with the project analyzed in the Draft SEIR, the revised project would not result in any significant long-term operational noise impacts.

### **Biological Resources**

The revised project reduces the amount of dock construction as compared to the project analyzed in the Draft SEIR. Potential impacts to marine resources resulting from turbidity and accidental spills during construction activities, construction impacts to endangered species, impacts to sensitive or protected birds, and potential long-term water quality-related impacts to marine life would be slightly less but similar to the project analyzed in the Draft SEIR, which is less than significant with mitigation. However, the revised project would avoid potential impacts to the eelgrass habitat in the vicinity of the OC Sailing and Events Center docks; potential impacts related to the disturbance or removal of eelgrass in this area would be eliminated under the revised project. Therefore, biological impacts are considered to be less for the revised project as compared to the project analyzed in the Draft SEIR, which were considered less than significant with mitigation.

Shading impacts to marine biological resources due to new and additional dock coverage of water surfaces for the revised project would be slightly less but similar to the project analyzed in the Draft SEIR. These shading impacts are considered significant and adverse for the areas associated with the temporary/yacht broker docks. Therefore, the significant and adverse impacts due to shading would not be avoided under the revised project and would be similar to the project analyzed in the Draft SEIR.

### **Aesthetics**

The revised project includes the renovations to the East and West Basins, similar to the project analyzed in the Draft SEIR (but with no realignment of the West Basin, no OC Sailing and Events Center docks and no channel narrowing). As a result, impacts to views throughout the Basins would

be similar to the proposed project, which were considered less than significant. Under the revised project, potential aesthetic impacts related to construction would be somewhat reduced compared to impacts under the project analyzed in the Draft SEIR because fewer construction activities would occur adjacent to the OC Sailing and Events Center docks. However, the revised project would result in similar, less than significant impacts related to aesthetic resources as the project analyzed in the Draft SEIR.

### **Recreational Resources**

The revised project, similar to the project analyzed in the Draft SEIR, would replace the dock facilities in the East and West Basins, enhancing the existing recreational facilities. Neither the revised project nor the project analyzed in the Draft SEIR removes the Harbor's recreational facilities, and no potentially significant impacts are identified for either scenario. However, because this revised project results in the loss of more slips than the proposed project, there would be fewer recreational opportunities for boat owners and recreational boaters. Long-term recreational impacts would therefore be considered slightly greater, although still less than significant, for the revised project as compared to the project analyzed in the Draft SEIR.

The revised project would have construction-related impacts on recreational facilities similar to the project analyzed in the Draft SEIR, which were considered less than significant. The revised project, similar to the project analyzed in the Draft SEIR, would not cumulatively, along with other projects in the vicinity, result in increased demand for recreational facilities or require development or expansion of additional recreational facilities.

### **Hazards and Hazardous Materials**

Construction activities for the revised project would be slightly reduced but similar to the project analyzed in the Draft SEIR; the potential to encounter hazardous materials during construction of the revised project would therefore be similar to the project analyzed in the Draft SEIR, which was considered less than significant with mitigation. Long-term operational impacts related to hazards and hazardous materials for the revised project would be similar to the project analyzed in the Draft SEIR because the uses would continue to be recreational marine uses. Due to the existing Harbor regulations and best management practices (BMPs) related to water quality and boat maintenance activities, impacts related to the use of hazardous materials during operations are considered less than significant for the revised project, similar to the project analyzed in the Draft SEIR.

**Conclusion.** In summary, as compared to the project analyzed in the Draft SEIR, the revised project would reduce construction-related impacts associated with geology and soils, biological resources and hazardous materials. In addition, operational boat traffic impacts would be reduced as compared to the project analyzed in the Draft SEIR due to the reduced number of boats and the elimination of channel narrowing. Lastly, impacts to eelgrass resources in the areas west of the OC Sailing and Events Center facility near Baby Beach would be eliminated as no construction would occur in this area.

### **COMMON RESPONSES**

In response to similar comments received on the same issue, the following common responses have been prepared. Where appropriate, the responses to individual comments in the following pages are referenced back to one of the following common responses.

**Common Response 1: Congestion.** Many of the comments received stated that proposed docks adjacent to the OC Sailing and Events Center near Baby Beach would result in an overcrowding condition, limit the maneuverability of vessels in this basin, result in too many mixed uses and would cause collisions between human-powered craft and boats due to congestion as well as prevailing winds.

The following is a list of concerns raised in regard to perceived congested conditions:

- The Harbor is not of adequate size now for kayakers, standup paddlers, small boat sailors and the Dana outriggers
- The proposed configuration of the new docks on the west side of youth facility puts large motorized vessels in dangerously close proximity to Baby Beach
- These motorized vessels are typically skippered by youth who are novice skippers, putting the youth on the boats, the toddlers on the shore and the surrounding kayakers and paddle boarders at risk
- This part of the basin is too shallow to safely accommodate boats with keel hulls
- There is no space for correction should an engine fail or prevailing winds require a sudden change of direction by a vessel increasing the risk of a boat running aground or ending up on the beach
- The primary populations enjoying the beach at Baby Beach are babies and toddlers. Adding motorized vessels to the west docks will have a negative impact on this vulnerable population with increased pollution in very close proximity to the swim beach
- The existing docks on the west side are already very congested with activity involving Capris, Lasers, Sabots and paddle boards. Adding more vessels and people to this dock area will create an untenable level of congestion
- This encroachment and resulting congestion creates a dangerous situation and dramatically increases legal exposure for all involved parties including the County, Westwind and the Mariners organization

These comments state the commenters' views on the project, but do not raise any environmental issues under CEQA or their treatment in the Draft SEIR. These comments will be forwarded to the decision makers for their consideration.

However, in response to the comments, the potential renovations to the OC Sailing and Events Center docks, if constructed, will not create uses that currently do not exist in the area. While the expansion of the existing dock may occupy the open water areas which currently exist, it will not eliminate these areas, prevent access or limit maneuverability to levels seen as unsafe by the Harbor Patrol.

**Common Response 2: Safety.** Many of the comments received stated that the addition of the docks near Baby Beach posed several safety hazards, including but not limited to the location of power boats, a pump-out station and electrical conduits being placed in close proximity to the users of Baby Beach.

This comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

However, in response to the comments, pump-outs are necessary to prevent sewage spills and encourage improved water quality in the Harbor. Pump outs exist in the Harbor today. In fact, there is an existing pump-out in the OC Sailing and Events Center/Baby Beach area, which is located at the end of the guest docks. The proposed pump-out will replace this existing pump-out in the same general area, located about 150 feet to the west of this existing location, as shown on Figure 3.11 on page 3-30 of the Draft SEIR. The only swimming allowed in Dana Point Harbor is within the existing Baby Beach swim buoys. Although there is no evidence that electrical service provided at docks in the Harbor is a danger to swimmers, there should not be any swimmers within close proximity of the docks. In addition, the effects of vessels that could be docked in the potential dock expansion area, including emissions from such vessels, are also not seen as a danger to swimmers within the Baby Beach swim area buoys. The vessel usage in the area should not change since the small power vessels used as chase boats for the sailing programs will continue to operate in this area as they do now. Further, electrical service and small power boats are currently present throughout the Harbor in the same areas where human-powered craft are currently used. Finally, vessels currently used for educational purposes that are too large to access the proposed docks west of the OC Sailing and Events Center facilities would remain in a portion of the docks on the east side of OC Sailing and Events Center similar to their current location.

**Common Response 3: Access.** Many comments received stated that the proposed plan limits access as required by the Coastal Act, and would result in a reduction in the water area of the West Turning Basin in the vicinity of Baby Beach by 20 percent.

This comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

However, in response to the comments, the potential renovations to the OC Sailing and Events Center docks, if constructed, will not reduce the size of the sandy beach, change access to the beach or waterfront areas. The docks will be an expansion into a water area not currently occupied by docks but will be an extension to the existing OC Sailing and Events Center docks that are currently located on the same west side of the OC Sailing and Events Center. Vessels used for educational purposes that are too large to access the proposed docks would remain in a portion of the docks on the east side of the OC Sailing and Events Center facility similar to their current location. The proposed project is consistent with the California Coastal Act, which protects the public's access to coastal areas. The proposed project will not interfere with the public's right of access to the sea and will not interfere with or modify the public's right of access to the Dana Point Harbor facilities. The project will maintain the existing coastal access for the public, which will serve local and regional visitors and enhance the existing public recreational opportunities for boaters as well as for those without boats who wish to access the same facilities.

The potential renovation of the docks could occupy up to approximately 15 percent of the existing open waterfront area adjacent to Baby Beach. The docks could reduce the amount of open water available in the immediate area, but would not eliminate or prohibit access to Baby Beach for the launching of human-powered craft. The docks, if constructed, would include a ramp designed in accordance with the requirements of the Americans with Disabilities Act of 1990 (ADA) and a hand launch dock (low freeboard) for use by boaters with special access requirements for ease of boarding human-powered craft such as kayaks, paddleboards, or small outriggers, etc.



**Common Response 4: Educational Programs.** Many comments received stated that the proposed plan will negatively impact the existing educational programs and reduce the available dock space, and that the proposed OC Sailing and Events Center docks will congest and cramp existing operations. The comments also raise concerns related to the movement of the docks to the outer harbor from the inner harbor, the shoaling of the water in the area, the perceived design for larger vessels, and the privatization of community docks used for education purposes.

This comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

However, in response to the comment, the potential renovations to the OC Sailing and Events Center docks, if constructed, are not envisioned to have any negative effect on the existing programs, and the dock space available is envisioned to be equal to and possibly greater than what exists today. As previously stated, vessels currently used for educational purposes that are too large to access the proposed docks west of the OC Sailing and Events Center facilities would remain in a portion of the docks on the east side of OC Sailing and Events Center similar to their current location. The renovations and expansion of the dock facilities in this area do not include a programming component; the future programming of activities and educational classes at the OC Sailing and Events Center will be established independently by the providers of those activities.

**Common Response 5: Traffic/Parking.** Many of the comments received stated that the addition of the docks near Baby Beach would result in greater traffic and parking impacts, including a loss of public parking and parking designated for boaters.

In 1997, the Orange County Board of Supervisors (BOS) approved a boat slip/parking ratio for the marinas in Dana Point Harbor. More recently, the California Coastal Commission (CCC) approved Standards and Regulations for off-street parking in Dana Point Harbor in the 2011 certified Dana Point Harbor Implementation Plan (see Chapter 14), which was certified through a detailed public process. These Standards and Regulations contain specific parking ratios, which must be maintained to provide adequate parking for slip renters, launch ramp users, dry storage space renters, commercial fishing, sports fishing, and other Harbor users. The ratio for boat slip parking recently approved in 2011 by the CCC is the same ratio approved by the BOS in 1997. Any Coastal Development Permit proposing to establish an exception to or modification of these off-street parking requirements based on joint-use or shared parking considerations shall require a public hearing with public notification before the City of Dana Point Planning Commission. The regulations are intended to provide parking facilities of sufficient capacity and adequate proximity to manage traffic congestion, provide safe and convenient facilities for motorists and pedestrians and assure that required land area is provided for parking facilities for higher priority water-dependent and park-related uses before non-water dependent land uses can be intensified. Current proposed designs are consistent with the parking requirements mandated by the BOS, City of Dana Point and the CCC.

## STATE AND LOCAL AGENCIES

## **NATIVE AMERICAN HERITAGE COMMISSION**

**LETTER CODE: S-1**

**DATE: September 29, 2011**

### **Response S-1-1**

The comment is introductory and states that the Native American Heritage Commission (NAHC) is the State “trustee agency” pursuant to Public Resources Code Section 21070 for the protection and preservation of the State’s Native American resources. The comment also states that the letter contains state and federal statutes relating to Native American historic properties of religious and cultural significance.

The comment is introductory in nature and outlines the NAHC’s authority and role as a commenting agency. The NAHC’s introduction in this comment is noted, and no further response is required.

### **Response S-1-2**

The comment states that CEQA requires that any project that causes a substantial adverse change in the significance of a historical resource, which includes archaeological resources, is a “significant effect” requiring the preparation of an EIR.

A Draft SEIR has been prepared for the proposed project and was circulated for public review on September 19, 2011. As documented in the Initial Study (dated November 2007) for the Dana Point Harbor Marina Improvement Project SEIR, Section 3.11 Cultural/Scientific Resources (pages 3-28 through 3-39): “The Dana Point Harbor Revitalization Project Program FEIR [No. 591] indicated that no archaeological and/or historical resources were expected to occur within the Harbor project area. There are no historic buildings or resources located on site that would be impacted by the proposed project. In addition, the presence of prehistoric cultural material is unlikely because the waterside improvements involve the marina facilities in the Harbor waters and no landside excavation is required to replace the dock facilities. The waterside improvements are in a location that has historically been covered by water, and no cultural resources are likely to be discovered in the Harbor waters. In addition, the area was dredged to create the original Harbor and has subsequently been dredged for maintenance purposes since its inception. Hence, impacts to cultural resources are not anticipated and this issue was not evaluated further in the Draft SEIR.

However, as stated in Standard Condition of Approval 4.11-1 (Section 4.11.7, Standard Conditions of Approval in the Dana Point Harbor Revitalization Project Program FEIR [No. 591], pages 4.11-10 through 4.11-11), prior to the issuance of any Grading Permit, the County of Orange shall ensure that a County-certified consultant has been retained to observe and determine, if necessary, the appropriate actions and document the exploration and/or salvage of any discovered artifacts.

In addition, the requirements of mitigation measure MM 4.11-1 of the Dana Point Harbor Revitalization Project Program FEIR [No. 591] were expanded by the California Coastal Commission in their certification of the Dana Point Harbor Implementation Plan to include Special Provision

number 19 (Chapter II-3, General Regulations and Special Provisions) that states: "If human remains are encountered, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made a determination of the origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified immediately of any find. If the County Coroner determines that the human remains are Native American, the Native American Heritage Commission (NAHC) must be notified within twenty-four (24) hours. The NAHC is required to immediately notify the Most Likely Descendent (MLD) of the human remains. The MLD shall be consulted in the preparation and implementation of any mitigation plan that includes Native American human remains." All projects shall be required to be in compliance with these provisions.

### **Response S-1-3**

The comment states that the NAHC Sacred Lands File (SLF) search found that no Native American cultural resources were identified within the project area. Similarly, the Dana Point Harbor Revitalization Project Program FEIR [No. 591] and the subsequently prepared Initial Study for the Marina Improvement Project SEIR (November 2077) determined that cultural resources (historic or prehistoric) were unlikely to be discovered on the project site. See Response S-1-2.

### **Response S-1-4**

The comment states that NAHC Sacred Sites are confidential and exempt from the Public Records Act pursuant to California Government Code Section 6254. OC Dana Point Harbor acknowledges the sensitivity and confidentiality of the information contained in an SLF; no records maps have been made public.

### **Response S-1-5**

The comment states that early consultation with Native American Tribes in the area of the project site is the best way to avoid unanticipated discoveries once a project is underway. The letter includes a list of Native American contacts and recommends obtaining their recommendations concerning the proposed project. The Draft SEIR determined that no cultural resources are likely to be discovered in the Harbor waters, however project mitigation measures and implementation requirements have been included requiring Native American Heritage Commission notification in the unlikely event Native American cultural resources are discovered. See Response S-1-2.

### **Response S-1-6**

The comment states that consultation with Tribes and interested Native American consulting parties on the NAHC list should be conducted in compliance with the requirements of the National Environmental Policy Act (NEPA), Sections 106 and 4(f) of the National Historic Preservation Act, and the Native American Grave Protection and Repatriation Act (NAGPRA), as appropriate.

The project is not a federal undertaking as defined under Section 106 of the National Historic Preservation Act (NHPA) or 36 Code of Federal Regulations (CFR) Part 800 regulations implementing Section 106. The project does not use federal funds and will not require any federal permits. Therefore, the project does not fall under the regulatory oversight of Section 106. The project is not a federal transportation project, so it also does not fall under the jurisdiction of Section 4(f) of

the Department of Transportation Act of 1966. Since there is no federal involvement in the project, the requirements of NAGPRA do not apply. Further, as described in Response S-1-2, the Draft SEIR determined that no cultural resources are likely to be discovered in the Harbor waters. See Response S-1-2.

### **Response S-1-7**

The comment states that historic properties of religious and cultural significance are confidential and protected by California Government Code Section 6254. The comment further states that the confidentiality of such resources may also be protected by Section 304 of the NHPA. OC Dana Point Harbor acknowledges the sensitivity and confidentiality of any identified resources. In addition, because the project is not a federal undertaking, it is not regulated under Section 304 of the NHPA. See Response S-1-2.

### **Response S-1-8**

The comment cites provisions for accidentally discovered archaeological resources or human remains during construction. The Draft SEIR determined that no cultural resources are likely to be discovered in the Harbor waters. However, as stated in Standard Condition of Approval 4.11-1 (Section 4.11.7, Standard Conditions of Approval in the Dana Point Harbor Revitalization Project Program FEIR [No. 591], pages 4.11-10 through 4.11-11), prior to the issuance of any Grading Permit, the County of Orange shall ensure that a County-certified consultant has been retained to observe, determine if necessary the appropriate actions and document the exploration and/or salvage of any discovered artifacts. See Response S-1-2.

### **Response S-1-9**

The comment states that effective consultation, in the opinion of the NAHC is the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors. The comment does not contain any substantive statements or raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 12**

**LETTER CODE:** S-2

**DATE:** November 3, 2011

### **Response S-2-1**

The comment is introductory and summarizes the project description provided in the Draft SEIR. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR, and no further response is required.

### **Response S-2-2**

The comment states that any work in the vicinity of Caltrans right-of-way would require an encroachment permit and gives references for details on such permits. The proposed project does not include work within the vicinity of any identified Caltrans owned right-of-way. In the event any Caltrans right-of-way is under the jurisdiction of the City of Dana Point, the implementation requirements contained in the Dana Point Harbor Revitalization Plan and District Regulations, Implementation Plan Chapter II-3, General Regulations and Special Provisions requirement number 36 specifies that: "OC Dana Point Harbor shall prepare and process encroachment permits for any project work (e.g., street widening, emergency access improvements, storm drain construction, street connections, etc.) occurring in any City of Dana Point street right-of-way located within the Harbor boundary. Any future construction in the Harbor that encroaches into a City right-of-way will be required to process the appropriate permits prior to the commencement of construction. The comment is therefore noted, and no further response is required.

## **DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

**LETTER CODE: S-3**

**DATE:** November 3, 2011

### **Response S-3-1**

The comment is introductory and summarizes the project description provided in the Draft SEIR. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

### **Response S-3-2**

The comment states that the Department of Toxic Substances Control (DTSC) provided comments on the issued Notice of Preparation (NOP) and asks that all comments be addressed. The Draft SEIR addressed all pertinent comments in Section 4.10, Hazards and Hazardous Materials. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response S-3-3**

The comment states that DTSC can provide cleanup oversight and provides an informational phone number. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR, and no further response is required.

### **Response S-3-4**

This comment requests that future CEQA documents provide an email address so that comments can be sent electronically. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. Comment is noted and will be forwarded to the decision makers for their consideration.

## **STATE CLEARINGHOUSE**

**LETTER CODE:** S-4

**DATE:** November 7, 2011

### **Response S-4-1**

The comment is introductory and states that the State Clearinghouse submitted the Draft SEIR to selected state agencies for review and has enclosed the comment letters received. The comment letter enclosed is the Native American Heritage Commission letter, which has been addressed under Letter Code S-1. No further response is necessary.

### **Response S-4-2**

The comment acknowledges that the OC Dana Point Harbor has complied with State Clearinghouse notification and review requirements. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR, and no further response is necessary.



## CALIFORNIA COASTAL COMMISSION

**LETTER CODE:** S-5

**DATE:** November 21, 2011

### **Response S-5-1**

The comment is introductory and summarizes the project description provided in the Draft SEIR. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

### **Response S-5-2**

The comment states that the proposed project is located within the Coastal Zone and within the Coastal Commission's jurisdiction. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

### **Response S-5-3**

The comment introduces the following comments and states that the project must be evaluated for consistency with Chapter 3 policies of the California Coastal Act. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

### **Response S-5-4**

The comment states that eelgrass may be adversely impacted by the proposed project and that a preliminary eelgrass mitigation plan should be developed. In accordance with the requirements contained in the Dana Point Harbor Revitalization Plan and District Regulations, Implementation Plan Chapter II-3, General Regulations and Special Provisions, Implementation Provision number 24: "Prior to the potential disturbance to the shallow water marine substrate, OC Dana Point Harbor shall insure that a pre-construction eelgrass (*Zostera marina*) survey is completed in conformance with the most currently approved Southern California Eelgrass Mitigation Policy as adopted by the National Marine Fisheries Service, in consultation with the California Department of Fish and Game. The survey shall be conducted during the active growth period (typically March through October) when possible and make recommendations to avoid areas of eelgrass if determined to be present and/or provide recommendations for appropriate mitigation".

Concurrent with the preparation of the Pre-Construction Eelgrass Survey, OC Dana Point Harbor will identify existing sub-tidal areas within the Harbor that may be feasible eelgrass mitigation sites. These sites' respective attributes (i.e., the presence of near-by storm drains, water depths, underwater light levels, bottom habitat characteristics, tidal current patterns and bottom algal cover) as well as Harbor operational factors (i.e., public use and boat traffic) will be evaluated by the marine biological consultant and OC Dana Point Harbor. This information will then be incorporated into an Eelgrass

Mitigation Plan (EGMP) document, if required and a final mitigation site will be selected based on the highest potential for long-term eelgrass mitigation success.

OC Dana Point Harbor will also update the 2010 Coastal Resources Management, Inc. Focused Eelgrass Survey Report (CRM 2010) to determine how much eelgrass will be potentially impacted by the OC Sailing and Events Center docks since there has been a 2-year gap between eelgrass surveys. This information will be used in the preliminary EGMP to generate an updated impact analysis and to determine how much eelgrass donor material may be required if an eelgrass mitigation program is necessary. If no existing site meets standards for mitigation success, then additional mitigation site alternatives will be analyzed (i.e., the construction of an eelgrass mitigation site by either dredging or filling to create “eelgrass habitat”) as has been required for recent eelgrass mitigation projects in both Newport Bay (the renovation of the Irvine Company’s Balboa Marina) and in Alamitos Bay (the City of Long Beach Alamitos Bay Marina Revitalization Project).

### **Response S-5-5**

The comment requests that the number of boat slips removed and replaced at the Marine Services, Sport Fishing, and OC Sailing and Events Center docks be described in terms of slips rather than linear feet in order to get a better understanding of the slip replacement work in these areas. As stated in the Draft SEIR, certain dock areas accommodate a varying number and size of boats based on a fluctuating basis, not a permanent slip count. Furthermore, these particular areas are used for staging vessels of differing sizes for multiple uses. Therefore, capacity for these areas is discussed in terms of linear feet, not the number of slips. This is especially true for the three areas mentioned by the commenter. It is also true for the Embarcadero/Dry Boat Storage Staging Docks, which were not mentioned by the commenter. All four of these areas have long dock configurations rather than actual slips in many cases. For example, one portion at the Marine Services Dock area has a 75 ft long dock. This could accommodate one 75 foot vessel or it could accommodate multiple smaller vessels (the same general principle would apply to all of the other docks measured by linear feet in that the number of boats that can be identified can vary significantly depending on the size of the boats). This area happens to be a shipyard dock. Vessels located at the shipyard can change on a daily basis, so it is more appropriate to state the actual length of the dock rather than a specific number of vessels that could be accommodated on this dock. Since the existing and proposed linear footage is included in the Draft SEIR, it is simple to understand and compare the amount of dock space that could be removed or added. It is also important to note that these areas within the Harbor are completely separate from the East and West Basin Slips (Planning Areas 9 and 10), which currently contain 2,409 slips and where the Coastal Commission has established a goal of “no net loss of slips,” or no greater loss “than 155 slips overall” for any comprehensive redevelopment of the marina facilities.<sup>1</sup>

### **Response S-5-6**

The comment is a conclusion to the letter and requests that Commission staff be notified of any future activity associated with the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

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<sup>1</sup> Dana Point Harbor Revitalization Plan and District Regulations, Implementation Plan Section II-12.5, Site Development Standards and Requirements, letter n)

## OC PUBLIC WORKS

LETTER CODE: L-1

DATE: November 1, 2011

### Response L-1-1

The comment is introductory, states that the County of Orange has reviewed the NOA and Draft SEIR for the project, and offers comments that follow. No further response is required.

### Response L-1-2

The comment states that the document incorrectly identified the Dana Point Coastal Streams Watershed as a sub-watershed of the San Juan Creek. This was an error and has been corrected in the Draft SEIR as follows, included in the Errata, and will be included in the Final SEIR to be considered by decision makers:

*Page 4.3-1*

#### **Project Location**

Dana Point Harbor (Harbor), located within the City of Dana Point (City), is within the Dana Point hydrologic sub-area (HSA) (901.14) of the San Juan hydrologic unit (901), within the San Diego Basin. The Marina Improvement Project lies within the San Juan Creek Watershed (Watershed), which ultimately drains to the Pacific Ocean. More specifically, the Marina Improvement Project lies within the Dana Point Coastal Streams Watershed, a subwatershed of the San Juan Creek Watershed. The Dana Point Coastal Streams receiving water for the project site is the Harbor.

#### **~~San Juan Creek Watershed~~**

~~The San Juan Creek Watershed covers 133.9 square miles and includes portions of the cities of Dana Point, Laguna Hills, Laguna Niguel, Mission Viejo, Rancho Santa Margarita, and San Juan Capistrano. Its main tributary, San Juan Creek, originates in the Santa Ana Mountains district of the Cleveland National Forest in the easternmost part of Orange County.<sup>2</sup> A number of coastal drains discharge to the Pacific Ocean through Dana Point Harbor. San Juan Creek and its main tributaries, Arroyo Trabuco Creek and Oso Creek, flow into the Pacific Ocean, south of the Harbor. Salt Creek and its tributaries Arroyo Salado Creek and San Juan Canyon Creek discharge to Salt Creek Beach, north of Dana Point Harbor.~~

#### **Dana Point Coastal Streams Watershed**

The Dana Point Coastal Streams Watershed is located in southern Orange County, approximately 50 miles south of Los Angeles and 65 miles north of San Diego. The main tributary of the Dana Point Coastal Streams watershed is Salt Creek, which ultimately drains into the Pacific Ocean. The 6-

<sup>2</sup> Orange County Watershed and Coastal Resources Division Web site, <http://www.ocwatersheds.com/watersheds/sanjuan.asp>, accessed April 20, 2007.

square-mile watershed is almost fully developed and includes portions of the Cities of Dana Point and Laguna Niguel, and a very small area of San Juan Capistrano that does not drain into this watershed. Remaining undeveloped areas include open space within the Aliso and Wood Canyons Regional Park in the upper watershed and the Salt Creek Corridor Regional Park in the eastern part of the watershed. A few small, unnamed drainages and larger tributaries (Arroyo Salado Creek and San Juan Canyon Creek) join Salt Creek as it makes its way through the watershed. Also included in the Watershed are a number of coastal drains that discharge to the Pacific Ocean through Dana Point Harbor.<sup>3</sup>

**Response L-1-3**

The comment makes reference to a drain at the east end of Baby Beach that conveys runoff from a small parking lot area near the beach, stating it was unclear whether this drain is included in the table of storm drain facilities.

The Draft SEIR identified a 24-inch pipe that discharges drainage from the Baby Beach *West* Storm Drain. This drain should have been identified as the Baby Beach *East* Storm Drain. This correction has been made on the following page of the Draft SEIR, included in the Errata as indicated, and will be included in the Final SEIR to be considered by decision makers:

*Page 4.3-3*

The West Marina receives runoff from five storm water pipes. There are two 18 in pipes that discharge runoff from areas adjacent to the Ocean Institute dock and Ensenada Place. The 51 in El Encanto Storm Drain discharges runoff from a storm drain network that extends beyond the Harbor. A small 15 in pipe discharges runoff from Dana Point Harbor Drive, west of Island Way, and a 24 in pipe discharges drainage from the Baby Beach ~~West~~ East Storm Drain.

The existing Harbor storm water pipe system and drainage areas are summarized in Table 4.3.A.

**Table 4.3.A: Existing Storm Drain Facilities**

Pipe Location	Drainage Area (DA)	Pipe Size (inches)	Watershed (Drainage) Area (acres)
<b>East Marina</b>			
Boat Launch Ramp	1	18	10.4
Golden Lantern Storm Drain	2	60	247
East of Island Way	3	18	10.7
<b>West Marina</b>			
West of Island Way, Dana Point Harbor Drive	4	15	5.3
El Encanto Storm Drain	5	51	195
Ocean Institute dock	6	18	4.63
Baby Beach <del>West</del> <u>East</u> Storm Drain	7	24	34.1
Ensenada Place	8	18	14.7

Source: Dana Point Revitalization Project FEIR No. 591

<sup>3</sup> OC Watersheds, Dana Point Coastal Streams, <http://www.ocwatersheds.com/DanaPointCoastalStreams.aspx>, Accessed 11/29/11.

#### **Response L-1-4**

The comment provides an updated description on the water quality status of Baby Beach. While no changes to the Draft SEIR text have been made, it is understood that bacteria source investigation work and source control efforts have continued at Baby Beach since the initial 1996 beach closing. Although a definitive source of the high bacteria levels has not been identified, there has been significant improvement in the water quality at Baby Beach through the implementation of multiple Best Management Practices (BMPs). It is further understood that since 2007–2008, Baby Beach has received an “A” rating on Heal the Bay’s annual beach report card and has been delisted for “fecal coliform” (one of three tested indicator bacteria) from the State Water Resources Control Board 2010 Clean Water Act Section 303(d) List/305(b) Report (2010 Integrated Report).

#### **Response L-1-5**

The comment states that the document does not include the final decision issued on October 11, 2011, by the United States Environmental Protection Agency (EPA) in regard to the 303(d) list of impaired waters.

On August 4, 2010, the State Water Board approved the 303(d) list portion of the 2010 Integrated Report. The 2010 Integrated Report includes changes to the 2006 Clean Water Act Section 303(d) list of impaired water bodies and Clean Water Act Section 305(b) report on the quality of waters in California. The 2010 Integrated Report and supporting documents were submitted to the EPA for final approval on October 11, 2010. On November 12, 2010, the EPA approved the inclusion of all waters to California’s 2010 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The EPA provided public notice and the opportunity for public comment on the proposed additions, which ended December 23, 2010. On October 11, 2011, the EPA issued its final decision regarding the water bodies and pollutants the EPA added to California’s 2010 303(d) list.

According to the EPA-approved 2010 303(d) list of impaired waters, Dana Point Harbor is impaired for copper toxicity and zinc. Further, EPA delisted indicator bacteria for Baby Beach from the 303(d) list.

The above corrected text has been included in the Errata to the Draft SEIR and will be included in the Final SEIR to be considered by decision makers.

#### **Response L-1-6**

The comment states that not all species of enterococcus and coliform bacteria are pathogens. The referenced sentence (page 4.3-7, third paragraph, second line), was intended to indicate that enterococcus and coliform bacteria are both bacterial indicators for pathogens. Indicator organisms have been used for more than a century to help identify where disease-causing pathogens may be present. These indicator organisms generally do not cause illness themselves, but they have characteristics that make them good indicators that harmful pathogens may be present in the water.

## Response L-1-7

The comment states that the regulatory description regarding Baby Beach is out of date and also noted that Baby Beach was delisted for fecal coliform as part of the EPA's final approval of the 2010 Integrated Report. The comment further stated that the delisting for total coliform was related to shellfish criteria and not recreation objectives.

The regulatory information provided in Section 4.3.2 in regard to total maximum daily loads (TMDLs) needs to be updated with the following information:

### *Page 4.3-7*

~~The State Water Board approved the 2010 Integrated Report on August 4, 2010. The 2010 Integrated Report includes changes to the 2006 Clean Water Act Section 303(d) list of impaired water bodies and Clean Water Act Section 305(b) report on the quality of waters in California. On November 12, 2010, the United States Environmental Protection Agency (EPA) approved the inclusion of all waters to California's 2008-2010 Section 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The EPA did not include any additional waters in San Diego Region 9. The EPA is providing the public an opportunity to review its decision to add waters and pollutants to California's 2008-2010 Section 303(d) list.~~

On August 4, 2010, the State Water Board approved the 303(d) list portion of the 2010 Integrated Report. The 2010 Integrated Report includes changes to the 2006 Clean Water Act Section 303(d) list of impaired water bodies and Clean Water Act Section 305(b) report on the quality of waters in California. The 2010 Integrated Report and supporting documents were submitted to the United States Environmental Protection Agency (EPA) for final approval on October 11, 2010. On November 12, 2010, the EPA approved the inclusion of all waters to California's 2010 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The EPA provided public notice and the opportunity for public comment on the proposed additions, which ended December 23, 2010. On October 11, 2011, the EPA issued its final decision regarding the water bodies and pollutants the EPA added to California's 2010 303(d) list.

According to the EPA-approved 2010 303(d) list of impaired waters, Dana Point Harbor is impaired for copper toxicity and zinc. Further, EPA delisted indicator bacteria for Baby Beach from the 303(d) list.

~~According to the EPA State Water Board approved 2010 Integrated Report, Dana Point Harbor is impaired for copper, toxicity, and zinc. The Pacific Ocean shoreline at Baby Beach is impaired for enterococcus and total coliform (both are pathogens). Table 4.3.B summarizes the receiving waters and their classifications by RWQCB Region 9.~~

**Table 4.3.B: 303(d) Impairments of Downstream Water Bodies**

Receiving Water	Hydrologic Unit Code	303(d) Impairment	Size Affected
Dana Point Harbor—Bay and Harbor	901.14	Copper Toxicity Zinc	119 acres
Pacific-Ocean Shoreline—Dana Point HSA, at Dana Point Harbor at Baby Beach	901.14	Enterococcus Total Coliform	—miles

Source: California's 2010 Integrated Report, approved by the United States Environmental Protection Agency on November 12, 2010.  
HSA = hydrologic subarea

There are no TMDLs currently approved for Dana Point Harbor that could regulate contributions of surface runoff into impaired water bodies; TMDLs for Baby Beach and Dana Point Harbor are pending. There are no existing target design constituents in the San Juan hydrologic unit.

On June 11, 2008, the Regional Water Quality Control Board, San Diego Region, adopted a Basin Plan amendment to incorporate the TMDLs for Indicator Bacteria developed for Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay. The TMDL Basin Plan amendment was subsequently approved by the State Water Resources Control Board on June 16, 2009, and the Office of Administrative Law (OAL) on September 15, 2009. The EPA granted final approval on October 26, 2009.

In order to ensure that the TMDL requirements are met and as required under state law, an Implementation Plan was developed and describes the regulatory and/or enforcement actions that the San Diego Water Board can take to reduce pollutant loading and monitor effluent and/or receiving water. The TMDLs will be implemented primarily by reissuing or revising the existing NPDES requirements for municipal separate storm sewer systems (MS4s) discharges to include Water Quality Based Effluent Limitations (WQBELs) that are consistent with the assumptions and requirements of the bacteria wasteload allocations (WLAs) for MS<sub>4</sub> discharges. The USEPA expects that most WQBELs for NPDES-regulated municipal discharges will be in the form of BMPs.

The above corrected text has been included in the Errata to the Draft SEIR and will be included in the Final SEIR to be considered by decision makers.

## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**LETTER CODE: L-2**

**DATE: November 18, 2011**

### **Response L-2-1**

The comment is introductory and states that the South Coast Air Quality Management District (SCAQMD) has reviewed the Draft SEIR for the project and offers comments that follow. No further response is required.

### **Response L-2-2**

The comment recommends that the lead agency require additional mitigation measures as listed in the comment because the project exceeds the significance thresholds for regional nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) emissions. The Draft SEIR required adherence to SCAQMD rules and regulations and determined that although these measures would reduce significant impacts resulting from NO<sub>x</sub> and reactive organic compounds (ROC) emissions, they would remain significant and adverse. It should be noted that the project is the replacement of docks and slips and construction equipment contributing to the exceedance of these thresholds includes tugboats, gas-powered skiffs and other water vessels. Therefore, the measures proposed by Comment L-2-2 are not considered feasible since they are applicable primarily to off-road vehicles.

### **Response L-2-3**

The comment requests that the SCAQMD receive the written responses to its comments prior to adoption of the Final EIR. The Response to Comments document will be provided to the agency prior to any public hearing on the Final SEIR.



## PUBLIC AND INTERESTED PARTIES

## **BILL PRESTRIDGE**

### **LETTER CODE: P-1**

**DATE:** October 14, 2011

#### **Response P-1-1**

The comment is introductory, expresses opposition to the project and concerns regarding the safety of the proposed OC Sailing and Events Center docks. The commenter also expresses the opinion that the Harbor is currently not of adequate size to accommodate the needs of kayakers, standup paddlers, small boat sailors and the Dana Outriggers, with potential reductions in water area possibly causing conflicts. See Common Response 1.

#### **Response P-1-2**

The comment states concerns regarding the accommodation of larger boats at the proposed OC Sailing and Events Center docks, including dangers related to wind direction and congestion issues. See Common Responses 1 and 4.

#### **Response P-1-3**

The comment states that the proposed OC Sailing and Events Center docks will have a negative impact on the OC Sailing and Events Center programs. See Common Response 4.

#### **Response P-1-4**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. See Common Responses 1 and 4.

## **VALERIE BURCHFIELD RHODES**

**LETTER CODE: P-2**

**DATE:** October 25, 2011

### **Response P-2-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-2-2**

The comment expresses concern with safety issues related to the operation of motorized vessels at the proposed OC Sailing and Events Center docks near Baby Beach. See Common Response 1.

### **Response P-2-3**

The comment states that motorized vessels using the proposed OC Sailing and Events Center docks could result in pollution affecting beach users at Baby Beach. See Common Response 2.

### **Response P-2-4**

The comment states a concern related to congestion issues in the Baby Beach area resulting from the proposed OC Sailing and Events Center docks. See Common Response 1.

## **WILLIAM C. PALMER**

**LETTER CODE: P-3**

**DATE:** October 27, 2011

### **Response P-3-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-3-2**

The comment states a concern related to congestion issues in the Baby Beach area resulting from the proposed OC Sailing and Events Center docks. See Common Response 1.

### **Response P-3-3**

The comment questions whether any studies of "activities" were made to analyze the reduction in beach and water areas. See Common Response 3.

### **Response P-3-4**

The comment questions whether an economic impact study was completed to determine the effects of the project on local merchants. Economic impacts are not required to be analyzed under CEQA; further, the proposed project is the renovation of existing dock facilities within an existing Harbor, does not remove any commercial or retail uses and does not change the types of recreational uses available at the Harbor. The proposed waterside project addressed in the Draft SEIR is part of the Phase II (program-level conceptual environmental analysis) contained in the Dana Point Harbor Revitalization Project Program FEIR No. 591. The Program FEIR provided a programmatic analysis of potential Phase II improvements in order to serve as a basis for future "tiered" environmental analysis as specific projects are defined and/or more detailed design and engineering information is prepared. The Phase II area analyzed in FEIR No. 591 contemplated a variety of potential future waterside improvements, but because of unique funding, phasing, design and jurisdictional details associated with the reconfiguration of the waterside Planning Areas (PAs 8, 9, 10, 11 and 12), a specific construction-level analysis could not be completed until that information became available. This Dana Point Harbor Marina Improvement Project SEIR is intended to fulfill that commitment to provide additional environmental analysis as part of the discretionary approval process.

### **Response P-3-5**

The comment states that the project is inconsistent with the Coastal Act and reduces the amount of available waterfront recreational activities at Baby Beach. See Common Response 3.

### **Response P-3-6**

The comment states that the proposed OC Sailing and Events Center docks would reduce the amount of usable water and beachfront. See Common Response 3.

### **Response P-3-7**

The comment states that the project would affect the Harbor's recreational facilities and would not enhance Baby Beach or the available water area. The comment also raises concerns related to the potential congestion at Baby Beach. See Common Responses 1 and 3.

### **Response P-3-8**

The comment states that there will be a potential unsafe interaction between vessels and beach goers. See Common Response 2.

### **Response P-3-9**

The comment is a conclusion to the letter, restating the commenter's fondness for Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **SOUTH COAST SAILING TEAM**

### **LETTER CODE: P-4**

**DATE:** October 29, 2011

#### **Response P-4-1**

The comment is introductory and expresses concerns regarding the proposed OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-4-2**

The comment states understanding of the need for renewing the docks and buildings but does not support the proposed design changes. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-4-3**

The comment questions whether the length and size of vessels at the proposed OC Sailing and Events Center docks would be curtailed with the design layout. The comment also states concerns regarding shoaling in this area and the lack of sufficient docking for the larger boats used by the educational facility. Vessels used for educational purposes that are too large to access the proposed docks would remain in a portion of the docks on the east side of the OC Sailing and Events Center facility similar to their current location. The proposed OC Sailing and Events Center docks would be located in an area where vessels already operate. Buoys marking navigational hazards, including shoaling hazards are typically utilized by the OC Dana Point Harbor as necessary. Existing shoaling conditions in this area would not be changed by the addition of the proposed docks. See Common Response 4.

#### **Response P-4-4**

The comment questions whether any studies of surge currents in the area of the proposed OC Sailing and Events Center docks were conducted. The proposed OC Sailing and Events Center docks would be located within the existing Marina in an area where vessels are already located and already operate. The Draft SEIR concluded that the Marina Improvement Project would not change potential effects caused by a tsunami or seichi, and that there is an established warning system in place that would provide early notification of an advancing tsunami that would allow for evacuation. In addition, the Dana Point Harbor Revitalization Project Program FEIR No. 591 included Mitigation Measures 4.4-1 and 4.4-2 (listed on page 4.3-16 of the Draft SEIR) that address potential impacts related to tsunamis. Therefore, potential impacts due to inundation by a tsunami or seiche were determined to be less than significant. Also see Common Responses 1 and 2.

#### **Response P-4-5**

The comment questions whether any studies to evaluate shoaling in the area of the proposed OC Sailing and Events Center docks were conducted. The proposed OC Sailing and Events Center docks would be located in an area where vessels already operate. Buoys marking navigational hazards, including shoaling hazards are typically utilized by the OC Dana Point Harbor Department as necessary. Existing shoaling conditions in this area would not be changed by the addition of the proposed docks. See Common Responses 1 and 2 and 4.

#### **Response P-4-6**

The comment questions whether studies to evaluate the effect of wind in the area of the proposed OC Sailing and Events Center docks have been prepared. See Common Response 1.

#### **Response P-4-7**

The comment raises safety issues related to vessels with propellers being near swimmers. See Common Response 2.

#### **Response P-4-8**

The comment asks for an estimate of what the loss to the waterfront area would be. See Common Response 3.

#### **Response P-4-9**

The comment raises concerns related to the narrowing the channel and congestion concerns. See Common Response 1.

#### **Response P-4-10**

The comment raises concerns related to the present activities (teaching, parking, storage and use of the crane) as they relate to the proposed layout of the OC Sailing and Events Center docks. See Common Responses 1 and 4.

#### **Response P-4-11**

The comment questions whether foot traffic around the facility was evaluated. See Common Responses 1 and 4.

#### **Response P-4-12**

The comments questions what advantages the proposed OC Sailing and Events Center docks would have. See Common Response 4.

### **Response P-4-13**

The comment is a conclusion to the letter, restating the commenter's fondness for Dana Point Harbor and opposing the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **HABIB HOSSEINY**

**LETTER CODE: P-5**

**DATE:** October 30, 2011

### **Response P-5-1**

The comment is introductory and expresses concerns regarding the proposed OC Sailing and Events Center docks and a difficulty finding parking and picnic space. See Common Response 5.

Additionally, in accordance with the requirements contained in the Dana Point Harbor Revitalization Plan and District Regulations, Implementation Plan Chapter II-14, Off-Street Parking Standards and Regulations (Section 14.2i) certified by the California Coastal Commission, "The location and amount of new development adjacent to park and beach areas shall not adversely impact public use of the low cost water oriented recreation, park and beach uses by ensuring that adequate parking spaces are maintained for these uses. Accordingly, all Coastal Development Permits for new development in Planning Areas 1, 4 and 5 shall demonstrate that the intensity of the proposed development and the proposed hours of operation will not adversely impact public use of the beach or park area within the Planning Area."

### **Response P-5-2**

The comment expresses concern related to motorized vessels burning gasoline as being harmful to the environment. See Common Response 2. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **LESLIE NELSON**

**LETTER CODE: P-6**

**DATE:** October 30, 2011

### **Response P-6-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-6-2**

The comment expresses concern related to the potential congestion of multiple uses in the Baby Beach area. See Common Response 1.

### **Response P-6-3**

The comment is a conclusion to the letter, restating the commenter's opposition to the proposed OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

**KATHLEEN, DAVID, JACKIE, TIM SPENCE AND AARON WETZEL**

**LETTER CODE: P-7**

**DATE:** November 1, 2011

**Response P-7-1**

The comment states opposition to the proposed OC Sailing and Events Center docks and expresses concerns over congestion in the area. See Common Response 1.

**Response P-7-2**

The comment describes the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**BECKI KOLANDER**

**LETTER CODE: P-8**

**DATE:** November 2, 2011

**Response P-8-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**Response P-8-2**

The comment states a concern that the project will take away from a safe area enjoyed by children. See Common Responses 2 and 3.

**Response P-8-3**

The comment states an opposition to the proposed OC Sailing and Events Center docks and restates concerns over safety at the Baby Beach area. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. See Common Response 2.

**BEVERLY LEYMAN**

**LETTER CODE: P-9**

**DATE:** November 3, 2011

**Response P-9-1**

The comment describes the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **JOSH SMOLENAK**

### **LETTER CODE: P-10**

**DATE:** November 3, 2011

#### **Response P-10-1**

The comment is introductory and states concerns regarding configuration and location of the proposed OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

#### **Response P-10-2**

The comment states concerns regarding the placement of electrical utilities on docks near swimmers. See Common Response 2.

#### **Response P-10-3**

The comment states concerns regarding the placement of the additional pump-out station near a swimming beach. See Common Response 2.

#### **Response P-10-4**

The comment expresses concern over the potential congestion in the education basin. See Common Responses 1 and 4.

#### **Response P-10-5**

The comment is a conclusion to the letter, restating the commenter's appreciation for Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **KENDALL BAILEY**

### **LETTER CODE: P-11**

**DATE:** November 4, 2011

#### **Response P-11-1**

The comment is introductory and states concerns regarding boat use and safety. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

#### **Response P-11-2**

The comment expresses disagreement with the Draft SEIR and states that the proposed project will cause significant impacts related to the OC Sailing and Events Center boating use. This comment is an opinion and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-11-3**

The comment expresses concerns regarding the impacts to the OC Sailing and Events Center docks related to design issues, including length of docks, water depth, wind direction, channel narrowing and congestion. See Common Responses 1, 2, and 4.

#### **Response P-11-4**

The comment expresses disagreement with the Draft SEIR and states that cost and availability for users of the OC Sailing and Events Center will be impacted since existing vessels used for training will not be able to use the proposed docks due to shallow water depths. In addition, the comment states that there will be increased costs related to repairs and damages due to the dock design. See Common Response 4.

## **STEVE WYMAN**

### **LETTER CODE: P-12**

**DATE:** November 6, 2011

#### **Response P-12-1**

The comment is introductory and expresses concerns regarding the proposed OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR and no further response is required.

#### **Response P-12-2**

The comment expresses concerns regarding congestion and channel narrowing in the area near the proposed OC Sailing and Events Center docks. See Common Responses 1 and 2.

#### **Response P-12-3**

The comment expresses concerns related to safety issues between many different users in the Baby Beach area. See Common Responses 1 and 2.



## **RON COOK**

### **LETTER CODE: P-13**

**DATE:** 11-6-11

#### **Response P-13-1**

The comment is introductory and expresses concerns over the planned construction of a new boat dock and other modifications to OC Sailing and Events Center. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-13-2**

The comment questions that the proposed project may have a negative impact on the public use of Baby Beach by reducing the amount of space dedicated to public swimming, launching and the use of non-motorized paddle boats and safety issues related to the new boat docks. Please see Common Responses 1, 3 and 4.

#### **Response P-13-3**

The comment states that the project would reduce the amount of available public parking through the introduction of new cars due to the new addition of new yachts and corresponding visitors. In addition, the commenting party inquires whether plans have been developed to handle the additional traffic and parking at Baby Beach. Please see Common Response 5.

#### **Response P-13-4**

This comment states that the expansion of docks into the Baby Beach area would impact safety for boating students at O.C. Sailing and Events Center sharing waterways with larger boats. Please see Common Responses 2, 3 and 4.

#### **Response P-13-5**

The comment is a conclusion to the letter, restating the commenter's fondness for Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **TONI FLORES**

**LETTER CODE: P-14**

**DATE: 11-7-11**

### **Response P-14-1**

The comment is introductory and states that the commenter is protesting the impacts resulting from the proposed development around Baby Beach. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. Please refer to Common Response 1.

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-14-2**

The comment states that the new plans do not provide slips of adequate length to accommodate the boats used by the Sea Scouts at OC Sailing and Events Center. Please see Common Responses 1 and 4.

### **Response P-14-3**

The comment states that the proposed changes to the Harbor in this area are hurtful to the general public and the environment by decreasing the amount of available parking, which would impact the ease of access by the public. Please see Common Responses 3 and 5.

Additionally, in accordance with the requirements contained in the Dana Point Harbor Revitalization Plan and District Regulations, Implementation Plan Chapter II-14, Off-Street Parking Standards and Regulations (Section 14.2i) certified by the California Coastal Commission, "The location and amount of new development adjacent to park and beach areas shall not adversely impact public use of the low cost water oriented recreation, park and beach uses by ensuring that adequate parking spaces are maintained for these uses. Accordingly, all Coastal Development Permits for new development in Planning Areas 1, 4 and 5 shall demonstrate that the intensity of the proposed development and the proposed hours of operation will not adversely impact public use of the beach or park area within the Planning Area."

### **Response P-14-4**

The comment states that new dock construction will force overcrowding and reduce access in this area for youth activities. In addition, the commenter states that the Coastal Act is structured to protect the public's right to the sea and the construction of new docks will place boats within 15 ft of Baby Beach at mean low tide and impact safety. Please see Common Responses 1 through 5.

### **Response P-14-5**

The comment is a conclusion to the letter, stating the commenter's opinion that more commercial development at Dana Point Harbor is not wanted or needed. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **LEAH FETAH**

**LETTER CODE: P-15**

**DATE: 11-7-11**

### **Response P-15-1**

The comment is introductory and states the commenter's opposition to the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-15-2**

The comment states a concern regarding congestion and safety issues within the Baby Beach area, including plans to allow power boats near swimmers and that locating a proposed pump-out station on the docks will impact public access, the fragile biodiversity of the basin and the recreational nature of the area. Please see Common Responses 1 and 2. Additionally, a pump-out station currently exists at the end of the existing guest dock in the OC Sailing and Events Center/Baby Beach area. The proposed pump-out will replace this existing pump-out in the same general area, located about 150 feet to the west of this existing location, as shown on Figure 3.11 on page 3-30 of the Draft SEIR. Because a -station already exists in close proximity to the basin area, the proposed updated pump-out station would not have greater impacts on the biodiversity of the basin than under existing conditions. Further, pump-outs are necessary to prevent sewage spills and encourage improved water quality in the Harbor.

### **Response P-15-3**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. Please see Common Responses 1 and 2.

## **BECKY LEETCH**

**LETTER CODE: P-16**

**DATE: 11-7-11**

### **Response P-16-1**

The comment is introductory and states the commenter's opposition to the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR.

### **Response P-16-2**

The comment states a concern regarding congestion and safety issues within the Baby Beach area, including plans to allow power boats near swimmers and locating a proposed pump-out station on the docks. Please see Common Responses 1 and 2.

### **Response P-16-3**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. Please see Common Responses 1 and 2.

## **DONNA AND ARTHUR CARTER**

**LETTER CODE: P-17**

**DATE: 11-7-11**

### **Response P-17-1**

The comment is introductory and states that the commenter is opposed to the project. The comment also describes the commenter's personal familiarity with and experiences in Dana Point Harbor as members of the Dana Point Yacht Club. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-17-2**

The comment states the opinions of the commenter and states that the OC Sailing and Events Center docks would impact the youth programs currently offered. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-17-3**

The comment states that the commenter opposes the project's impact on the OC Sailing and Events Center and Baby Beach by reducing the size of the recreation area and replacing the area with guest docks. Please see Common Responses 1 and 4.

## **CYNTHIA FLETCHER**

### **LETTER CODE: P-18**

**DATE:** 11-8-11

#### **Response P-18-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-18-2**

The comment states a concern about the encroachment of new docks into the turning basin near Baby Beach. Please see Common Responses 1 and 2.

#### **Response P-18-3**

The comment states a concern about the impingement of the Sea Scout and Westwind programs through decreased dock space. Please see Common Response 4.

#### **Response P-18-4**

The comment states opinions against the project and that available dock space for education programs at the OC Sailing and Events Center will be reduced. Please refer to Common Response 4.

#### **Response P-18-5**

The comment states that available dock space for education programs at the OC Sailing and Events Center will be reduced and the location of the pumping dock will make maneuvering around the facility more difficult and dangerous. Please refer to Common Responses 1, 2 and 4.

#### **Response P-18-6**

The comment is a conclusion to the letter, asking that no changes be made to the OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **BILLY KHO**

**LETTER CODE: P-19**

**DATE: 11-8-11**

### **Response P-19-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-19-2**

The comment is an introductory statement describing the commenter's concern that with the expansion of the docks, safety will be compromised and boat traffic will increase and public access will be limited. Please see Common Responses 1, 2, 3 and 5.

### **Response P-19-3**

The commenter states that the introduction of more boats will cause more pollution from diesel fuels, gasoline, oil and waste from the proposed pump station. Please see Common Response 2.

### **Response P-19-4**

The commenter states that there will be compromised access at Baby Beach and this will affect local businesses at Dana Point Harbor. It should be noted that an EIR is required where there may be substantial or potentially significant adverse changes in physical conditions in the project area. [Public Resources Code Sections 21100, 21151, 21060.5 and CEQA Guidelines Section 15360.] Social or economic changes are not included because they are not changes in the physical environment. [CEQA Guidelines 15358(b).] Social and economic changes may not be treated as significant effects on the environment. [CEQA Guidelines Sections 15064(c) and 15382.]

This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **JAMES TALAY**

**LETTER CODE: P-20**

**DATE: 11-11-11**

### **Response P-20-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-20-2**

The comment states that the project will affect the safety of paddlers utilizing Baby Beach and the current programs offered at the Sea Base. Please refer to Common Responses 1 and 4.

### **Response P-20-3**

The comment states that Sea Scout boats would have difficulty trying to dock due to shallow depths in the Baby Beach area with the proposed improvements. Please see Common Response 2.

### **Response P-20-4**

The comment is a conclusion to the letter, stating the commenter's request that Dana Point Harbor reconsider its decision to implement this project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DOUG ABRAMSON**

### **LETTER CODE: P-21**

**DATE:** 11-11-11

#### **Response P-21-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-21-2**

The comment expresses concerns regarding the proposed OC Sailing and Events Center docks due to shoaling concerns, proximity to swimmers, wind direction and congestion. Please see Common Responses 1, 2 and 4.

#### **Response P-21-3**

The comment expresses concerns related to the proposed OC Sailing and Events Center docks and requests that more be done to improve water quality and reduce siltation.

As stated on pages 4.3-17 through 4.3-19 of the Draft SEIR, the Harbor drainage pattern (off-site and on-site drainage facilities) would not be altered as part of the proposed project. The docks are not considered an impervious area, as typically defined, because of the gaps in the docks that are over open Marina waters. Therefore, the project would not increase storm water flows into the West and East Marinas since there is no increase in the impervious area or capacity of the Marina. Because the proposed project is not increasing the capacity of the Marina or adding a new use to the Harbor, there will be no increase in pollutants generated on site above existing conditions and no impacts to water quality are anticipated. As a result, the drainage pattern, runoff volumes and pollutants from on and off the site would remain essentially the same as in the existing condition and would not create water quality impacts. Therefore, potential water quality impacts as they relate to drainage pattern, runoff volumes and pollutants are considered less than significant and no mitigation is required.

The proposed construction activities of the OC Sailing and Events Center dock facilities would occur adjacent to Baby Beach, which is impaired for bacteria. The improvements would disrupt the sediments, which could adversely affect water quality by temporarily re-suspending sediments, thereby increasing turbidity, as stated previously. However, implementation of Mitigation Measures 4.3-1, 4.3-2 and 4.3-4 as included on pages 4.3-21 and 4.3-22 in the Draft SEIR would reduce these construction-related water quality impacts to less than significant levels.

Also, see Response to Comment L-1-4.

### **Response P-21-4**

The comment is a conclusion to the letter, restating the commenter's concerns regarding the project as they relate to water quality and safety issues. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DOUG BLACK**

**LETTER CODE: P-22**

**DATE: 11-12-11**

### **Response P-22-1**

The comment proposes another alternative to the project. Some of the design components of the proposed alternative would be to add ADA improvements but retain the slips in their current configuration, not encroach into the channels and not eliminate any 50 ft size slips. The comment also requests that the replacement of docks should begin immediately and not wait for any commercial revitalization. The comment describes the commenter's personal opinions about the project and suggests an alternative. This comment does not raise any environmental issues under CEQA about the adequacy of the Draft SEIR alternatives.. This comment will be forwarded to the decision makers for their consideration.

However, it should be noted that the California Environmental Quality Act (CEQA) requires that an EIR or Draft SEIR describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. [CEQA Guidelines Section 15126.6] The No Project/No Development Alternative must be evaluated along with its impact. That analysis must discuss the existing conditions as well as what could be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The range of alternatives required in an EIR/SEIR is governed by the "rule of reason," which requires that the EIR/SEIR set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. Only alternative locations that would avoid or substantially lessen any of the significant effects of the project need be considered if the proponent can reasonably acquire, control, or otherwise have access to any alternative site. An EIR/SEIR need not consider an alternative under which the effect cannot be reasonably ascertained and implementation is remote and speculative. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

An EIR is not required to consider alternatives which are infeasible. Factors that may be taken into account when addressing the feasibility of alternatives are site suitability; economic viability; availability of infrastructure, General Plan consistency, other plans or regulatory limitations; and jurisdictional boundaries. Determination of feasibility involves a balancing of various economic, environmental, social and technological factors..(Public Resources Code Section 21061.1 [statutory definition of "feasibility"]). In this sense, 'feasibility' under CEQA encompasses 'desirability' to the extent that it is based on a reasonable balancing of the relevant economic, environmental, social and technological factors." CEQA establishes no categorical legal imperative as to the scope of

alternatives to be analyzed in an EIR. An EIR must identify the environmentally superior alternative. It need not consider multiple variations of alternatives or alternatives to project components.

## **JACQUELINE PRICE**

**LETTER CODE: P-23**

**DATE: 11-12-11**

### **Response P-23-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-23-2**

The comment states that the loss in revenue as a result of the project was not evaluated. Please see Response to Comment P-19-4.

### **Response P-23-3**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment also states that the project will impact businesses and business sales, which will affect City revenues through the loss in sales tax. Please refer to Response to Comment P-19-4.

### **Response P-23-4**

The comment states that implementation of the proposed OC Sailing and Events Center docks will cause safety issues for the boating students. Please refer to Common Responses 1, 2 and 4.

### **Response P-23-5**

The comment is a conclusion to the letter stating the commenter's personal opinions regarding the project and experiences at Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **MAX MONAHAN**

### **LETTER CODE: P-24**

**DATE:** 11-13-11

#### **Response P-24-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-24-2**

The comment states concerns related to safety and congestion in the area near Baby Beach. Please see Common Responses 1 and 2.

#### **Response P-24-3**

The comment states that water quality at Baby Beach will be contaminated through the introduction of waste and pollutants from additional yachts. Please see Response to Comment P-21-3.

#### **Response P-24-4**

The comment is a conclusion to the letter, stating the commenter's personal opinions regarding the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DEBRA MONAHAN**

**LETTER CODE: P-25**

**DATE: 11-14-11**

### **Response P-25-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-25-2**

The comment expresses concerns related to congestion and water quality at Baby Beach through the introduction of waste and pollutants from additional marine vessels. Please refer to Common Responses 1 and 2. Please also see Response to Comment P-21-3.

### **Response P-25-3**

The comment is a conclusion to the letter, stating the commenter's personal opinions regarding the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **WORLD PADDLE ASSOCIATION - BYRON KURT**

**LETTER CODE: P-26**

**DATE: 11-15-11**

### **Response P-26-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment also expresses concerns about local businesses. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please also see Response to Comment P-19-4.

### **Response P-26-2**

The comment states the commenter's personal opinion about the project and raises concerns related to the potential congestion at Baby Beach. Please see Common Response 1.

### **Response P-26-3**

The comment states that the project will deter visitors to visit Baby Beach, and this will affect the amount of money that would be spent at local businesses. Please see Response to Comment P-19-4.

### **Response P-26-4**

The comment is a conclusion to the letter, stating the commenter's personal opinions regarding the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **BILL AND JOAN CVENGROS**

**LETTER CODE: P-27**

**DATE: 11-15-11**

### **Response P-27-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-27-2**

The comment raises concerns regarding safety as a result of the project by placing young sailors and users of Baby Beach closer to docks. Please refer to Common Response 2.

### **Response P-27-3**

The commenter states that there will be a reduction in available parking with implementation of the proposed improvements. Please refer to Common Response 5.

### **Response P-27-4**

The commenter states that the construction of additional docks will impede public access to the Baby Beach, which would be in violation of requirements outlined in the California Coastal Act. Please refer to Common Response 3.

## **MICHAEL MAURI**

**LETTER CODE: P-28**

**DATE: 11-15-11**

### **Response P-28-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-28-2**

The comment states that access to Baby Beach will be reduced by approximately 25 percent. Please refer to Common Response 3.

### **Response P-28-3**

The comment states that the project is in direct conflict with the California Coastal Act. Please refer to Common Response 3.

### **Response P-28-4**

The comment states that the project will reduce the amount of available parking and cause an increase in traffic and congestion in the area. Please refer to Common Responses 1 and 5.

### **Response P-28-5**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. See Common Responses 1, 3 and 5.

## **THERESE HALL**

### **LETTER CODE: P-29**

**DATE: 11-15-11**

#### **Response P-29-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-29-2**

The first part of the comment states that safety issues will result from the close proximity of small boats and children to large boats that will utilize Baby Beach from the dock expansion. Please refer to Common Response 2. The second part of the comment states the commenter's personal opinions and experiences with Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **RESPONSE P-29-3**

The comment states that the proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach, encroaches into the Education Basin, reducing the shoal area by at least 20 percent, impedes upon the public access to Baby Beach, privatizes docks at O.C. Sailing and Events Center which are specifically for educational purposes, and impedes the flow of boat traffic entering and existing the inside west channel between O.C. Sailing and Events Center and the Dana Point Yacht Club. In addition, the project proposes to construct the new docks in shallow water that will cause the boats to bottom out at low tide. Please refer to Common Responses 1, 2, 3 and 4.

#### **RESPONSE P-29-4**

The comment states that the proposed plan will disrupt the existing Eelgrass and fragile marine ecosystem in the basin. Impacts of the proposed project on the surrounding marine biological resources, including eelgrass, were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

#### **RESPONSE P-29-5**

The comment states that the project will increase motor vehicle traffic and limit parking near Baby Beach. Please see Common Response 5.

### **RESPONSE P-29-6**

The comment states that the presence of motorboats that will be docked in front of Baby Beach will increase pollution near the swimming area. Please see Common Response 2.

### **RESPONSE P-29-7**

The comment states that the presence of the large dock with big boats as a result of the project will change the visual character of the area and it will become aesthetically undesirable. As described in Section 4.8 of the Draft SEIR, boats and docks are a component of the existing views at the Marina, and the proposed OC Sailing and Events Center docks would continue to be consistent with the existing maritime character of the Harbor.

### **RESPONSE P-29-8**

The comment states that the addition of motor boats will increase safety concerns for non-motorboat users launching at Baby Beach. Please refer to Common Responses 1 and 2.

## **TERRI PLUNKETT**

**LETTER CODE: P-30**

**DATE: 11-16-11**

### **Response P-30-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-30-2**

The comment states that the commenter does not like the outcome of the studies conducted as part of the Draft SEIR and expresses concerns for the protection of birds, especially egrets. The Draft SEIR included a mitigation measure to protect migratory and sensitive nesting birds, including blue herons, snowy egrets, the black crowned night heron, owl, and raptors. Implementation of Mitigation Measure 4.7-5 as outlined on page 4.7-42 of the Draft SEIR will reduce potential impacts to such species to a less than significant level. In addition, impacts of the proposed project on the surrounding biology including eelgrass resources were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments P-21-3 and S-5-4.

### **Response P-30-3**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **JILL CUPPVICKERY**

**LETTER CODE: P-31**

**DATE: 11-16-11**

### **Response P-31-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-31-2**

The comment expresses concern over the increase in congestion that would be caused by the additional boats that would use Baby Beach as a result of the project. The comment also mentions the loss of tax dollars in Dana Point. Please see Common Response 1 and 2, as well as Response to Comment P-19-4.

### **Response P-31-3**

The comment states concerns related to the safety of bathers from the pump-out station and the privatization of community docks used for education purposes. Please see Common Responses 2 and 4. The remaining portion of the comment is a conclusion to the letter, reiterating the concerns raised in the previous comments.

## **NICOLE HALL**

**LETTER CODE: P-32**

**DATE: 11-16-11**

### **Response P-32-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-32-2**

The comment states the commenter's personal opinions and familiarity and experiences with Dana Point Harbor and expresses concern over the proposed OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-32-3**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **ELIZABETH HARRINGTON**

### **LETTER CODE: P-33**

**DATE: 11-17-11**

#### **Response P-33-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-33-2**

The comment expresses concerns regarding safety due to congestion, shoaling areas, public access, channel encroachment and impacts to educational programs. Please see Common Responses 1, 2, 3 and 4.

#### **Response P-33-3**

The comment states that the proposed plan will disrupt the existing eelgrass and fragile marine ecosystem in the basin. Impacts of the proposed project on the surrounding marine biological resources, including eelgrass, were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

#### **Response P-33-4**

The comment expresses safety concerns related to docking by students in the OC Sailing and Events Center programs. Please see Common Responses 1 and 4.

#### **Response P-33-5**

The comment states that the project will increase motor vehicle traffic and limit parking near Baby Beach. Please see Common Response 5.

#### **Response P-33-6**

The comment states that motorboats docked in front of Baby Beach will increase pollution near the bathers. Please see Common Response 2.

**Response P-33-7**

The comment states that the presence of the large dock with big boats as a result of the project will change the visual character of the area and it will become aesthetically undesirable. Please see Response to Comment P-29-7.

**Response P-33-8**

The comment states that the addition of motor boats will increase safety concerns for non-motorboat users launching at Baby Beach. Please refer to Common Responses 1 and 2.

**Response P-33-9**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **MARY ELLEN AND DAVE BROWN**

**LETTER CODE: P-34**

**DATE: 11-17-11**

### **Response P-34-1**

The comment is an introductory statement describing the commenter's personal familiarity with, and experiences in, Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-34-2**

The comment expresses concerns regarding safety due to congestion, shoaling areas, public access, channel encroachment, and impacts to educational programs. Please see Common Responses 1, 2, 3 and 4.

### **Response P-34-3**

The comment states that the proposed plan will disrupt the existing eelgrass and fragile marine ecosystem in the basin. Impacts of the proposed project on the surrounding marine biological resources, including eelgrass, were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

### **Response P-34-4**

The comment expresses safety concerns related to docking by students in the OC Sailing and Events Center programs. Please see Common Responses 1 and 4.

### **Response P-34-5**

The comment states that the project will increase motor vehicle traffic and limit parking near Baby Beach. Please see Common Response 5.

### **Response P-34-6**

The comment states that motorboats docked in front of Baby Beach will increase pollution near the bathers. Please see Common Response 2.

**Response P-34-7**

The comment states that the presence of the large dock with big boats as a result of the project will change the visual character of the area and it will become aesthetically undesirable. Please see Response to Comment P-29-7.

**Response P-34-8**

The comment states that the addition of motor boats will increase safety concerns for non-motorboat users launching at Baby Beach. Please refer to Common Responses 1 and 2.

**Response P-34-9**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **MICHAEL HALL**

**LETTER CODE: P-35**

**DATE: 11-17-11**

### **Response P-35-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-35-2**

The comment expresses concerns regarding safety due to congestion, shoaling areas, public access, channel encroachment, and impacts to educational programs. Please see Common Responses 1, 2, 3 and 4.

### **Response P-35-3**

The comment states that the proposed plan will disrupt the existing eelgrass and fragile marine ecosystem in the basin. Impacts of the proposed project on the surrounding marine biological resources, including eelgrass, were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

### **Response P-35-4**

The comment expresses safety concerns related to docking by students in the OC Sailing and Events Center programs. Please see Common Responses 1 and 4.

### **Response P-35-5**

The comment states that the project will increase motor vehicle traffic and limit parking near Baby Beach. Please see Common Response 5.

### **Response P-35-6**

The comment states that motorboats docked in front of Baby Beach will increase pollution near the bathers. Please see Common Response 2.

**Response P-35-7**

The comment states that the presence of the large dock with big boats as a result of the project will change the visual character of the area and it will become aesthetically undesirable. Please see Response to Comment P-29-7.

**Response P-35-8**

The comment states that the addition of motor boats will increase safety concerns for non-motorboat users launching at Baby Beach. Please refer to Common Responses 1 and 2.

**Response P-35-9**

The comment is a conclusion to the letter, stating the commenter's personal opinions regarding the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **ANDREW AND CYNTHIA MOUACDIE**

**LETTER CODE: P-36**

**DATE: 11-17-11**

### **Response P-36-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-36-2**

The comment expresses concerns related to safety in the Baby Beach area that may result from the proposed plans. Please see Common Response 2.

## **NICHOLAS E. FLORES**

**LETTER CODE: P-37**

**DATE: 11-18-11**

### **Response P-37-1**

The comment is an introductory statement describing the commenter's opposition to the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

It should be noted however, that an EIR is required where there may be substantial or potentially significant adverse changes in physical conditions in the project area. [Public Resources Code Sections 21100, 21151, 21060.5 and CEQA Guidelines Section 15360.] Social or economic changes are not included because they are not changes in the physical environment. [CEQA Guidelines 15358(b).] Social and economic changes may not be treated as significant effects on the environment. [CEQA Guidelines Sections 15064(c) and 15382.]

### **Response P-37-2**

The comment states that there would be an immediate economic impact to paddlers. The reduction in the amount of surface water available for paddlers and increasing sailboat traffic will make the area less desirable. Please see Response to Comment P-3-4.

### **Response P-37-3**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **PENNY ELIA**

### **LETTER CODE: P-38**

**DATE:** November 18, 2011

#### **Response P-38-1**

The comment is introductory and states that the comments should be incorporated into the official record of the project. The comment also references conversations with the South Coast Water District (SCWD) regarding the future plans for a “purple pipe” for recycled water being extended into the Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-38-2**

The comment is a chain of email correspondence between the commenter and SCWD regarding the progress of extending a recycled water line to the Headlands and Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-38-3**

The comment is summary of conversations between the commenter and SCWD regarding the progress of extending a recycled water line to the Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-38-4**

The comment references the SCWD 5-year Capital Improvement Program that is attached to the comment letter and states that it is imperative that recycled water be provided to OC Dana Point Harbor by the time construction in the Harbor begins. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-38-5**

The comment is the 2011–2012 Capital Projects list for the SCWD, provided as an attachment to the comment letter. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **SURFERS ENVIRONMENTAL ALLIANCE**

**LETTER CODE: P-39**

**DATE: 11-18-11**

### **Response P-39-1**

The comment states that the Surfer's Environmental Alliance (SEA) has only recently become aware of the project and is requesting that the public review period be extended 90 days. CEQA mandates that a review period of 45 days be provided for a Draft SEIR. However, in response to stakeholder requests, OC Dana Point Harbor extended the Draft SEIR review period from 45 days to 62 days, with the public review period ending on November 21, 2011.

### **Response P-39-2**

The comment states that the project will impact public access to one of the only protected beach areas in Southern California and public safety. The docks could reduce the amount of open water available in the immediate area, but would not eliminate or prohibit access to Baby Beach. Please refer to Common Responses 2 and 3.

### **Response P-39-3**

The comment describes the organization that the commenter belongs to. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-39-4**

The comment states that the coastal community has not had a sufficient opportunity to review the project EIR, which is important since the project is affecting legal coastal access rights. Please see Response to Comment P-39-1 and Common Response 3.

## **THOMAS SHAHINIAN**

**LETTER CODE: P-40**

**DATE: 11-18-11**

### **Response P-40-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-40-2**

The comment states the commenter's concern with the project, especially how the project would impede upon public access to launch human-powered crafts at Baby Beach and that the increase in the number of motorized vessels in the Education Basin near Baby Beach would create an unsafe environment. Please refer to Common Responses 1, 2, 3 and 4.

### **Response P-40-3**

The comment is a conclusion to the letter, reiterating the concerns raised in the previous comments. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **WILLARD SOMERS**

**LETTER CODE: P-41**

**DATE: 11-18-11**

### **Response P-41-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment expresses opposition to the expansion of docks in the Baby Beach area. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration

## **PAUL GALVEZ**

**LETTER CODE: P-42**

**DATE:** November 18, 2011

### **Response P-42-1**

The comment is introductory and states that the commenter opposes the proposed development around Baby Beach. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-42-2**

The comment states that the decision for the proposed development should be reversed because it would create a danger to swimmers and remove public access. Please refer to Common Responses 1, 2, 3 and 4.

### **Response P-42-3**

The comment states that the Draft SEIR is inconsistently and inadequately written; however, the commenter does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. The comment does not contain any specifics as to what is inconsistent or inadequate and no evidence is provided to support the commenter's conclusion. The comment is an opinion and will be forwarded to the decision makers for their consideration.

## **MARCIE FROLOV**

### **LETTER CODE: P-43**

**DATE:** November 18, 2011

#### **Response P-43-1**

The comment is introductory and states that the proposed project would have a negative impact on the public use of Baby Beach by reducing the amount of space dedicated to public swimming, launching, and the use of non-motorized paddle boats. Please see Common Response 1, 3 and 4.

#### **Response P-43-2**

The comment states that the project is in direct violation of the California Coastal Act and that new docks would reduce the public's use of the area as well as altering the beach's scenic view. Please see Common Response 3 and Response to Comment P-29-7.

#### **Response P-43-3**

The comment states that the project would limit public access. Please see Common Response 3.

#### **Response P-43-4**

The comment states that the project would reduce public parking. Please see Common Response 5.

#### **Response P-43-5**

The comment states that the project would create unsafe congested conditions and have a negative impact on the Sea Scouts program. Please see Common Responses 1 and 4.

#### **Response P-43-6**

The commenter would prefer that the project be moved to the mouth of the Harbor or the east side. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **YVONNE HEUSLER GALVEZ**

### **LETTER CODE: P-44**

**DATE:** November 18, 2011

#### **Response P-44-1**

The comment is introductory and states that the commenter opposes the proposed development around Baby Beach. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-44-2**

This comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-44-3**

The comment states that the decision for the proposed development should be reversed because it would create a danger to swimmers and remove public access. Please refer to Common Responses 1, 2, 3 and 4.

#### **Response P-44-4**

This comment notes that the harbor water quality has improved and that there is an abundance of starfish and garibaldi present. The comment is an opinion and observation on the part of the commenter, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. Marine biology and water quality impacts were addressed in Sections 4.3 and 4.7, respectively, of the Draft SEIR. Please see Response to Comments L-1-4 and P-21-3. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-44-5**

The comment states that the Draft SEIR is inconsistently and inadequately written; however, the commenter does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. The comment does not contain any specifics as to what is inconsistent or inadequate and no evidence is provided to support the commenter's conclusion. The comment is an opinion and will be forwarded to the decision makers for their consideration.

## **KRISTIN THOMAS**

### **LETTER CODE: P-45**

**DATE:** November 18, 2011

#### **Response P-45-1**

The comment is introductory and states that the developers have overlooked the economics of the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please refer to Response to Comment P-19-4.

#### **Response P-45-2**

The comment describes the commenter's familiarity with and experiences in Dana Point Harbor. The comment states that the project would reduce access, downgrade safety and affect environmental habitats, resulting in a bad business decision. Please refer to Common Responses 2 and 3 and Response to Comment P-19-4.

#### **Response P-45-3**

The comment states that the project will have an economic impact on Stand Up Paddling in the Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-45-4**

This comment states that the expansion of docks into the Baby Beach area would result in an impact to education and recreational opportunities and reduce safety as well as reduce the volume of business in the Harbor. Please see Common Responses 2, 3 and 4.

#### **Response P-45-5**

This comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **CHUCK PATTERSON**

### **LETTER CODE: P-46**

**DATE:** November 18, 2011

#### **Response P-46-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment also describes the many uses of Baby Beach. This comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-46-2**

The comment expresses concerns related to safety, access, and educational programs being impacted by the proposed OC Sailing and Events Center dock configuration. Please see Common Responses 2, 3, and 4.

#### **Response P-46-3**

The comment states that the proposed project will increase motor vehicle traffic and limit parking. Please see Common Response 5.

#### **Response P-46-4**

The comment states that the proposed project as configured will increase pollution from motor boats and increase environmental hazards due to the location of the pump-out station. Please see Common Response 2.

#### **Response P-46-5**

The comment states that the proposed dock in front of Baby Beach will pose a safety issue related to motor boats and the winds. Please see Common Responses 1 and 2.

#### **Response P-46-6**

The comment is a conclusion of the letter and expresses the commenter's views on the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **CALIFORNIA SHIPS TO REEFS**

**LETTER CODE: P-47**

**DATE:** November 19, 2011

### **Response P-47-1**

The comment is introductory and proposes three alternative disposal options to avoid trucking the pier pilings off site. The Draft SEIR analyzed trucking as a worst-case scenario for potential impacts. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-47-2**

The comment suggests that the pier pilings could be placed in the ocean as artificial reefs under the direction of California Ships to Reefs (CSTR). The comment identifies a site outside of the Harbor on Dana Point's Legislative Granted Lands and indicates that Dana Point would retain ownership under this option. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-47-3**

The comment suggests that the pier pilings could be placed in the ocean as artificial reefs under the direction of CSTR. The comment identifies a potential second site 1.5 miles southwest of the Harbor and indicates that Dana Point would also retain ownership under this option. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-47-4**

The comment suggests that the pier pilings could be placed in the ocean as artificial reefs under the direction of CSTR at any of the potential sites identified. However, under this alternative the pier pilings would be donated to CSTR, which would take ownership at some point during the reefing process. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-47-5**

The comment concludes the letter by urging consideration of one of the artificial reef options. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-47-6**

The comment includes three attached exhibits illustrating potential locations for offshore artificial reefs. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DANA POINT BOATERS ASSOCIATION**

### **LETTER CODE: P-48**

**DATE:** November 20, 2011

#### **Response P-48-1**

The comment is introductory and states that comments were both emailed and hand delivered. This comment addresses financial, economic and policy issues that are outside of the scope of CEQA and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR, and no further response is required.

#### **Response P-48-2**

The comment is a summary of the Dana Point Harbor Revitalization Plan relative to the current lending environment for capital improvement projects. This comment addresses financial, economic and policy issues that are outside of the scope of CEQA and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please refer to Response to Comment P-19-4.

#### **Response P-48-3**

The comment is a proposal for a change in the scope, approach, and financing for the proposed project. The comment includes recommendations for a systematic replacement of docks over a period of years and encourages transparent financial reporting for funding and expenses for the proposed improvements. This comment addresses financial, economic and policy issues that are outside of the scope of CEQA and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please refer to Response to Comment P-19-4.

#### **Response P-48-4**

The comment is an assessment of the financing that will be required for implementation of the Dana Point Harbor Revitalization Plan and the projected revenue for the boat slips. This comment addresses financial, economic and policy issues that are outside of the scope of CEQA and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please refer to Response to Comment P-19-4.

#### **Response P-48-5**

The comment is a list of recommendations for the revitalization of the Harbor, focusing on a systematic replacement of the facilities on an as-needed basis. The comment also includes

recommendations related to forecasting slip revenues, the pricing of slip rates, timing of the improvements, funding for improvements, and suggestions for financial reporting of expenditures. This comment addresses financial, economic and policy issues that are outside of the scope of CEQA and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-48-6**

The comment is a table of suggestions by the Dana Point Boaters Association (DPBA) for Harbor improvements, including the types and locations of facilities preferred by DPBA. This comment addresses financial, economic and policy issues that are outside of the scope of CEQA and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **JEFF JOHNSON**

### **LETTER CODE: P-49**

**DATE:** November 19, 2011

#### **Response P-49-1**

The comment is introductory and states the commenter's views on the project and familiarity with Dana Point Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-49-2**

The comment states that educational programs will be eliminated and the safe use of other programs will be compromised. Please see Common Responses 2 and 4.

#### **Response P-49-3**

The comment states the commenter's views on the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-49-4**

The comment states the commenter's views on the project design for the OC Sailing and Events Center docks. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-49-5**

The comment states the commenter's views on the impacts the project will have on the OC Sailing and Events Center programs and facilities. Please see Common Response 4. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-49-6**

The comment states that any changes to the OC Sailing and Events Center facility should be made in collaboration with the users of the facility. This comment represents the commenter's views on the project and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **MARY JANE JOHNSON**

### **LETTER CODE: P-50**

**DATE:** November 19, 2011

#### **Response P-50-1**

The comment states that the proposed OC Sailing and Events Center docks violate the California Coastal Commission rules. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-50-2**

This comment states that the project would eliminate public access and Sea Scout use of the facilities. Please see Common Responses 3 and 4.

#### **Response P-50-3**

The comment states that the project would create visual pollution to the area, but does not specifically discuss any visual or aesthetic impact. Visual impacts of the proposed project were thoroughly assessed in the Draft SEIR in Section 4.8, Aesthetics. Additionally, see Response to Comment P-29-7.

#### **Response P-50-4**

The comment states that the additional large yachts will increase the air pollution in the environment. The existing Harbor has 2,409 slips of various sizes. The proposed project will reduce the number of slips to 2,293. The exact size, ratio of 2-stroke gasoline, 4-stroke gasoline and diesel engines and the age of the boats that use the existing slips and would use the proposed slips, is unknown. Therefore, because there is an overall reduction in the number of slips, it was assumed that the increase in the average vessel size due to the proposed project would be offset by the reduction in the total number of slips within the Marina. Further, the actual usage time of any type of vessel is extremely difficult, if not impossible to estimate; there is no way to accurately estimate the number of hours or times a higher-emission boat may be used as compared to a lower-emission one. It cannot be automatically assumed that, as asserted in the comment, overall operational emissions will increase due to the presence of additional larger boats. Air quality impacts were thoroughly assessed in the Draft SEIR in Section 4.5, Air Quality.

## **STEPHEN HILL**

### **LETTER CODE: P-51**

**DATE:** November 19, 2011

#### **Response P-51-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-51-2**

The comment states that the proposed project would create a safety and access hazard to the educational facilities and will reduce access at Baby Beach by 20 percent. Please see Common Responses 2 and 3.

#### **Response P-51-3**

The comment states that the project will result in parking impacts. Please see Common Response 5.

#### **Response P-51-4**

The comment states that the proposed boat pump-out facility has the potential to cause environmental impacts to Baby Beach. Please see Common Response 2.

#### **Response P-51-5**

The comment states that the project would result in a loss of a community facility. This comment raises economic and social issues, both of which are outside of the scope of CEQA, and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please refer to Response to Comment P-19-4.

#### **Response P-51-6**

This comment states the commenter's views on the project, and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **WESTWIND SAILING – DIANE WENZEL**

### **LETTER CODE: P-52**

**DATE:** November 19, 2011

#### **Response P-52-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment also describes the purpose and mission of Westwind Sailing, LLC. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-52-2**

This comment expresses concerns related to the proposed OC Sailing and Events Center dock configuration related to congestion, wind direction and loss of shoal area in the basin. Please see Common Responses 1, 2, 3 and 4.

#### **Response P-52-3**

The comment states that it would be more valuable for a lift to be provided to those with special needs rather than ADA docks. Additionally, the comment expresses concern regarding the prevailing winds and the proposed design. Please see Common Responses 3 and 4. The ADA is intended to ensure equal opportunity and access for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation. The provision of ADA facilities as proposed is intended to ensure compliance with the ADA mandate.

#### **Response P-52-4**

The comment is a conclusion and states the commenter's views on the project. The comment is related to boater education which is not an issue subject to CEQA review, and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DANA POINT AQUATIC FOUNDATION – DIANE J WENZEL**

### **LETTER CODE: P-53**

**DATE:** November 19, 2011

#### **Response P-53-1**

The comment is introductory, states the commenter's views on the project and serves as an introduction to the comments provided below. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-53-2**

The comment provides a history of the Dana Point Aquatic Foundation and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-53-3**

The comment states that the proposed layout of the docks will impact an already crowded area and threaten the continuation of the education and recreational programs. Please refer to Common Responses 1, 3 and 4.

#### **Response P-53-4**

The comment states that the project will impact public access to educational programs provided within the Harbor and will present hazards due to the design of the proposed docks. Please refer to Common Responses 1, 2 and 3.

#### **Response P-53-5**

The comment states that privatization of the docks would impact public access and educational purposes as defined in the Tideland Grant for the Harbor. Dana Point Harbor is held in trust by the County of Orange in accordance with the State Tidelands Grant. Chapter 321 of the Statutes of 1961 was an Act of the State legislature (effective on September 15, 1961) that granted ownership of certain tidelands and submerged lands of the State of California (including Dana Point Harbor) to the County of Orange. Conveyance of the Harbor area by the State Lands Commission was subject to several conditions, including the following: "That said lands shall be used by said County and its successors, only for the establishment, improvements and conduct of a harbor and for the construction, maintenance and operation thereon of wharves, docks, piers, slips, quays and other utilities, structures, facilities and appliances necessary or convenient for the promotion and accommodation of commerce and navigation and for use, public park, parking, highway, playground

and business incidental thereto; and said County or its successors shall not at any time, grant, convey, give or alien said lands or any part thereof to any individual, firm or corporation for any purposes whatever; provided that said County or its successors may grant franchises thereon for limited periods (but in no event exceeding 50 years) for purposes consistent with the trust upon which said land are held by the State of California and with the requirements of commerce and navigation at said Harbor and collect and retain rents from such leases.” The proposed Marina Improvement Project will continue to be in accordance with all provisions and conditions of the Tidelands Trust. Please also refer to Common Responses 3 and 4.

#### **Response P-53-6**

The comment states that the parking requirements for private slips would impact public parking. Please see Common Response 5.

#### **Response P-53-7**

The comment states that the project would reduce the recreational water area in the educational basin by approximately 25 percent. Please see Common Response 3.

#### **Response P-53-8**

The comment states that the proposed dock configuration would impede the flow of boat traffic and recreational uses of the beach will be exposed to additional pollution. Please see Common Responses 2 and 3.

#### **Response P-53-9**

The comment is a conclusion and states the commenter’s views on the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **MIRACLES FOR KIDS – TOM SWANECAMP**

**LETTER CODE: P-54**

**DATE:** November 20, 2011

### **Response P-54-1**

The comment is introductory and states the purpose of the Miracles for Kids program and their uses of the project area. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-54-2**

The comment expresses concerns regarding congestion of uses in the Baby Beach area. The comment consists of opinion and does not include any specifics or evidence to support the views expressed and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. Please see Common Response 1.

## **BARBARA MERRIMAN**

### **LETTER CODE: P-55**

**DATE:** November 20, 2011

#### **Response P-55-1**

The comment states the commenter's views on the project, expresses disappointment over public involvement, and states that the alternatives do not meet the project objectives. CEQA requires that an EIR/SEIR describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. See Response to Comment P-22-1. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-55-2**

The comment states that the planning of the project has been piecemeal and there are constraints on how and where to add docks because of boater parking. This comment will be forwarded to the decision makers for their consideration.

It should be noted that the California Environmental Quality Act forbids 'piecemeal' review of the significant environmental impacts of a project." It mandates "that environmental considerations do not become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences." Thus, the Guidelines define "project" broadly as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment...." [CEQA Guidelines Section 15378, subd.(a).] The lead agency may not chop the project into smaller units in order to avoid consideration of the entire project. Such as division of a project into separate projects occurred when a shopping center was divided into two parts for separate environmental review. "This approach is inconsistent with the mandate of CEQA that a large project shall not be divided into little ones because such division can improperly submerge the aggregate environmental considerations of the total project.

To enhance protection of the environment, CEQA defines "project" broadly to encompass "the whole of an action, which has a potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment." [CEQA Guidelines Section 15378, subds.(a), (c).] This definition precludes "piecemeal review which results from 'chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences.'" However, when two projects, are related (such as in time or location as with the landside and marina projects considered here) but neither project is a crucial or functional element of the other and neither depends on the other to proceed the projects are independently justified, separate projects with different project proponents—not piecemealed components of the same project. However, both are addressed in related EIRs so that their cumulative contributions to each other are considered. Similarly, when funding and other issues meant that a

major highway project did not occur, an EIR for the highway segment within the city did not constitute improper piecemeal review under CEQA, reasoning that the highway segment had “substantial independent utility” (that is, “local utility” independent of the full highway), and that uncertainties existed regarding the ultimate completion of the full highway independently. Under circumstances such as described and as exist in regard to the revitalization and marina projects they are justified, separate projects, not piecemealed components of the same project. Please also refer to Common Response 5.

### **Response P-55-3**

The comment is a conclusion and states the commenter’s views on the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DOUGLAS HEIM**

**LETTER CODE: P-56**

**DATE:** November 20, 2011

### **Response P-56-1**

The comment suggests that the slips should be repaired before the buildings in the commercial core and that there should be no new slips at Baby Beach and no reduction in channel width. The comment also comments on the design and repair of structures in the commercial core area. The landside improvements mentioned in the comment were addressed in the Dana Point Revitalization Project FEIR No. 591. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please see also Common Response 1.

## **STEVE BOEHNE**

**LETTER CODE: P-57**

**DATE:** November 20, 2011

### **Response P-57-1**

The comment states the commenter's familiarity with Dana Point Harbor and expresses their opposition to the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-57-2**

The comment states that Baby Beach parking should continue to be available to the public and not designated for boaters. Please see Common Response 5 and Response to Comment P-14-3.

### **Response P-57-3**

The comment states that the proposed additional boat docks and reduced open water in the turning basin would decrease the safe passage of non-motorized craft in the channel. Please see Common Responses 1 and 2.

### **Response P-57-4**

The comment states the commenter's views on the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.



## **SURFERS ENVIRONMENTAL ALLIANCE – ANDREW MENCINSKY**

**LETTER CODE: P-58**

**DATE:** November 20, 2011

### **Response P-58-1**

The comment is introductory and requests an extension on the review period for the Draft SEIR. CEQA mandates that a review period of 45 days be provided for a Draft SEIR. However, in response to stakeholder requests, OC Dana Point Harbor extended the Draft SEIR review period from 45 days to 62 days, with the review ending on November 21, 2011.

## **LIS DUBOIS**

### **LETTER CODE: P-59**

**DATE:** November 20, 2011

#### **Response P-59-1**

The comment is introductory and describes the commenter's familiarity and experiences with Dana Point Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-59-2**

The comment states that the project would reduce public access to the water, increase boat traffic and create safety concerns. Please see Common Responses 2 and 3.

#### **Response P-59-3**

The comment states that the increase in motorized vessels will pose a hazard related to safety, pollution and traffic. Please see Common Responses 1, 2, 3, and 5.

#### **Response P-59-4**

The comment states the commenter's views on the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **JOSEPH AND BARBARA GILDNER**

**LETTER CODE: P-60**

**DATE:** November 21, 2011

### **Response P-60-1**

The comment is an introductory statement describing the commenter's personal familiarity with and experiences in Dana Point Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-60-2**

The comment states opposition to the parking plans and expresses concern that private enterprises are taking the funds from the slip fees that have been paid over the years and suggests a reduction in the commercial rebuild project. The landside, or commercial core, improvements were addressed in the Dana Point Revitalization Project FEIR No. 591. The project addressed in the Draft SEIR is a separate and independent project with different project components. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Also, please see Common Response 5 and Response to Comment P-55-2.

### **Response P-60-3**

The comment expresses support for more slips in the 40–50 ft range and requests that the proposal be downsized to accommodate the needs of all who use the Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **HUMAN POWERED WATERCRAFT ASSOCIATION**

### **LETTER CODE: P-61**

**DATE:** November 21, 2011

#### **Response P-61-1**

The comment states the commenter's views on the planning process for the proposed project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-61-2**

The comment states that the project would not protect boating interests or coastal-dependent access. The comment further states that the boater facilities should be revitalized before the commercial interests. The landside, or commercial core, improvements were addressed in the Dana Point Revitalization Project FEIR No. 591. The project addressed in this Draft SEIR is a separate and independent project with different project components. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Also, please see Common Response 5 and Response to Comment P-55-2.

#### **Response P-61-3**

The comment states that an increase in slip size would impact the environment, boater access, and aesthetics. Please see Common Response 3 and Response to Comment P-29-7.

#### **Response P-61-4**

The comment states that channel encroachment would pose a sun shading impact and expresses opposition to the proposed docks near Baby Beach. Impacts related to shading of marine resources were thoroughly addressed in Section 4.7 of the Draft SEIR. The comment does not raise specific questions regarding the treatment of these issues in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-61-5**

The comment states that the Draft SEIR does not address the needs of the human-powered watercraft, and the project does not include human-powered watercraft facilities. This comment states the commenter's views on the project and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Also, see Common Response 3.

## **PAMELA PATTERSON**

### **LETTER CODE: P-62**

**DATE:** November 21, 2011

#### **Response P-62-1**

The comment is introductory and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-62-2**

The comment discusses the needs of adaptive boaters and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-62-3**

The comment expresses concerns regarding congestion, encroachment into the Educational Basin, public access, impacts to educational facilities, and safety related to shoaling and boat traffic. Please see Common Responses 1, 2, 3, and 4.

#### **Response P-62-4**

The comment states that the project will disrupt the eelgrass and fragile marine ecosystem. Biological impacts, including impacts to eelgrass, were addressed in Section 4.7, Biology of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

#### **Response P-62-5**

The comment states that the proposed dock configuration would affect the launching and docking for boating students. Please see Common Responses 1 and 4.

#### **Response P-62-6**

The comment states that the presence of a pump-out station and motorboats that will be docked in front of Baby Beach will increase pollution near the bathers. Please see Common Response 2.

**Response P-62-7**

The comment states that the project will create a safety concern near Baby Beach. Please see Common Response 2.

**Response P-62-8**

The comment states the commenter's views on the project, but does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## BOATERS FOR DANA POINT HARBOR

**LETTER CODE: P-63**

**DATE:** November 21, 2011

### **Response P-63-1**

The comment is introductory and states the purpose of the organization Boaters for Dana Point Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-63-2**

The comment cites several sections of CEQA and states that the Draft SEIR does not meet the requirements of CEQA regarding consideration of alternatives. The comment states that the first alternative (the No Project Alternative) has been correctly considered and rejected. The comment consists of opinion and does not include any specifics or evidence to support the views expressed, nor does it specifically question the treatment of any issue in the Draft SEIR. CEQA requires that an EIR or Draft SEIR describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. This comment will be forwarded to the decision makers for their consideration. See also Response to Comments P-63-3 and P-63-6, below.

### **Response P-63-3**

The comment states that Alternatives 2 and 3 have been designed to fail and not meet the project objectives by excluding certain elements of the objectives.

Section 21100 of the Public Resources Code (PRC) and Section 15126 of the CEQA Guidelines require an EIR/SEIR to identify and discuss a No Project/No Development Alternative as well as a reasonable range of alternatives to the proposed project that would feasibly attain *most of the basic objectives of the project* and would avoid or substantially lessen any of the significant environmental impacts. The primary objective in the selection of alternatives is to develop alternative project scenarios that would *avoid or substantially lessen any of the significant effects of the project*. There is no requirement that the alternatives meet all of the project objectives. In fact, project alternatives that lessen or avoid impacts are generally smaller, less intensely developed projects that typically do not meet all of the project objectives due to the scaling down of the project in order to lessen any identified impacts. The project alternatives developed in the Draft SEIR are considered to be appropriate and adequate in meeting the intent of CEQA.

#### **Response P-63-4**

The comment elaborates on how Alternative 2 and 3 were designed to fail by leaving out a part of the proposed project that lessens the impacts but does not meet project objectives. Please see Response P-63-3.

#### **Response P-63-5**

The comment states that Alternative 3 was designed to fail and does not address the need for replacement of the waterside facilities. Please see Response to Comment P-63-3.

#### **Response P-63-6**

This comment is the commenter's opinion that it is not logical that all alternatives were rejected because they did not meet project objectives. Please see Response to Comment P-63-3.

It should also be noted that CEQA requires that an EIR or SEIR describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. [CEQA Guidelines Section 15126.6] The No Project/No Development Alternative must be evaluated along with its impact. That analysis must discuss the existing conditions as well as what could be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The range of alternatives required in an EIR/SEIR is governed by the "rule of reason," which requires that the EIR/SEIR set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. Only alternative locations that would avoid or substantially lessen any of the significant effects of the project need be considered if the proponent can reasonably acquire, control, or otherwise have access to any alternative site. An EIR/SEIR need not consider an alternative under which the effect cannot be reasonably ascertained and implementation is remote and speculative. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

An EIR is not required to consider alternatives which are infeasible. Factors that may be taken into account when addressing the feasibility of alternatives are site suitability; economic viability; availability of infrastructure, General Plan consistency, other plans or regulatory limitations; and jurisdictional boundaries. Determination of feasibility involves a balancing of various economic, environmental, social and technological factors. (Public Resources Code Section 21061.1 [statutory definition of "feasibility"]). In this sense, 'feasibility' under CEQA encompasses 'desirability' to the extent that it is based on a reasonable balancing of the relevant economic, environmental, social and technological factors." CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. An EIR must identify the environmentally superior alternative. It need not consider multiple variations of alternatives or alternatives to project components.



### **Response P-63-7**

The comment suggests an additional alternative to the proposed project and summarizes how the commenter believes this Alternative 4 meets all of the project objectives. The comment does not specifically question the treatment of any issue in the Draft SEIR. This suggested alternative and comment will be forwarded to the decision makers for their consideration. Please see Response to Comment P-63-6.

### **Response P-63-8**

The comment states that Alternatives 2 and 3 have been designed with the specific purpose of failing to meet the project objectives, which makes the Draft SEIR invalid under CEQA. This comment states the views of the commenter but does not specifically question the treatment of any issue in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please see Response to Comment P-63-6.

### **Response P-63-9**

This comment states that the commenter's suggested alternative is feasible, will accomplish the project objectives, is a reduction in environmental impacts, and would not have economic, social, or other conditions that would make the suggested alternative infeasible. This comment states the views of the commenter but does not specifically question the treatment of any issue in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please see Response to Comment P-63-6.

### **Response P-63-10**

The comment states that the commenter hopes Dana Point Harbor does not certify the Draft SEIR, and the commenter would like to see public hearings before the Orange County Planning Commission and the Orange County Board of Supervisors. The County, as the CEQA Lead Agency, is the legal agency to take action on the Draft SEIR. Public hearings before the Orange County Planning Commission and the Orange County Board of Supervisors will occur as part of the Draft SEIR certification and project discretionary approval process.

### **Response P-63-11**

The comment states that the Lead Agency has not complied with CEQA by not following a timely submission of the Draft SEIR. This comment does not raise any environmental issues under CEQA or their treatment in the EIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-63-12**

The comment states that the Scoping Meeting is out of date due to the passage of time and that the allotted review period for the Draft EIR was too short. CEQA mandates that a review period of 45

days be provided for a Draft SEIR. However, in response to stakeholder requests, OC Dana Point Harbor extended the Draft SEIR review period from 45 days to 62 days, with the public review period ending on November 21, 2011. There is no requirement to hold a scoping meeting under CEQA; the time that has elapsed since the original scoping meeting was held does not invalidate the Draft SEIR analysis or conclusions.

Additionally, the comment states that the Harbor Director treated the process as a political game and not a professional community planning activity. This comment is the commenter's view on the process of the project and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-63-13**

The comment states that Boaters for Dana Point Harbor request to be an interested party and to meet with the Harbor Director or his staff regarding the project. This comment is the commenter's view on the process of the project and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-63-14**

The comment states that the Harbor Director did not include all interested parties in his selection of the members of the Boater Focus Group, nor were meetings conducted with transparency. This comment does not raise any environmental issues under CEQA or their treatment in the EIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-63-15**

The comment states that the County Board of Supervisors should consider assigning a different Lead Agency. Under CEQA, the Lead Agency for a project is that agency which has the primary authority to approve a project. The comment does not specifically question the treatment of any issue in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-63-16**

The comment requests that the alternative proposed by the commenter be given fair and professional evaluation. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DAVID AND AUDREY ZINKE**

### **LETTER CODE: P-64**

**DATE:** November 21, 2011

#### **Response P-64-1**

The comment is introductory and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-64-2**

The comment states that the proposed project does not include adequate parking for boaters. Please see Common Response 5.

#### **Response P-64-3**

The comment expresses the belief that the boaters are financing most of the project, but the replacement of the docks and slips will be completed last. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-64-4**

The comment states opposition to any channel narrowing and expresses safety concerns. Please see Common Responses 1 and 2.

#### **Response P-64-5**

The comment states opposition to eliminating the 3 ft overhang currently allowed. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-64-6**

The comment requests that no land or dock area be eliminated from the shipyard. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-64-7**

The comment is concerned that County officials have intimidated members of the public from speaking in opposition to the project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **APRIL SALEM AND FAMILY**

### **LETTER CODE: P-65**

**DATE:** November 21, 2011

#### **Response P-65-1**

The comment is introductory and states opposition to the proposed project. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-65-2**

The comment states that the Dana Point Harbor is a safe entry for a small craft during storms, and the focus of the Harbor should remain a Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-65-3**

The comment states that the Harbor is lucky to have nonnative birds year round. The comment is an observation and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-65-4**

The comment states that adding more slips near Baby Beach will increase the noise. Overall, the number of slips will be reduced under the proposed project, and no additional noise impacts due to the reconfiguration of slips is anticipated. Noise impacts were thoroughly addressed in Section 4.6 of the Draft SEIR.

#### **Response P-65-5**

The commenter is opposed to the slip configuration because it would result in more gates within the Harbor, which would create additional noise. The comment does not specifically question the treatment of any issues in the Draft SEIR; however, noise impacts were thoroughly addressed in Section 4.6 of the Draft SEIR. Additionally, this comment will be forwarded to the decision makers for their consideration.

#### **Response P-65-6**

The commenter is opposed to narrowing the channel. A Boater Traffic Study was completed and summarized in the Draft SEIR. The study determined that no significant impacts would result from

the proposed channel narrowing. However, this comment will be forwarded to the decision makers for their consideration.

**Response P-65-7**

The comment states opposition to the planned dock changes for the Sea Scout slips and expresses concerns that their boats will not be accommodated. Please see Common Responses 3 and 4.

**Response P-65-8**

The comment states that parking was removed without a vote and given to kayak racks and vessels. Please see Common Response 5.

**Response P-65-9**

The comment expresses concerns that an increase in boats with larger engines would increase pollution. Please see Common Response 2.

**Response P-65-10**

The comment lists the commenter's fears for the future of the Harbor and views on the project, but does not raise any environmental issues under CEQA or their treatment in the EIR. This comment will be forwarded to the decision makers for their consideration.

## **CHOC – KRISTIN M HAWKING, MSW**

**LETTER CODE: P-66**

**DATE:** November 21, 2011

### **Response P-66-1**

The comment is introductory and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-66-2**

The commenter is concerned that the project will bring powerboats closer to the designed area for recreational activities. Please see Common Response 2.

## **STAND UP PADDLE ALLIANCE – MIKE MUIR**

**LETTER CODE: P-67**

**DATE:** November 21, 2011

### **Response P-67-1**

The comment is introductory and provides information about the Stand Up Paddle Alliance organization. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-67-2**

The comment states opposition to the project and expresses concerns that the encroachment of the new docks into the educational basin would impede access for human-powered watercraft. Please see Common Response 3.

### **Response P-67-3**

The comment states that the proposed project would create a safety hazard within the channel. Please see Common Responses 1 and 2.

### **Response P-67-4**

The comment states that the Draft SEIR did not adequately research the impacts of the docks on the ecosystems and tidal flow. Impacts of the proposed project on the surrounding biology were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

### **Response P-67-5**

The comment states that the limited access and impacts to ecosystems will impact the education opportunities. Please see Common Response 4 and Response to Comment P-67-4.



## **SAVE BABY BEACH COALITION**

### **LETTER CODE: P-68**

**DATE:** November 21, 2011

#### **Response P-68-1**

The comment is introductory and introduces the purpose of the Save Baby Beach Coalition (Coalition) in providing comments on the Draft SEIR. The Coalition expresses its opposition to construction of the proposed OC Sailing and Events Center docks and the public participation process. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-68-2**

The comment states that the proposed OC Sailing and Events Center docks are in conflict with the California Coastal Act and will impact sensitive coastal resources, recreational opportunities, and public access to the sea. Please see Common Responses 1, 3, and 4.

#### **Response P-68-3**

The comment states that the proposed project will decrease water quality within the basin. Please see Response to Comment P-21-3.

#### **Response P-68-4**

The comment states that the proposed project will substantially degrade the Basin's habitat. Impacts of the proposed project on the surrounding biology were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comment S-5-4.

#### **Response P-68-5**

The comment states that the proposed project will require the public to relocate to other areas due to access and congestion concerns. Please see Common Responses 1 and 3.

#### **Response P-68-6**

The comment states that the proposed project will substantially reduce the scenic value and views of the ocean. Please see Response to Comment P-29-7.

### **Response P-68-7**

The comment states that the proposed project will negatively impact parking. The comment further summarizes the previous comments. Please see Common Response 5.

### **Response P-68-8**

The comment states that the Draft SEIR piecemeals the project and fails to provide adequate cumulative analysis. Please refer to Response P-55-2

### **Response P-68-9**

The comment states that a longer extension for the public review period for the Draft SEIR was requested to be made to January 1, 2012, but that the County extended it by only 15 days. CEQA mandates that a review period of 45 days be provided for a Draft SEIR. However, in response to stakeholder requests, OC Dana Point Harbor extended the Draft SEIR review period from 45 days to 62 days, with the review ending on November 21, 2011.

### **Response P-68-10**

The comment states that the County acted to discourage public comment and that the public was not involved in the process. As stated above in Response to Comment P-68-1, CEQA mandates that a review period of 45 days be provided for a Draft SEIR. However, in response to stakeholder requests, OC Dana Point Harbor extended the Draft SEIR review period from 45 days to 62 days. CEQA does not require a longer review period, and no unusual circumstances occurred that would require a longer review period. OC Dana Point Harbor was responsive to the request to extend the public review period based solely on stakeholders' requests. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-68-11**

The comment states that the Draft SEIR's analysis does not include the environmental and construction history of Dana Point Harbor in order to assess the project's cumulative impact. In accordance with CEQA, the baseline for analysis of project impacts is generally considered to be the condition of the project site at the time the Notice of Preparation (NOP) is filed. As stated in the CEQA Guidelines Section 15125, "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives." The Draft SEIR was developed based on baseline conditions at the time the Revised NOP was prepared (December 2009). In addition, the baseline conditions for each environmental topic were fully described in the Existing Setting section in Chapters 4.1 through 4.11 of the Draft SEIR.

### **Response P-68-12**

The comment states that the Draft SEIR does not provide adequate analysis of impacts to the public's access to water-oriented uses at Baby Beach and that existing uses within and adjacent to the site will be disrupted. The proposed OC Sailing and Events Center docks are consistent with the marine and recreational uses within the Harbor and will not divide any existing uses. Additionally, the proposed docks, if constructed, will not reduce the size of the sandy beach or change access to the beach or waterfront. The proposed project is consistent with the California Coastal Act, which protects the public's access to coastal areas. The proposed project will not interfere with the public's right of access to the sea and will not interfere with or modify the public's right of access to the Dana Point Harbor facilities. Also, please see Common Response 3.

### **Response P-68-13**

The comment states that the impacts of the project alternatives are not adequately evaluated. The comment further proposes to work with the County to identify a more compliant alternative. CEQA requires that an EIR or SEIR describe a reasonable range of alternatives to the proposed project or to its location that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant effects and that it evaluate the comparative merits of each of the alternatives. See Response to Comment P-22-1.

### **Response P-68-14**

The comment states that the Draft SEIR fails to describe the full and long-term construction impacts. The comment raises concerns related to long-term noise, safety, parking, water pollution, habitat, and public access. Formulation of mitigation measures should not be deferred until some future time. (Guidelines, § 15126.4(a)(1)(B). An EIR/SEIR is inadequate if the success or failure of mitigation efforts depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR/SEIR. However, lead agencies have been permitted to defer the formulation of specific mitigation measures after the lead agency (1) undertook a complete analysis of the significance of the environmental impact, (2) proposed potential mitigation measures early in the planning process, and (3) articulated specific performance criteria that would ensure that adequate mitigation measures were eventually implemented. The Draft SEIR did meet the above criteria as there was a complete analysis of potential environmental impacts and all mitigation measures include specific performance criteria as to who, when and how the measures shall be implemented. Also, please see Response to Comment P-21-3.

### **Response P-68-15**

The comment states that the impacts to the aquatic environment are not accurately reported. Impacts of the proposed project on the surrounding biology were thoroughly addressed in Section 4.7 of the Draft SEIR. Also, please see Response to Comment S-5-4. The comment presents no report or other evidence to support the statements made and there is no specific reference to any specifically identified alleged deficiencies in the analysis.

### **Response P-68-16**

The comment states that impacts to current and future traffic and parking issues are not properly analyzed. In accordance with the requirements contained in the Dana Point Harbor Revitalization Plan and District Regulations, Implementation Plan Chapter II-14, Off-Street Parking Standards and Regulations (Section 14.2h) certified by the California Coastal Commission, "The location and amount of new development adjacent to park and beach areas shall not adversely impact public use of the low cost water oriented recreation, park and beach uses by ensuring that adequate parking spaces are maintained for these uses. Accordingly, all Coastal Development Permits for new development in Planning Areas 1, 4 and 5 shall demonstrate that the intensity of the proposed development and the proposed hours of operation will not adversely impact public use of the beach or park area within the Planning Area." In addition, the Draft SEIR included an analysis potential parking impacts on pages 4.4-14 and 4.4-15 in Section 4.4, Transportation. Mitigation Measures 4.4-2 and 4.4-3 include provisions to ensure that potential parking impacts are reduced to a less than significant level. Also, please see Common Response 5.

### **Response P-68-17**

The comment raises concerns related to access and congestion in the areas of Baby Beach. Please see Common Responses 1 and 3.

### **Response P-68-18**

The comment states that the Boater Traffic Study is outdated and lacks key data. The Dana Point Harbor Boat Traffic Study (Moffat and Nichol, November 2007) was prepared to analyze boat traffic conditions in the inner channel under existing conditions and with the proposed renovation configuration. The study analyzed historical boat traffic data from similar Marinas and conducted observations of boat traffic on a summer Saturday in the Harbor. The layout of docks, number of slips and boater conditions within the Harbor has not changed since the Boat Traffic Study was conducted, and therefore the study is considered to still be accurate for purposes of discussing the boat traffic conditions.

### **Response P-68-19**

The comment states concerns related to OC Dana Point Harbor's relocation of the swim buoys at Baby Beach over the years. The swim buoys are removed periodically for certain events held in the area, such as the Mongoose Cup stand up paddleboard event, but the concrete anchors for the buoys are left in place. In 2008/2009 the actual buoy anchors were removed for harbor dredging activities. A review of historic aerial photos shows that the current location of the swim buoys is very consistent with the location of the buoys in the 1980's and 1990's. An aerial photo from 2003 shows the buoy location slightly more to the east and closer to the OC SEC docks. Any shift that may have occurred in the buoy anchor location as a result of the 2008/2009 dredging did not relate to "pending new construction" as questioned by the commenter. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-68-20**

The comment states that the proposed project would degrade the cultural resources and public use experience at Baby Beach and states that Baby Beach is historically significant. As stated in the Draft SEIR, the Program EIR completed for the Dana Point Harbor Revitalization Project (FEIR No 591) concluded that based on results of the records searches, contact with the State of California's Native American Heritage Commission, and field reconnaissance completed by Chambers Group, no archaeological and/or historical resources were located within the Project area. Therefore, this issue was not evaluated further in the Draft SEIR.

The public use experience at Baby Beach, and the commenter's observation that Baby Beach is an important cultural resource, are personal opinions and do not specifically question the treatment of any issue in the Draft SEIR. Baby Beach does not meet the standards for cultural or historical resources, as defined in CEQA Guidelines Section 15064.5. In order for a site to be historically significant it must meet one of the criteria listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4852) A) including the following: A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (B) Is associated with the lives of persons important in our past; (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (D) Has yielded, or may be likely to yield, information important in prehistory or history. Additionally, the proposed Marina Improvement Project would not result in a substantial adverse change in the significance of any historical resource since it would not materially impair the significance of any cultural or historic resource.

### **Response P-68-21**

The comment states that the Draft SEIR fails to fully analyze the impacts to biological life and does not accurately document the present habitat that exists in the educational Basin. Impacts of the proposed project on the marine biological environment were thoroughly addressed in Section 4.7 of the Draft SEIR. Also, please see Response to Comment S-5-4.

### **Response P-68-22**

The comment disagrees with the Draft SEIR's conclusion that the project will result in approximately 33,000 square feet (sf) of increased foraging habitat; the comment requests recalculating the true amount of habitat area that will become available. As stated on page 4.7-28 of the Draft SEIR, the net amount of dock surface areas and pile surface areas throughout the Harbor is expected to decrease by approximately 32,990 sf due to reconfiguration of the dock systems. This is due to the design including double-wide slips and overall fewer slips than currently exist. The calculations were made based on the existing square footage of the docks as compared to the square footage contained in the conceptual design plans. This decrease in dock surface area will result in a long-term, beneficial impact to open water habitat. This will increase waterbird (and endangered species) and seabird foraging habitat and reduce shading effects on Harbor waters.

### **Response P-68-23**

The comment states that the previous biological surveys were flawed because they were conducted at a time when the Harbor was experiencing a harsh environment due to higher water pollution levels and siltation events. Project-specific eelgrass surveys were conducted in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP, National Marine Fisheries Service 1991, as amended). Eelgrass surveys were conducted during February/March of 2007 and in October/November of 2007. Further, in June of 2010, the earlier Dana Point Harbor marine biological surveys in the vicinity of Baby Beach and the Sailing Center Docks along the eastern one-third of Baby Beach were updated. Therefore, the eelgrass surveys were conducted over several different time periods and represent an accurate condition of the marine biology in the Harbor. In addition, pre- and post-dock construction eelgrass surveys will be required per the provisions of the SCEMP. Based upon these surveys, a determination will be made if mitigation is required, and a mitigation plan to offset eelgrass habitat losses will be developed if eelgrass losses occur. Please see Response to Comment S-5-4.

### **Response P-68-24**

The comment states that the dock design results in safety and emergency vehicle hazards in the event of an emergency on the proposed OC Sailing and Events Center docks. This comment is an opinion and does not specifically question the treatment of any issue in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-68-25**

The comment states that safety issues related to tsunamis should be further addressed. As stated on page 4.4-17 of the Draft SEIR, a tsunami or seiche could cause damage to the Marina facilities and boats docked at the Harbor. However, the Marina Improvement Project would not change these existing conditions, and there is an established warning system in place that would provide early notification of an advancing tsunami that would allow for evacuation. Additionally, there would not be a substantial change from existing conditions with regard to Marina facilities and the number of boats docked at the Harbor. Therefore, potential impacts to public safety due to inundation by a tsunami or seiche were determined to be less than significant.

### **Response P-68-26**

The comment states that an accident or failure of the proposed pump-out station near Baby Beach would have a water quality and public health impact. Pump-outs are necessary to prevent sewage spills and encourage improved water quality in the Harbor. Pump-outs exist in the Harbor today. In fact, there is an existing pump-out in the OC Sailing and Events Center /Baby Beach area, which is located at the end of the guest docks. The proposed pump-out will replace this existing pump-out in the same general area, located about 150 feet to the west of this existing location, as shown on Figure 3.11 on page 3-30 of the Draft SEIR. Pump-outs are self-contained collection systems and are necessary to prevent sewage spills and encourage improved water quality in the Harbor. The availability and use of pump-out stations should improve water quality in the Harbor overall, including the Baby Beach area. Please see Common Response 2.

### **Response P-68-27**

The comment states that the proposed OC Sailing and Events Center docks will change tidal and runoff flows and will impact water quality in the basin during storm events. The comment is an opinion and does not include any specifics or evidence to support the views expressed. The Draft SEIR included a complete analysis of runoff and water quality impacts in Section 4.3, Hydrology and Water Quality. As stated on page 4.3-17 of the Draft SEIR, "...the docks are not considered an impervious area, as typically defined, because of the gaps in the docks that are over open marina waters. Therefore, the project would not increase storm water flows into the West and East Marinas since there is no increase in the impervious area or capacity of the marina. Because the proposed project is not increasing the capacity of the marina or adding a new use to the Harbor, there will be no increase in pollutants generated on site above existing conditions. As a result, the drainage pattern, runoff volumes, and pollutants from on and off the site would remain essentially the same as in the existing condition." Also, please see Response to Comment P-21-3.

### **Response P-68-28**

The comment states that the Draft SEIR omitted a visual impact analysis and lighting analysis of the proposed docks. Aesthetic and visual resources, including lighting, were thoroughly addressed in Section 4.8 of the Draft SEIR. Also, please see Response to Comment P-29-7.

### **Response P-68-29**

The comment requests that buoys marking the location of the proposed OC Sailing and Events Center docks be installed to allow the public to better understand what visual impacts may occur. Aesthetic and visual resources, including lighting, were thoroughly addressed in Section 4.8 of the Draft SEIR. Also, please see Response to Comment P-29-7.

### **Response P-68-30**

The comment states that the proposed OC Sailing and Events Center docks will restrict the public's access to recreational uses in the Basin and will result in health impacts. The comment does not identify any project-specific impacts as addressed in the Draft EIR and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. The comment raises social issues, which are outside of the scope of CEQA. This comment will be forwarded to the decision makers for their consideration. Please refer to Response to Comment P-19-4 and Common Response 3.

### **Response P-68-31**

The comment states that the proposed project will limit access and result in negative economic impacts to businesses. This comment raises economic and social issues, both of which are outside of the scope of CEQA, and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration. Please see Common Response 3 and Response to Comments P-3-4 and P-19-4.

### **Response P-68-32**

The comment is a summary and conclusion to the letter, restating the concerns regarding the perceived piecemealing of the project and consideration of alternatives as outlined in the previous comments. See Response to Comments P-22-1 and P-55-2.

### **Response P-68-33**

The comment is an attachment to the comment letter and contains an example of the Save Baby Beach Petition Letter that was circulated and signed by the Coalition members. This letter was submitted by individuals separately and responded to several times within this document. This comment will be forwarded to the decision makers for their consideration.

### **Response P-68-34**

The comment is an attachment containing a list of signatures from the Save Baby Beach Petition. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This attachment will be forwarded to the decision makers for their consideration.

### **Response P-68-35**

The comment is an attachment containing a list of additional comments made by individuals on the Save Baby Beach Petition Letter. These comments are addressed individually within this document. This attachment will be forwarded to the decision makers for their consideration.



**LORI J VAN HOVE**

**LETTER CODE: P-69**

**DATE:** November 21, 2011

**Response P-69-1**

The comment is introductory and states that the commenter has concerns regarding the project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**Response P-69-2**

The comment states that the project will further impact parking issues at the Harbor. Please see Common Response 5.

**Response P-69-3**

The comment states that eliminating the 3 ft overhang rule will force boaters into more expensive slips. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**Response P-69-4**

The comment states that the proposed project represents the interests of businesses over boaters. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**ALLEANNA CLARK**

**LETTER CODE: P-70**

**DATE:** November 21, 2011

**Response P-70-1**

The comment describes the commenter's personal familiarity with, and experiences in, Dana Point Harbor and expresses concerns related to water quality and congestion resulting from the proposed OC Sailing and Events Center docks. Please see Common Response 1 and Response to Comment P-21-3.

## **JOHN CLARK**

### **LETTER CODE: P-71**

**DATE:** November 21, 2011

#### **Response P-71-1**

The comment is introductory and expresses concerns regarding the proposed project. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-71-2**

The comment states that the proposed OC Sailing and Events Center docks will reduce safe access for recreational activities. See Common Responses 1 and 3.

#### **Response P-71-3**

The comment states that the proposed OC Sailing and Events Center docks will increase pollution in a swimming area. Please see Common Response 2.

#### **Response P-71-4**

The comment states that the proposed OC Sailing and Events Center docks will limit the amount of parking for public access. Please see Common Response 5.

#### **Response P-71-5**

The comment states that the proposed OC Sailing and Events Center docks will impact biological life in the Harbor. Impacts of the proposed project on the surrounding biology were thoroughly addressed in Section 4.7 of the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-71-6**

The comment also describes the commenter's personal familiarity with, and experiences in, Dana Point Harbor and raises issues related to congestion and safety. Please see Common Responses 1, 2, and 3.

**Response P-71-7**

The comment states that additional parking will be needed due to the proposed OC Sailing and Events Center docks. The proposed Waterside Improvement Project reduces the overall number of boat slips in the Harbor. Please see Common Response 5.

**Response P-71-8**

The comment states that the project will impact eelgrass and water quality. Impacts of the proposed project on the surrounding biology were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments P-21-3 and S-5-4.

**Response P-71-9**

The comment is a conclusion to the letter and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**TOM NULTY, JR.**

**LETTER CODE: P-72**

**DATE:** November 21, 2011

**Response P-72-1**

The comment states that the proposed project is a plan to reduce the number of smaller affordable slips and did not present enough reconfigurations. The comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

**Response P-72-2**

The comment proposes an alternative to the project where the slips would be rebuilt as they are now (including no channel encroachment, realignment elimination of 50 ft slips, or loss of parking) and should be constructed immediately. See Response to Comment P-22-1 regarding the consideration of alternatives.

**Response P-72-3**

The comment states that there are areas of inconsistency with baseline numbers and a lack of transparency with regard to fiscal accountability. This comment raises economic issues, which are outside of the scope of CEQA. See Response to Comment P-19-4. See also Response to Comment P-68-11 regarding baseline conditions.

## **SHIRLEY ZANTON**

### **LETTER CODE: P-73**

**DATE:** November 21, 2011

#### **Response P-73-1**

The comment is introductory and describes the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-73-2**

The comment expresses concerns regarding safety with motorized vessels near Baby Beach due to the proposed OC Sailing and Events Center docks. Please see Common Response 2.

#### **Response P-73-3**

The comment expresses safety concerns related to launching and docking by students in the OC Sailing and Events Center programs, as well as impacts public access for educational purposes. Please see Common Responses 1, 3 and 4.

#### **Response P-73-4**

The comment is a conclusion to the letter and does not raise any environmental issues under CEQA or their treatment in the Draft SEIR. This comment will be forwarded to the decision makers for their consideration.

## **WILLIAM J KINDEL**

### **LETTER CODE: P-74**

**DATE:** November 21, 2011

#### **Response P-74-1**

The comment states that the Boat Traffic Study (2007) does not account for the growth in human-powered watercraft use in the Harbor and their launching at Baby Beach. The Boat Traffic Study was conducted to assess the impacts related to narrowing the inner channels and was not intended to address the launching of human-powered watercraft at Baby Beach. See Response to Comment P-68-18. See also Common Response 1.

#### **Response P-74-2**

The comment states an opinion related to the narrowing of the channels, but does not question the specific treatment of environmental issues in the SEIR. The Dana Point Harbor Boat Traffic Study (Moffat and Nichol, November 2007) was prepared to analyze boat traffic conditions in the inner channel under existing conditions and with the proposed renovation configuration. See Response to Comment P-68-18.

#### **Response P-74-3**

The comment states that the encroachment into Baby Beach is the opposite of what should be done. The comment is an opinion and does not question the specific treatment of environmental issues in the SEIR. See Common Response 3 for access issues related to Baby Beach. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-74-4**

The comment states that the addition of a pump-out station near Baby Beach is a potential liability. Please see Common Response 2.

#### **Response P-74-5**

The comment states that the Boat traffic Study did not adequately address human-powered watercraft. Please see Response to Comment P-74-1.

#### **Response P-74-6**

The comment is a conclusion to the letter stating opposition to the project and does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

## **MICKEY AND PEGGY MUNOZ**

**LETTER CODE: P-75**

**DATE:** November 21, 2011

### **Response P-75-1**

The comment is introductory and describes the commenter's personal familiarity with Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-75-2**

The comment states that the proposed OC Sailing and Events Center docks will take up to 20 percent of the Baby Beach cove. Please see Common Response 3.

### **Response P-75-3**

The comment expresses concerns related to congestion in the Baby Beach area. Please see Common Response 1.

### **Response P-75-4**

The comment states that the project will limit parking available to the public. Please see Common Response 5.

### **Response P-75-5**

The comment states that access to the water will be reduced under the proposed project. Please see Common Response 3.



**TOM JONES**

**LETTER CODE: P-76**

**DATE:** November 21, 2011

**Response P-76-1**

The comment states opposition to the proposed OC Sailing and Events Center docks. This comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

## **DAN AND CAROL PELKEY**

**LETTER CODE: P-77**

**DATE:** November 22, 2011

### **Response P-77-1**

The comment describes the commenter's personal familiarity with Dana Point Harbor and asks that no changes be made to Baby Beach. The comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

## **SUPLOVE – DEB JOHNSTON**

**LETTER CODE: P-78**

**DATE:** November 22, 2011

### **Response P-78-1**

The comment states opposition to the proposed OC Sailing and Events Center docks and describes the commenter's personal familiarity with Dana Point Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

### **Response P-78-2**

The comment expresses concerns related to congestion and access resulting from the proposed OC Sailing and Events Center docks. Please see Common Responses 1 and 3.

### **Response P-78-3**

The comment expresses concerns related to introducing power boats into the area and placing a pump-out station near Baby Beach. Please see Common Response 2.

### **Response P-78-4**

The comment restates concerns related to public access and asks that the plans for the OC Sailing and Events Center docks be eliminated. Please see Common Response 3. This comment will be forwarded to the decision makers for their consideration.

## **ED AND ELAINE RAUTERKUS**

**LETTER CODE: P-79**

**DATE:** November 21, 2011

### **Response P-79-1**

The comment questions why such large expensive changes need to be made at the Harbor. The comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

## **RYAN AND LAUREN HARRINGTON**

### **LETTER CODE: P-80**

**DATE:** November 21, 2011

#### **Response P-80-1**

The comment is introductory and describes the commenter's personal familiarity with and experiences in Dana Point Harbor. This comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

#### **Response P-80-2**

The comment expresses concerns regarding safety due to congestion, shoaling areas, public access, channel encroachment, and impacts to educational programs. Please see Common Responses 1, 2, 3 and 4.

#### **Response P-80-3**

The comment states that the proposed plan will disrupt the existing eelgrass and fragile marine ecosystem in the basin. Impacts of the proposed project on the surrounding marine biological resources, including eelgrass, were thoroughly addressed in Section 4.7 of the Draft SEIR. Please see Response to Comments S-5-4 and P-21-3.

#### **Response P-80-4**

The comment expresses safety concerns related to launching and docking by students in the OC Sailing and Events Center programs. Please see Common Responses 1 and 4.

#### **Response P-80-5**

The comment states that motorboats docked in front of Baby Beach and the proposed pump-out station will increase pollution near the bathers. Please see Common Response 2.

#### **Response P-80-6**

The comment states that the presence of the large dock with big boats as a result of the project will change the visual character of the area and it will become aesthetically undesirable. Please see Response to Comment P-29-7.

**Response P-80-7**

The comment states that the addition of motor boats will increase safety concerns for non-motorboat users launching at Baby Beach. Please refer to Common Responses 1 and 2.

**Response P-80-8**

The comment restates concerns stated in the above comments and asks that other options be considered. This comment does not raise any environmental issues under CEQA or their treatment in the SEIR. This comment will be forwarded to the decision makers for their consideration.

## **SURFERS ENVIRONMENTAL ALLIANCE**

**LETTER CODE: P-81**

**DATE:** December 11, 2011

### **Response P-81-1**

The comment states that the Surfer's Environmental Alliance opposes any new development or docks adjacent to the Baby Beach area due to potential safety and congestion issues. Please see Common Responses 1 and 2. This comment will be forwarded to the decision makers for their consideration.

## EIR ERRATA

### INTRODUCTION

Any corrections to the Draft Subsequent Environmental Impact Report (SEIR) text and figures generated either from responses to comments or independently by OC Dana Point Harbor, are stated in this section of the Final SEIR. The Draft SEIR text and figures have not been modified to reflect these SEIR modifications.

These SEIR errata are provided to clarify, refine, and provide supplemental information for the Dana Point Harbor Marina Improvement Project Draft SEIR. Changes may be corrections or clarifications to the text and figures of the original Draft SEIR. Other changes to the SEIR clarify the analysis in the SEIR based upon the information and concerns raised by commenters during the public review period. None of the information contained in these SEIR modifications constitutes significant new information or changes to the analysis or conclusions of the Draft SEIR.

The information included in this SEIR errata that resulted from the public comment process does not constitute substantial new information that requires recirculation of the Draft SEIR. The California Environmental Quality Act (CEQA) Guidelines, Section 15088.5, states in part:

- (a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term “information” can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing that:
  - (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
  - (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
  - (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.
  - (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.
- (b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.



The changes to the Draft EIR included in these EIR modifications do not constitute “significant” new information because:

- No new significant environmental impact would result from the project or from a new mitigation measure;
- There is no substantial increase in the severity of an environmental impact that would result unless mitigation measures are adopted that reduce the identified significant impacts to a level of insignificance;
- No feasible project alternative or mitigation measure considerably different from others previously analyzed has been proposed or identified that would clearly lessen the significant environmental impacts of the project; and
- The Draft EIR is not fundamentally or basically inadequate or conclusory in nature such that meaningful public review and comment were precluded.

Therefore, recirculation of the Draft SEIR is not required because the new information added to the Draft SEIR through these modifications clarifies or amplifies information already provided or makes insignificant modifications to the already adequate Draft SEIR.

For simplicity, the Draft SEIR modifications contained in the following pages are in the same order as the information appears in the Draft SEIR. Changes in text are signified by strikeouts (~~strikeouts~~) where text has been removed and by underlining (underline) where text has been added. The applicable page numbers from the Draft SEIR are also provided where necessary for easy reference.

## PAGE 4.3-1 OF THE DRAFT SEIR

*The text on page 4.3-1 in Section 4.3, Hydrology and Water Quality, of the Draft SEIR was revised to provide clarification. This change to the Draft SEIR does not result in a significant impact and has no material effect on the findings of the SEIR.*

### Project Location

Dana Point Harbor (Harbor), located within the City of Dana Point (City), is within the Dana Point hydrologic sub-area (HSA) (901.14) of the San Juan hydrologic unit (901), within the San Diego Basin. The Marina Improvement Project lies within the San Juan Creek Watershed (Watershed), which ultimately drains to the Pacific Ocean. More specifically, the Marina Improvement Project lies within the Dana Point Coastal Streams Watershed, a subwatershed of the San Juan Creek Watershed. The Dana Point Coastal Streams receiving water for the project site is the Harbor.

### ~~San Juan Creek Watershed~~

~~The San Juan Creek Watershed covers 133.9 square miles and includes portions of the cities of Dana Point, Laguna Hills, Laguna Niguel, Mission Viejo, Rancho Santa Margarita, and San Juan Capistrano. Its main tributary, San Juan Creek, originates in the Santa Ana Mountains district of the Cleveland National Forest in the easternmost part of Orange County.<sup>1</sup> A number of coastal drains discharge to the Pacific Ocean through Dana Point Harbor. San Juan Creek and its main tributaries, Arroyo Trabuco Creek and Oso Creek, flow into the Pacific Ocean, south of the Harbor. Salt Creek and its tributaries Arroyo Salado Creek and San Juan Canyon Creek discharge to Salt Creek Beach, north of Dana Point Harbor.~~

### Dana Point Coastal Streams Watershed

The Dana Point Coastal Streams Watershed is located in southern Orange County, approximately 50 miles south of Los Angeles and 65 miles north of San Diego. The main tributary of the Dana Point Coastal Streams watershed is Salt Creek, which ultimately drains into the Pacific Ocean. The 6-square-mile watershed is almost fully developed and includes portions of the Cities of Dana Point and Laguna Niguel, and a very small area of San Juan Capistrano that does not drain into this watershed. Remaining undeveloped areas include open space within the Aliso and Wood Canyons Regional Park in the upper watershed and the Salt Creek Corridor Regional Park in the eastern part of the watershed. A few small, unnamed drainages and larger tributaries (Arroyo Salado Creek and San Juan Canyon Creek) join Salt Creek as it makes its way through the watershed. Also included in the Watershed are a number of coastal drains that discharge to the Pacific Ocean through Dana Point Harbor.<sup>2</sup>

<sup>2</sup> Orange County Watershed and Coastal Resources Division Web site, <http://www.ocwatersheds.com//.asp>, accessed April 20, 2007.

<sup>2</sup> OC Watersheds, Dana Point Coastal Streams, <http://www.ocwatersheds.com/DanaPointCoastalStreams.aspx>, Accessed 11/29/11.

**PAGE 4.3-3 OF THE DRAFT SEIR**

*The text on page 4.3-3 in Section 4.3, Hydrology and Water Quality, of the Draft SEIR was revised to provide clarification. This change to the Draft SEIR does not result in a significant impact and has no material effect on the findings of the SEIR.*

The West Marina receives runoff from five storm water pipes. There are two 18 in pipes that discharge runoff from areas adjacent to the Ocean Institute dock and Ensenada Place. The 51 in El Encanto Storm Drain discharges runoff from a storm drain network that extends beyond the Harbor. A small 15 in pipe discharges runoff from Dana Point Harbor Drive, west of Island Way, and a 24 in pipe discharges drainage from the Baby Beach ~~West~~ East Storm Drain.

The existing Harbor storm water pipe system and drainage areas are summarized in Table 4.3.A.

**Table 4.3.A: Existing Storm Drain Facilities**

Pipe Location	Drainage Area (DA)	Pipe Size (inches)	Watershed (Drainage) Area (acres)
<b>East Marina</b>			
Boat Launch Ramp	1	18	10.4
Golden Lantern Storm Drain	2	60	247
East of Island Way	3	18	10.7
<b>West Marina</b>			
West of Island Way, Dana Point Harbor Drive	4	15	5.3
El Encanto Storm Drain	5	51	195
Ocean Institute dock	6	18	4.63
Baby Beach <del>West</del> <u>East</u> Storm Drain	7	24	34.1
Ensenada Place	8	18	14.7

Source: Dana Point Revitalization Project FEIR No. 591

## PAGE 4.3-7 OF THE DRAFT SEIR

*The text beginning on page 4.3-7 in Section 4.3, Hydrology and Water Quality, of the Draft SEIR is expanded with the following information to provide clarification. This change to the Draft SEIR does not result in a significant impact and has no material effect on the findings of the SEIR.*

The State Water Board approved the 2010 Integrated Report on August 4, 2010. The 2010 Integrated Report includes changes to the 2006 Clean Water Act Section 303(d) list of impaired water bodies and Clean Water Act Section 305(b) report on the quality of waters in California. On November 12, 2010, the United States Environmental Protection Agency (EPA) approved the inclusion of all waters to California's 2008-2010 Section 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The EPA did not include any additional waters in San Diego Region 9. The EPA is providing the public an opportunity to review its decision to add waters and pollutants to California's 2008-2010 Section 303(d) list.

On August 4, 2010, the State Water Board approved the 303(d) list portion of the 2010 Integrated Report. The 2010 Integrated Report includes changes to the 2006 Clean Water Act Section 303(d) list of impaired water bodies and Clean Water Act Section 305(b) report on the quality of waters in California. The 2010 Integrated Report and supporting documents were submitted to the United States Environmental Protection Agency (EPA) for final approval on October 11, 2010. On November 12, 2010, the EPA approved the inclusion of all waters to California's 2010 303(d) list of impaired waters requiring TMDLs and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. The EPA provided public notice and the opportunity for public comment on the proposed additions, which ended December 23, 2010. On October 11, 2011, the EPA issued its final decision regarding the water bodies and pollutants the EPA added to California's 2010 303(d) list.

According to the EPA-approved 2010 303(d) list of impaired waters, Dana Point Harbor is impaired for copper toxicity and zinc. Further, EPA delisted indicator bacteria for Baby Beach from the 303(d) list.

~~According to the EPA State Water Board approved 2010 Integrated Report, Dana Point Harbor is impaired for copper, toxicity, and zinc. The Pacific Ocean shoreline at Baby Beach is impaired for enterococcus and total coliform (both are pathogens). Table 4.3.B summarizes the receiving waters and their classifications by RWQCB Region 9.~~

**Table 4.3.B: 303(d) Impairments of Downstream Water Bodies**

Receiving Water	Hydrologic Unit Code	303(d) Impairment	Size Affected
Dana Point Harbor — Bay and Harbor	901.14	Copper Toxicity Zinc	119 acres
Pacific Ocean Shoreline— Dana Point HSA, at Dana Point Harbor at Baby Beach	901.14	Enterococcus Total Coliform	— miles

Source: California's 2010 Integrated Report, approved by the United States Environmental Protection Agency on November 12, 2010.  
HSA — hydrologic subarea

There are no TMDLs currently approved for Dana Point Harbor that could regulate contributions of surface runoff into impaired water bodies; TMDLs for Baby Beach and Dana Point Harbor are pending. There are no existing target design constituents in the San Juan hydrologic unit.

On June 11, 2008, the Regional Water Quality Control Board, San Diego Region, adopted a Basin Plan amendment to incorporate the TMDLs for Indicator Bacteria developed for Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay. The TMDL Basin Plan amendment was subsequently approved by the State Water Resources Control Board on June 16, 2009, and the Office of Administrative Law (OAL) on September 15, 2009. The EPA granted final approval on October 26, 2009.

In order to ensure that the TMDL requirements are met and as required under state law, an Implementation Plan was developed and describes the regulatory and/or enforcement actions that the San Diego Water Board can take to reduce pollutant loading and monitor effluent and/or receiving water. The TMDLs will be implemented primarily by reissuing or revising the existing NPDES requirements for municipal separate storm sewer systems (MS4s) discharges to include Water Quality Based Effluent Limitations (WQBELs) that are consistent with the assumptions and requirements of the bacteria wasteload allocations (WLAs) for MS4 discharges. The USEPA expects that most WQBELs for NPDES-regulated municipal discharges will be in the form of BMPs.

**ATTACHMENT A**  
**CODED COMMENT LETTERS**

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-6390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
ds\_nahc@pacbell.net



September 29, 2011

Mr. Brad Gross, Director

**County of Orange – OC Dana Point Harbor**

24650 Dana Point Harbor Drive  
Dana Point, CA 92629

**Re: SCH#2003101142; CEQA Notice of Completion; Subsequent draft Environmental Impact Report (SEIR) for the "Dana Point Harbor Marina Improvement Project," located in the southwest portion of the City of Dana Point, Orange County, California.**

Dear Mr. Gross:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3<sup>rd</sup> 604). The NAHC wishes to comment on the proposed project.

S-1-1

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified** in the areas (APEs) you specified. The absence of archaeological resources does not preclude their existence.

S-1-2

S-1-3

The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

S-1-4

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

S-1-5

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

S-1-5

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

S-1-6

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254( r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

S-1-7

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

S-1-8

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

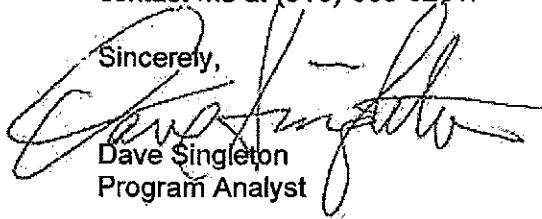
S-1-9



If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

↑  
S-1-9

Sincerely,



Dave Singleton  
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

**Native American Contacts**  
Orange County  
September 29, 2011

S-1

Juaneno Band of Mission Indians Acjachemen Nation  
David Belardes, Chairperson  
32161 Avenida Los Amigos Juaneno  
San Juan Capistrano CA 92675  
chiefdavidbelardes@yahoo.  
(949) 493-4933 - home  
(949) 293-8522

Juaneño Band of Mission Indians  
Sonia Johnston, Tribal Chairperson  
P.O. Box 25628 Juaneno  
Santa Ana , CA 92799  
sonia.johnston@sbcglobal.  
(714) 323-8312

Juaneno Band of Mission Indians Acjachemen Nation  
Anthony Rivera, Chairman  
31411-A La Matanza Street Juaneno  
San Juan Capistrano CA 92675-2674  
arivera@juaneno.com  
(949) 488-3484  
(949) 488-3294 - FAX  
(530) 354-5876 - cell

Juaneno Band of Mission Indians  
Anita Espinoza  
1740 Concerto Drive Juaneno  
Anaheim , CA 92807  
neta777@sbcglobal.net  
(714) 779-8832

Juaneno Band of Mission Indians  
Alfred Cruz, Cultural Resources Coordinator  
P.O. Box 25628 Juaneno  
Santa Ana , CA 92799  
alfredgcruz@sbcglobal.net  
714-998-0721  
714-998-0721 - FAX  
714-321-1944 - cell

United Coalition to Protect Panhe (UCPP)  
Rebecca Robles  
119 Avenida San Fernando Juaneno  
San Clemente CA 92672  
rebrobles1@gmail.com  
(949) 573-3138

Juaneno Band of Mission Indians  
Adolph 'Bud' Sepulveda, Vice Chairperson  
P.O. Box 25828 Juaneno  
Santa Ana , CA 92799  
bssepul@yahoo.net  
714-838-3270  
714-914-1812 - CELL  
bsepul@yahoo.net

Juaneno Band of Mission Indians Acjachemen Nation  
Joyce Perry; Representing Tribal Chairperson  
4955 Paseo Segovia Juaneno  
Irvine , CA 92612  
949-293-8522

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed sCH#2003101142; CEQA Notice of Completion; Subsequent draft Environmental Impact Report (SEIR) for the Dana Point Harbor Marina Improvement Project; located in the City of Dana Point; Orange County, California.

DEPARTMENT OF TRANSPORTATION

District 12  
3347 Michelson Drive, Suite 100  
Irvine, CA 92612-8894  
Tel: (949) 724-2241  
Fax: (949) 724-2592



Flex your power!  
Be energy efficient!

November 3, 2011

Brad Gross  
County of Orange  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

File: IGR/CEQA  
SCH#: 2003101142  
Log #: 1327G  
SR-1

Subject: Dana Point Harbor Marina Improvement Project

Dear Mr. Gross,

Thank you for the opportunity to review and comment on the **Draft Subsequent Environment Impact Report (SEIR) for the Dana Point Harbor Marina Improvement Project**. The Dana Point Harbor Marina Improvement Project will include removal of nearly all floating docks and piles; reconstruction of portions of the degraded wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. The project includes public access improvements to gangways and docks in compliance with the ADA guidelines, and construction of temporary docks located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach. The project site is located the Dana Point Harbor, in the southern portion of the City of Dana Point. The Harbor is a County of Orange facility operated by OC Dana Point Harbor. The nearest State route to the project site is Pacific Coast Highway (SR-1).

S-2-1

The Department of Transportation (Department) is a responsible agency on this project and we have the following comments:

1. Any project work proposed in the vicinity of the Department's right-of-way would require an encroachment permit and all environmental concerns must be adequately addressed. If the environmental documentation for the project does not meet the Department's requirements, additional documentation would be required before approval of the encroachment permit. Please coordinate with Department to meet requirements for any work within or near State right-of-way. All entities other than the Department working within the Department's right-of-way must obtain an Encroachment Permit prior to commencement of work. Please allow 2 to 4 weeks for a complete submittal to be reviewed and for a permit to be issued. When applying for an Encroachment Permit, please incorporate Environmental Documentation, SWPPP/ WPCP, Hydraulic Calculations, Traffic Control Plans, Geotechnical Analysis, right-of-way certification and all relevant design details including design exception approvals. For specific details on the Department's Encroachment Permits procedure, please refer to the Caltrans Encroachment Permits Manual. The latest edition of the manual is available on the web site:

S-2-2

<http://www.dot.ca.gov/hq/traffops/developserv/permits/>

Please continue to keep us informed of this project and any future developments, which could potentially impact the State Transportation Facilities. If you have any questions or need to contact us, please do not hesitate to call Marlon Regisford at (949) 724-2241.

↑  
S-2-2

Sincerely,

*Maya Maki for,*

Christopher Herre, Branch Chief  
Local Development/Intergovernmental Review

C: Scott Morgan, Office of Planning and Research



Matthew Rodriguez  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Deborah O. Raphael, Director  
5796 Corporate Avenue  
Cypress, California 90630



Edmund G. Brown Jr.  
Governor

November 3, 2011

Mr. Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

### NOTICE OF AVAILABILITY OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE DANA POINT HARBOR MARINA IMPROVEMENT PROJECT, (SCH#2003101142), ORANGE COUNTY

Dear Mr. Gross:

The Department of Toxic Substances Control (DTSC) has received your submitted draft Subsequent Environmental Impact Report (SEIR) for the above-mentioned project. The following project description is stated in your document: "Dana Point Harbor (Harbor) is located in Capistrano Bay on the Southern Orange County coastline approximately halfway between Los Angeles and San Diego Counties. The harbor is a County of Orange (County) facilities located within the City of Dana Point (City) and offers recreational boaters, County residents, tourists, and others a number of recreational activities, retail shopping, and dining opportunities. The harbor is bordered by the Pacific Ocean to the south; Dana headlands and Old Cove Marine preserve to the west; Doheny State Beach to the east; and a variety of commercial, hotel, residential, and park uses to the north. Land uses surrounding the Dana Point Marina Improvement Project within the Harbor boundaries include Marine Services, commercial retail, restaurants, public parking, public waterways, yacht clubs, Harbor patrol facilities, a hotel, Harbor-related public recreational areas, the Ocean Institute, and public parks. The project site is located entirely within the Coastal Zone and is under the land use planning and regulatory jurisdiction of the City (landslide areas) and the California Coastal Commission (CCC) (waterside areas)".

S-3-1

Based on the review of the submitted document DTSC has the following comments:

1. DTSC provided comments on the project re-issued Notice of Preparation (NOP) on January 27, 2010; some of those comments have been addressed in the submitted draft SEIR. Please ensure that all those comments will be addressed in the final Environmental Impact Report.
2. DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a

S-3-2

S-3-3

Mr. Brad Gross, Director  
November 3, 2011  
Page 2

Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see [www.dtsc.ca.gov/SiteCleanup/Brownfields](http://www.dtsc.ca.gov/SiteCleanup/Brownfields), or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

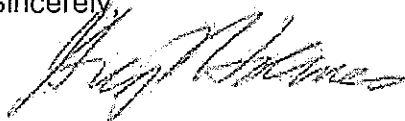
↑  
S-3-3

3. Also, in future CEQA documents please provide your e-mail address, so DTSC can send you the comments both electronically and by mail.

S-3-4

If you have any questions regarding this letter, please contact Rafiq Ahmed, Project Manager, at [rahmed@dtsc.ca.gov](mailto:rahmed@dtsc.ca.gov), or by phone at (714) 484-5491

Sincerely,



Greg Holmes  
Unit Chief  
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research  
State Clearinghouse  
P.O. Box 3044  
Sacramento, California 95812-3044  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov).

CEQA Tracking Center  
Department of Toxic Substances Control  
Office of Environmental Planning and Analysis  
P.O. Box 806  
Sacramento, California 95812  
Attn: Nancy Ritter  
[nritter@dtsc.ca.gov](mailto:nritter@dtsc.ca.gov)

CEQA # 3355



Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

November 7, 2011

Brad Gross  
Orange County, Dana Point Harbor Dept.  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Subject: Dana Point Harbor Marina Improvement Project  
SCH#: 2003101142

Dear Brad Gross:

The State Clearinghouse submitted the above named Supplemental EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 4, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

11-09-11P05:03 RCVD

S-4-1

S-4-2

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2003101142  
**Project Title** Dana Point Harbor Marina Improvement Project  
**Lead Agency** Orange County

**Type** SIR Supplemental EIR

**Description** The Dana Point Harbor marina Improvement Project renovations will include removal of nearly all floating docks and piles; reconstruction of portions of the degraded quay wall; installation of new docks, guide piles (or alternate anchoring methods), gangways, security gates, dock boxes, and utilities. Additionally, new dry stack storage staging docks and dinghy docks, along with renovations to the Youth and Group docks, guest docks, Harbor Patrol docks, commercial fishing docks, and sport fishing docks are included in the proposed Project. The project includes public access improvements to gangways and docks in compliance with the ADA guidelines, and construction of temporary docks located in the Harbor's Main Channel and along the breakwater adjacent to Doheny State Beach. The total number of boat slips would result in a net loss of no more than 155 slips.

**Lead Agency Contact**

**Name** Brad Gross  
**Agency** Orange County, Dana Point Harbor Dept.  
**Phone** (949) 923-2236 **Fax**  
**email**  
**Address** 24650 Dana Point Harbor Drive  
**City** Dana Point **State** CA **Zip** 92629

**Project Location**

**County** Orange  
**City** Dana Point  
**Region**  
**Lat / Long** 33° 27' .6" N / 117° 42' 0" W  
**Cross Streets** Golden Lantern Street / Dana Point Harbor Drive  
**Parcel No.** Water Area  
**Township** **Range** **Section** **Base**

**Proximity to:**

**Highways** Hwy 1, I-5  
**Airports** No  
**Railways** OCTA Metrolink  
**Waterways** San Juan Creek and Pacific Ocean  
**Schools** Capistrano Valley Unified School District  
**Land Use** Recreational Marinas/Dana Point Harbor Planned Community (City of Dana Point)/Harbor Marine Water (City of Dana Point)

**Project Issues** Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wildlife; Landuse; Cumulative Effects; Soil Erosion/Compaction/Grading; Aesthetic/Visual; Air Quality

**Reviewing Agencies** Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Conservation; Department of Fish and Game, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 12; Regional Water Quality Control Board, Region 9; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

**Date Received** 09/20/2011 **Start of Review** 09/21/2011 **End of Review** 11/04/2011

Note: Blanks in data fields result from insufficient information provided by lead agency.



**NATIVE AMERICAN HERITAGE COMMISSION**

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 SACRAMENTO, CA 95814  
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 ds\_nahc@pacbell.net



Clear  
 11/4/11  
 e

September 29, 2011

Mr. Brad Gross, Director

**County of Orange – OC Dana Point Harbor**

24650 Dana Point Harbor Drive  
 Dana Point, CA 92629



Re: SCH#2003101142; CEQA Notice of Completion; Subsequent draft Environmental Impact Report (SEIR) for the "Dana Point Harbor Marina Improvement Project;" located in the southwest portion of the City of Dana Point; Orange County, California.

Dear Mr. Gross:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3<sup>rd</sup> 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified in the areas (APEs) you specified.** The absence of archaeological resources does not preclude their existence.

The NAHC 'Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq.*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

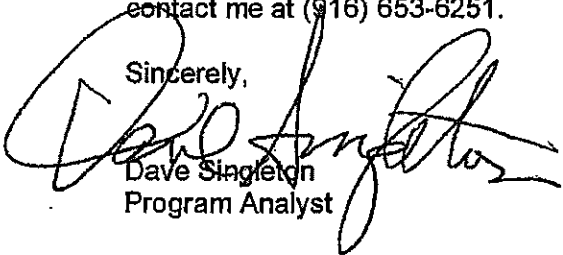
Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254( r) and may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Singleton", written over the typed name and title.

Dave Singleton  
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

Nov-21-11 05:07pm From-California Coastal

+5625905084

T-483 P.001/003 F-521

EDMLIND G. BROWN, JR., GOVERNOR

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY

**CALIFORNIA COASTAL COMMISSION**

South Coast Area Office  
200 OceanGate, Suite 1000  
Long Beach, CA 90802-4302  
(562) 590-5071



**FAX TRANSMITTAL FORM**

Date: 11/21/11

No. of Pages (Including Cover): \_\_\_\_\_

Fax Number: (949) 923-3792

TO: <u>BRYAN GROSS</u>	FAX Number: <u>562-590-5084</u>
Subject: <u>SEIR (SCH# 2003101142)</u>	

Comments:

FROM: FEHIE SY

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|--|---|
| <input type="checkbox"/> Urgent/Hand Carry | <input type="checkbox"/> Per Your Request     |
| <input type="checkbox"/> Confidential      | <input type="checkbox"/> Please Comment       |
| <input type="checkbox"/> Information       | <input type="checkbox"/> Original Will Follow |

**CALIFORNIA COASTAL COMMISSION**

South Coast Area Office  
200 Oceanside, Suite 1000  
Long Beach, CA 90802-4302  
(562) 590-5071



November 21, 2011

OC Dana Point Harbor  
Attn: Brad Gross, Director  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

**Re: Dana Point Harbor Marina Improvement Project  
Draft Subsequent Environmental Impact Report (SCH# 2003101142)**

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Marina Improvement Project. According to the Draft Subsequent Environmental Impact Report, the proposed project includes the following: replacement of waterside facilities in the West and East Basins in Dana Point Harbor, connection of dock gangways with the quay wall and bulkheads within those basins and replacement of gangways and security gates to both marina areas. Additionally, new Embarcadero/Dry Stack Storage Staging docks and dinghy docks, along with renovations to the marine services docks, OC Sailing and Events Center docks, guest slips, Harbor Patrol docks, commercial fishing docks and sport fishing docks are included in the proposed project. The project also includes public access improvements to gangways and docks in compliance with the Americans with Disabilities Act (ADA) guidelines. In order to accommodate displaced boats during project implementation, a temporary dock will be utilized located near the east breakwater next to the Harbor entrance is included in the project. Once renovations are complete, the temporary dock may be used on a permanent basis as a yacht broker dock. However, permanent use of the dock would require approval by the U.S. Army Corps of Engineers.

S-5-1

The proposed project is located within the Coastal Zone in the City of Dana Point. The entire project is located within the Coastal Commission's jurisdiction. Thus, the project must be evaluated for consistency with the Chapter 3 policies of the Coastal Act and will require a Coastal Development Permit from the Coastal Commission.

S-5-2

The following comments address the issue of the proposed project's consistency with the Chapter 3 policies of the California Coastal Act of 1976. The comments contained herein are preliminary and those of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. As described below, the proposed project raises issues related to biological resources and boating.

S-5-3

Draft Subsequent Environmental Impact Report  
Dana Point Harbor Marina Improvement Project  
Page 2 of 2

1. Biological Resources

The Draft Subsequent Environmental Impact Report states that eelgrass in the vicinity of the proposed OC Sailing and Event Center docks may be adversely impacted. In response, Mitigation Measure 4.7-2 has been imposed, which requires pre- and post-construction surveys and based upon these surveys, a determination will be made if impacts to eelgrass are anticipated and a mitigation plan to offset these losses will be developed. Avoidance of any adverse impacts to eelgrass should be the priority. However, if impacts to eelgrass are unavoidable, an approximation of the amount of eelgrass to be impacted should be made and a preliminary eelgrass mitigation plan developed. You should not wait until completion of the eelgrass surveys to develop a preliminary eelgrass mitigation plan.

S-5-4

2. Boating

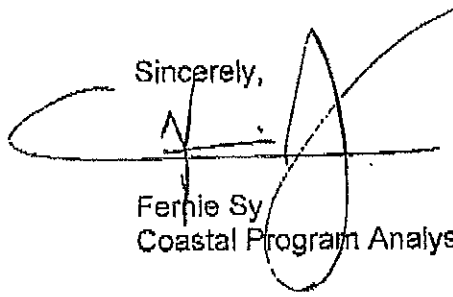
The Draft Subsequent Environmental Impact Report discusses and analyzes the proposed replacement of docks. For the Marine Services Docks, Sport Fishing Docks and OC Sailing and Events Center Docks, the document states that since these areas accommodate a varying number and size of boats on a fluctuating basis, that the capacity is discussed in terms of linear feet, not number of slips. However, in order to get a better understanding of the slip replacement work in these areas, the analysis should also provide the information of how many slips are removed and added.

S-5-5

Thank you for the opportunity to comment on the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project. Commission staff request notification of any future activity associated with this project or related projects. Please note, the comments provided herein are preliminary in nature. Additional and more specific comments may be appropriate as the project develops into final form and when an application is submitted for a Coastal Development Permit. Please feel free to contact me at 562-590-5071 with any questions.

S-5-6

Sincerely,



Fernie Sy  
Coastal Program Analyst II

Cc: State Clearinghouse



Jess A. Carbajal, Director
300 N. Flower Street
Santa Ana, CA
P.O. Box 4048
Santa Ana, CA 92702-4048
Telephone: (714) 834-2300
Fax: (714) 834-5188

NCL 11-043

November 1, 2011

County of Orange - OC Dana Point Harbor
24650 Dana Point Harbor Drive
Dana Point, California 92629

SUBJECT: Notice of Availability of a Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project located in the City of Dana Point.

To Whom It May Concern:

The County of Orange has reviewed the Notice of Availability of a Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project and offers the following comments:

Environmental Resources:

In response to your request for input on the subject project, Environmental Resources has reviewed the document, and offers the following technical comments:

- 1. Page 4.3-1, Existing Setting, Project Location/San Juan Creek Watershed

Although the San Diego Regional Board has placed Dana Point Coastal Streams under the Laguna subunit of the San Juan Hydrologic Basin, Dana Point Coastal Streams is not a subwatershed to San Juan Creek as it does not drain into the creek. A description of the Dana Point Coastal Streams watershed can be found in the Dana Point Coastal Streams watershed workplan which can be downloaded from the OC Watersheds website at { HYPERLINK "http://www.ocwatersheds.com/DocumentsPublicReview.aspx" }. An excerpt is provided below including added reference to Dana Point Harbor:

The Dana Point Coastal Streams Watershed is located in southern Orange County, approximately 50 miles south of Los Angeles and 65 miles north of San Diego. The main tributary of the Dana Point Coastal Streams watershed is Salt Creek, which ultimately drains into the Pacific Ocean. The 6-square-mile watershed is almost fully developed and includes portions of the cities of Dana Point and Laguna Niguel, Dana Point Harbor and a very small area of San Juan Capistrano. Remaining undeveloped areas include open space within the Aliso and Wood Canyons Regional Park in the upper watershed and the Salt Creek Corridor Regional Park in the eastern part of the watershed. A few small, unnamed drainages and larger tributaries (Arroyo Salado Creek and San Juan Canyon

L-1-1

L-1-2

*Creek) join Salt Creek as it makes its way through the watershed. The creek originates in the city of Laguna Niguel and flows underneath Marina Hills Drive, Niguel Road, Pacific Island Drive, and lastly, Pacific Coast Highway, before discharging into the Pacific Ocean. A number of coastal drains also discharge to the Pacific Ocean through Dana Point Harbor.*

L-1-2

2. Page 4.3-3, Existing Storm Drain Facilities

There is a drain at the east end of Baby Beach which conveys runoff from a small parking lot area near the beach. It is unclear whether this drain is included in the table of storm drain facilities.

L-1-3

3. Page 4.3-4, Existing Conditions, Baby Beach Water Quality

Provided description of water quality conditions presumes closures are mainly because of untreated runoff but this relationship has not been clearly defined. Please modify to include additional information on bacteria impairment at Baby Beach from Baby Beach Bacteria TMDL FY 2009-10 progress report. The report can be downloaded from the OC Watershed website at { HYPERLINK "http://www.ocwatersheds.com/DanaPointCoastalStreams\_BabyBeach.aspx" }.

An excerpt is also provided below. Additional information on BMPs implemented at the beach in response to bacteria impairment can also be found in the progress report.

*Routine testing of bacterial water quality at Baby Beach began in 1995. In August of 1996 high fecal indicator bacteria concentrations in beach waters prompted health officials to close the water to swimmers. An extensive 11-month investigation included:*

- *video camera inspection of nearby sewer lines,*
- *inspection of plumbing of harbor restrooms,*
- *development and testing of groundwater at 15 monitoring wells,*
- *analysis of runoff from blufftop neighborhoods,*
- *installation of plugs in storm drains to the beach,*
- *reduction of irrigation and fertilizer use at adjacent park areas,*
- *increased cleanup of animal excrement in the park area,*
- *installation of signage to discourage the feeding of birds, and*
- *removal of an old abandoned septic tank,*

L-1-4

*The source of the high bacteria levels remained unknown in spite of these efforts. The beach was reopened on July 1, 1997 but high bacteria counts remained a recurring problem.*

*In 2000, health risk advisory signs were posted at Baby Beach again for an extended period of 54 days. As a result, Baby Beach was placed on the 2002 303(d) list as impaired by indicator bacteria. In 2004, The San Diego Regional Water Quality Control Board (San Diego Water Board) began development of Total Maximum Daily Loads (TMDLs) to address high bacteria concentrations at Baby Beach and at other impaired harbor and bay beaches in the San Diego Region. On June 11, 2008, the San Diego Water Board adopted TMDLs to address elevated bacteria concentrations at Baby Beach in the Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay (Resolution No. R9-2008-0027). Final approval of the Baby Beach Bacterial Indicator TMDL by the state Office of Administrative Law (OAL) occurred in September 2009.*



OC Dana Point Harbor  
November 1, 2011  
Page { PAGE }

*Bacteria source investigation work and source control efforts have continued at Baby Beach since the initial 1996 beach closing. Although a definitive source of the high bacteria levels has not been identified, there has been significant improvement in the water quality at Baby Beach through the implementation of multiple Best Management Practices (BMPs). Since 2007-08 Baby Beach has received an "A" on Heal the Bay's annual beach report card and has been delisted for "fecal coliform" (one of three tested indicator bacteria) from the State Water Resources Control Board 2010 Clean Water Act Section 303(d) List/305(b) Report (2010 Integrated Report).*

↑  
L-1-4

- 4. Page 4.3-7, Regulatory Setting, Federal Requirements of the Clean Water Act, Second Paragraph, Last Line.

Description is outdated as the EPA issued its final decision regarding the waters it added to the State's 303(d) list on October 11, 2011.

L-1-5

- 5. Page 4.3-7, Regulatory Setting, Federal Requirements of the Clean Water Act, Third Paragraph, Second Line.

Not all species of enterococcus and coliform bacteria are pathogens. See for reference: { HYPERLINK "http://water.epa.gov/type/rsl/monitoring/vms511.cfm" }. Revise "{both are pathogens}" to "(both are bacterial indicators for pathogens)"

L-1-6

- 6. Page 4.3-7, Regulatory Setting, Federal Requirements of the Clean Water Act.

Provided regulatory description is out of date, as final approval of the Baby Beach Bacterial Indicator TMDL by the state Office of Administrative Law (OAL) occurred in September 2009. Please modify description accordingly. It should be noted that Baby Beach was delisted for fecal coliform as part of the 2010 Integrated Report and that the listing for total coliform is related is the shellfish criteria and not REC objectives.

L-1-7

If you require any additional information, please contact Grant Sharp at (714) 955-0674.

Sincerely,

Michael Balsamo  
Manager, OC Community Development  
OC Public Works/OC Planning  
300 North Flower Street  
Santa Ana, California 92702-4048  
{ HYPERLINK "mailto:Michael.Balsamo@ocpw.ocgov.com" }

MB/mmc

cc: Chris Crompton, Environmental Resources



South Coast  
Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov

E-Mailed: November 18, 2011  
bgross@ocdph.com

November 18, 2011

Mr. Brad Gross  
Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

**Review of the Draft Subsequent Environmental Impact Report (Draft EIR)  
for the Proposed Dana Point Harbor Marina Improvement Project**

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the lead agency and should be incorporated into the Final Subsequent Environmental Impact Report (SEIR) as appropriate.

L-2-1

The AQMD staff is concerned about the significant regional impacts from the proposed project. Specifically, the lead agency determined that the project will exceed the AQMD's CEQA significance thresholds for regional NOx and VOC emissions; therefore, the AQMD staff recommends that the lead agency require the additional construction mitigation measures listed below pursuant to Section 15126.4 of the CEQA Guidelines.

- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NOx emissions requirements,
- During project construction, all internal combustion engines/construction, equipment operating on the project site shall meet EPA-Certified Tier 2 emissions standards, or higher according to the following:
  - ✓ Project Start, to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 2 offroad emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

L-2-2

- ✓ January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- ✓ Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- ✓ A copy of each unit’s certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
- ✓ Encourage construction contractors to apply for AQMD “SOON” funds. Incentives could be provided for those construction contractors who apply for AQMD “SOON” funds. The “SOON” program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website:  
<http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>

L-2-2

For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website:  
[www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html).

Pursuant to Public Resources Code Section 21092.5, AQMD staff requests that the lead agency provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final SEIR. Further, staff is available to work with the lead agency

L-2-3

Mr. Brad Gross

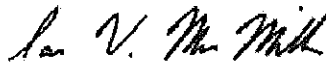
3

November 18, 2011

to address these issues and any other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

↑  
L-2-3

Sincerely,



Ian MacMillan

Program Supervisor, CEQA Inter-Governmental Review  
Planning, Rule Development & Area Sources

IM:DG

ORC110922-03  
Control Number

10-21-11P12:52 RCVD

101 W. Avenida Santiago  
San Clemente, CA. 92672  
October 14, 2011

Dear O.C. Dana Point Harbor Officials,

I would like to make a public comment about the SEIR draft report for the O.C. Sailing and Events Center to move the existing docks to the western most side of the facility near Baby Beach. Not only does this idea not make any sense, it is a very dangerous concept and will really impact the public's use of the harbor in a negative way.

P-1-1

First, the harbor is not adequate in size now for Kayakers, standup paddlers, small boat sailors and the Dana outriggers. Taking up space by putting in docks in front of Baby Beach will reduce the space for these activities and cause more dangerous situations for those citizens involved in these sports.

Second, the plan states that due to the shallow depths, "only small boating craft would have access" to these docks. The Sea Scouts, who have been in the harbor at the Youth and Group Facility (O.C. Sailing and Events Center) for over thirty five years (before the buildings were built) have five large vessels in length from 24 feet to 38 feet. These vessels are used by hundreds of Orange County youth and adults each year, including Saddleback College, Westwind sailing, Aventura Sailing and the Mariners Ship 936 - the largest Sea Scout ship in California. Where in the plan are there docks for these larger vessels? The plan calls for docking them along the channel between the Dana Point Yacht Club and the O.C. Sailing and Events Center. This is a very unsafe idea that will put many adults and kids at risk. The tidal bores and winds that run through the channel at this point are ferocious and can be dangerous, not to mention the narrowing of the channel for tacking boats, kayakers, standup paddlers, and other non-motorized users.

P-1-2

Third, Putting the docks on the west side of the O. C. Sailing and Events Center is a very dangerous idea because of the wind direction in this part of the harbor. The prevailing winds would push boats into the docks creating a very dangerous docking situation for young sailors docking their vessels. Now, with the docks on the eastern side of the facility, docking is much easier and safer for novices because the docking vessels are behind a building which shields the wind and are headed into the wind. Any sailor knows that docking into the wind is much safer.

Fourth, there will be inexperienced youth and adults entering and leaving slips with kayakers, standup paddlers and other small craft right next to them. This will create a very hazardous situation for all involved and could end up in deaths and lawsuits.

Lastly, in the SEIR it states: "...it (moving the docks to the western side of the facility) will not significantly alter the existing uses and activities associated with this facility." This is a blatant lie. The western oriented docks will have a major negative impact on all of the youth and adult programs at the facility for the reasons stated above.

P-1-3

I hope the designers who thought up this really dangerous and impractical idea reconsider their plans for putting the O.C. sailing and Events Center docks on the western side of the facility. Again, the area for small boat sailing, kayaking, paddling, etc. is already too small; there is no safe docking for larger boats used by those groups who use the facility and the wind direction will cause the docking of boats to be very dangerous and accidents and lawsuits are going to happen.

P-1-4

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Prestridge", followed by a long horizontal line extending to the right.

Bill Prestridge  
101 W. Avenida Santiago  
San Clemente, CA. 92672

billprestridge@gmail.com  
949-498-8585

October 25, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr Gross:

I am writing about the Draft SEIR for the renovation of the Baby Beach area. I have been a resident of the local area for over 15 years and enjoy a number of activities in the Baby Beach area. I introduced my children to sailing when they were very young through Westwind Sailing where I sailed as an adult. When they got older they both attended the summer camps and sailing clinics offered by Westwind. My son became a volunteer instructor for Westwind as soon as he was old enough and is now in his 3rd year of working for them as a paid instructor.

Our family is also deeply involved with the Mariners Sea Scouts with my son currently in the program for his 4th year. I am on the Board of Directors and serve in a variety of volunteer positions for this wonderful organization. I've also participated as a volunteer working with the adaptive learning adults who have come down to the basin to experience the joys of sailing, paddle boarding and kayaking

My daughter has served as a volunteer counselor for the Ocean Institute summer camps overseeing dozens of small children in the Baby Beach area. We've all learned to paddle board off of Baby Beach, enjoy the kayaks stored on the east dock, and come down to the harbor almost every weekend to sail or paddle board.

I share all of this to let you know how familiar I am with the level of activity and traffic which occur at the Baby Beach basin. Given this familiarity, I have deep concerns about the Draft SEIR. Specifically:

- The proposed configuration of the new docks on the west side of youth facility puts large motorized vessels in dangerously close proximity to Baby Beach
- These motorized vessels are typically skippered by Mariners youth who are novice skippers putting the youth on the boats, the toddlers on the shore and the surrounding kayakers and paddle boarders at risk
- This part of the basin is too shallow to safely accommodate boats with keel hulls

P-2-1

P-2-2

- There is no space for correction should an engine fail or prevailing winds require a sudden change of direction by a vessel increasing the risk of a boat running aground or ending up on the beach
- The primary population enjoying the beach at Baby Beach are babies and toddlers. Adding motorized vessels to the west docks will have a negative environmental impact on this vulnerable population with increased pollution in very close proximity to the swim beach.
- The existing docks on the westside are already very congested with activity involving Capris, Lasers, Sabots and paddle boards. Adding more vessels and people to this dock area will create an untenable level of congestion
- The proposed docks in the basin will encroach upon at least 20% of the available launch area and sailing area for novice sailors, kayakers and paddle boarders. The reduced water and beachfront space will make an already crowded area that much more congested due to reduced area.
- This encroachment and resulting congestion creates a dangerous situation and dramatically increases legal exposure for all involved parties including the County, Westwind and the Mariners organization.

↑  
P-2-2

P-2-3

P-2-4

In my opinion, the Draft EIR does not adequately address these issues related to access, congestion, pollution and liability and should not be approved.

Thank you for your consideration.



Valerie Burchfield Rhodes  
16 High Bluff  
Laguna Niguel, CA 92677



*William C. Palmer*  
83 North Road  
Hopkinton, RI

October 27, 2011

Mr. Brad Gross, Director  
OC Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for operating and maintaining such a wonderful Boat and Recreation Harbor. My wife Jean, our daughter with her friend, and I, recently toured the Dana Point Harbor Area.

The whole scene is magnificent. There is not a beach in New England, that even compares with what we saw in your district. We had a wonderful time there.

Our family sponsors the Tandem Wave Organization of California. We watched our first, professional Tandem Surfing Contest at the Velzy recently. It was quite a time for all of us.

I am writing you, to explain my concerns with the proposed dock project, next to Baby Beach. I have read through a copy of the Environmental Impact Report, for the proposed Dana Point Harbor Marina Improvement Project.

Listed below, are a few sections of the report, describing the proposed project at the Baby Beach Area, and my concerns with them:

- Under the 12 Plan Priorities developed in 1997, Objective #10, "Keep existing parkland, beach and landscape", is being overlooked, by removing substantial usable water area at the Baby Beach. I have seen the "plan" view, or looking down view, of the proposed dock work at Baby Beach... and various "Key Views" presented in the report. Is there a proposed project "virtual" Key view, as seen from standing on Baby Beach, looking South, towards the stone jetty, with the proposed dock work on the left side, and the large Sea Scout Sailboats interacting with individuals, trying to launch human powered SUPs, outrigger canoes, small sailboats, and swimmers in the same area? This is a potentially dangerous scenario. Unacceptable for all parties involved...
- The EIR contains several different studies conducted for the project, from watercraft traffic, air quality, water quality, even noise decibels for marine life. However, has there been a study of the "activities", which occur at Baby Beach, including numbers of people? Is there any photography of these

P-3-1

P-3-2

P-3-3

~11P12:51 60v0

activities? Has a study been undertaken, showing the potential displacement of said activities/people, at Baby Beach, if the reduction of the beach frontage and square footage of water area available occurs?

P-3-3

- Has an economic impact study been completed, showing the potential effects to local merchants, if the Baby Beach frontage and square footage of water area available, is reduced by the proposed construction. I have personally seen videos being filmed, SUP and sailing lessons, and several various types of small, human powered activities at Baby Beach. Clearly not only do people enjoy the beach but there are people that earn part of their living at Baby Beach as well as the many shops and restaurants they would visit.

P-3-4

- There appears to be Inconsistency with Coastal Act Article 3 which states Recreation: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas "shall be protected for such uses". Oceanfront land suitable for recreational use shall be protected. As a visitor from afar its clear to us that Baby Beach is a unique, existing, sheltered ocean beach, and a Perfectly suitable place for recreation. From children to beginner, to experience several water recreation/activities, in a safe, peaceful and beautiful setting is hard to find. Baby Beach and the open area in front of it "should be protected" for such uses. In fact, the proposed project would not enhance the existing water-oriented recreational activities of the Baby Beach. By reducing the available water area of the Baby Beach, the proposed project would "lower the quality" of these recreational activities, with the displacement of people and equipment, creating a potentially dangerous situation for everyone.

P-3-5

- The EIR also claims that proposed project does not change the existing types of recreational and/or open space on site. Pg.4.9-8. In fact, the proposed project would change the existing "open space" on site, by reducing the usable beach front and water, substantially.

- The EIR claims proposed project includes renovations to existing facilities within the Marina and does not remove or preclude any existing recreational facility or affect the range of available recreational activities currently available in the Marina. Pg 4.9-9. Agreed, the proposed project does not remove or preclude any existing recreational facility or affect the range of available recreational activities currently available at Baby Beach. However, the proposed project "does remove a substantial area of usable water and beach front", which may be deemed "an existing recreational facility", in which these existing recreational activities are conducted.

P-3-6

- The EIR claims that because the proposed project enhances existing

P-3-7

recreational facilities and does not remove or otherwise affect any of the Harbor's recreational facilities, the project will have no long-term negative impact on the public's use or access to recreation facilities in the area, including Doheny State Park. 4.9-9. In fact, the proposed project "does not" enhance Baby Beach, or the available water area.



P-3-7

- Further, the proposed project "does affect" the Baby Beach recreational facility, by removing substantial usable area of the Beach's water. The obvious "short and long" term negative impact of the project, on the public's use of the proposed construction at Baby Beach, will be the displacement of the beach population, with their small watercraft, to a much smaller and more congested area.
- Another negative impact of the project on the public's use of Baby Beach, will be the "continual, potentially unsafe interaction", between the sailing vessels at the newly proposed docks, adjacent to Baby Beach, and the beach goers, with small human powered watercrafts, using the Baby Beach area.

P-3-8

I personally, have never seen any place quite like Dana Point Harbor. While touring the Dana Point area recently, Jean and I had our very first SUP Lesson at Baby Beach. Our short time there was amazing. Baby Beach in Dana Point Harbor is a "very unique place in the world". Baby Beach should remain preserved, as it is, for future generations of local and tourist water people to experience...

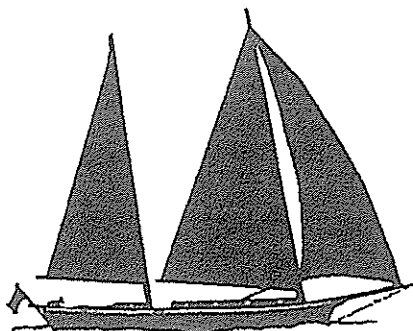
P-3-9

I hope that you and Dana Point Harbor, would please take these few concerns of mine into consideration, and Preserve The Baby Beach Area.

Thank You.  
Sincerely,

William C. Palmer  
83 North Road  
Hopkinton, RI

11-01-11A11:08 RCVD



**SOUTH COAST SAILING TEAM**

*A sea exploring unit of the Boy Scouts of America*

October 29, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for The Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>. I am writing to express my concerns over the modification planned for the OC Sailing and Event Center. My remarks are directly pointed to the facility. I realize that the total harbor plan is very comprehensive. I wish only to express my dismay at the suggested changes for the facility previously known as the youth and group facility.

P-4-1

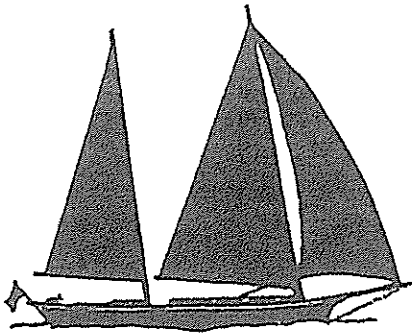
Question 1 Has anyone utilizing the present center requested a change in the facility?

I was a member of the county planning committee that worked with the naval architect in designing the present structure. I formally represented the Sea Scouts on that committee. We were very proud of our work at the time. The facility after opening received a number of prestigious design awards. Since that time for over twenty-five years I have been the Director for the sea scouts in Dana Harbor. The facility has always totally served our needs. The county employees and management have always been totally cooperative and responsive in helping us serve thousands of youth and adults of the community. As the Sea Scout representative, I have worked closely with all of the other organizations utilizing the facility. I am completely unaware of anyone that desires a revamping of the facility. All of us are aware of the need for renewing the aged docks and buildings. We support totally the effort by the county to upgrade existing docks and buildings. We do not support the proposed design changes in the facility.

P-4-2

Question 2 Despite the claim that the linear dock footage for the facility would be increased, is it not true that the length and size of vessels that the facility could accommodate would be

P-4-3



greatly curtailed due to the decreased size of the individual docks, the movement of the docks to the outer harbor from the inner harbor and the shoaling of the water in the area proposed for the new docks?

In the existing facility there are two docks that could accommodate 40 foot vessels, five docks that could accommodate 48 foot vessels and one that could accommodate a 55 foot vessel.

Question 3 Is it not true that four of the vessels currently utilized by the Sea Scouts, Saddleback College and Westwind Sailing for their programs would no longer be accommodated by the new facility?

These vessels are 35, 36, 37 and 38 feet in length. The largest vessel shown to be accommodated on the new plan is 32 feet in length'

P-4-3

Question 4 Have studies been done to evaluate the effect of surge currents in the area of the proposed new docks?

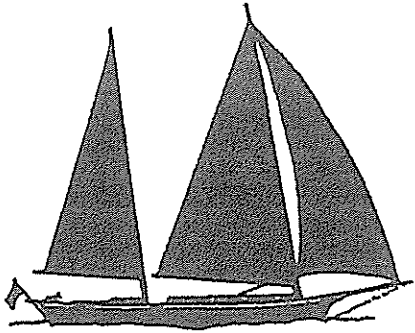
At the present time, there are only three vessels kept in the outer harbor at this end of the harbor. These vessels are owned by the Ocean Institute. For the last nine years I have been charged with the safe dockage of two of these vessels. Due to the extreme surges that can occur, I have utilized chain dock lines and windlasses to safely lash these vessels to the docks.

P-4-4

Question 5 Have studies been done to evaluate the rate of shoaling in the proposed area for the new docks?

Recently the schooner, *Spirit of Dana Point* went aground in the anchorage area south of the proposed area for the new docks. A diver for the Orange County Harbor Department Maintenance Staff determined that the shoal area outlined by buoys maintained by the county had grown out into the harbor beyond the buoys. The buoys were subsequently moved an additional fifteen to twenty feet away from the swim beach.

P-4-5



Question 6 Has the topography of the bottom in the area proposed for the new docks been charted to establish minimum depths?

Vessels are shown on the plan to be docked between the proposed docks and the existing pier. A docking approach to the outside dock would require maneuvering in the water between the dock and the pier. It is known that fourteen foot sailboats occasionally touch bottom in this area. Thirty-two foot vessels as shown on the plan would definitely draw more water than a fourteen foot sailboat.

P-4-5

Question 7 Has the relative effect of the wind in the area proposed for the new docks compared to the existing docks been studied?

All of the vessels docked at the facility have been utilized in the past for teaching docking. The larger sailing vessels at the facility are normally docked with the use of inboard engines. The vessels as they turn into the present docks under prevailing winds encounter steady head winds partially blocked by the buildings at the facility. In the proposed docks, depending on the direction of the dock, students will encounter swirling winds, beam winds, head winds and tail winds.

P-4-6

Question 8 Has the increased danger to swimmers imposed by vessels with propellers and manned by students been studied?

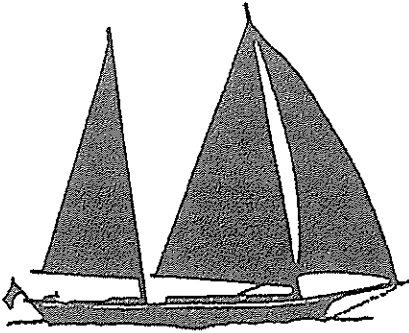
Although it is true that many of the docks will be contained, it is also true that the proposed dock configuration forces some vessels to be operated in very close proximity to the swim beach.

P-4-7

Question 9 Since the area in front of Baby Beach defined by the shoal buoys and the beach swimming buoys is presently devoted to small sail boat sailing, stand up paddling, wind surfing and kayaking, what is the estimated percentage loss to this usage?

Presently larger vessels do not enter the area outlined by the shoal buoys. This area is devoted primarily to use by small human powered or wind powered vessels. Under the proposed dock

P-4-8



plan, space would be taken for the docks, the vessels docked there and maneuvering inside and outside the dock area by engine powered vessels.

↑ P-4-8

Question 10 Has the impact of the proposed docks on the vessel traffic in the channel directly between the Event Center Mole and the Dana Point Yacht Club Mole been studied?

Presently the channel is heavily used by docked vessels entering and departing the West Basin as well as human powered vessels. The proposed plan would narrow the channel by a considerable degree both with the addition of a dock and the continuing maneuvering of vessels to momentarily dock at the pump out station. In addition all small vessels stored on the dock next to the facility sidewalk would be forced to enter this channel before being brought to a teaching space within the proposed dock space.

P-4-9

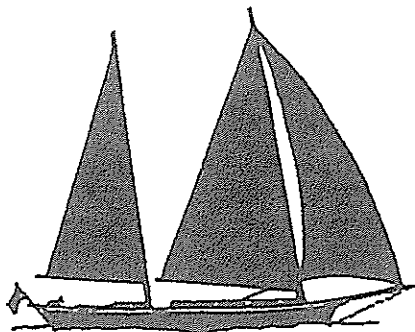
Question 11 Has a study been done to determine the effect on teaching caused by the concentration of all activities on one side of the facility with a focus on the increased distances between classrooms, lockers, storage and maintenance areas?

It is not uncommon on a Saturday morning for students to be testing on swimming ability in the area near the crane, practicing rigging on the northeast docks, performing maintenance on the larger vessels on the southeast docks and practicing basic sailing and launching paddle boards off the west docks. As proposed by the new dock plan, all of these activities would require movement of material and personnel down the same ramp and onto narrow congested dock spaces.

P-4-10

Question 12 Has a study been done to determine how to provide for the present uses of the parking area north of the docks, between the event center and the present guest docks?

If as proposed, the docks to the east of the facility and the present guest docks are to be dedicated to the docking of private vessels, than one would assume that parking spaces would need to be dedicated for these private renters. At the present time this parking lot is used for public parking, storage of Sea Scout equipment, storage of Outriggers and related equipment, storage of equipment for a number of organizations and dry storage of a variety of small vessels. The loss



of this space to the activities of the center would greatly impact the present usage of the facility. Removal of this storage space to the lot directly north of the center would greatly impact the public parking of the users of the beach and the center multipurpose building.

Question 13 Has a study been done to determine the negative effect on the use of the crane created by the elimination of a part of the dock underneath the crane?

P-4-10

Presently vessels being lifted out of the water or into the water are swung over the south side of the crane pier. The crane design allows no other usage. Vessel tag lines can be utilized by persons on the to-be-removed ramp. Vessels can be moved from the dry storage area utilizing the to-be-removed ramp. Vessels waiting for crane usage can be stored on the to-be-removed dock under the crane and the to-be-inaccessible dock on the southeast side of the crane.

Question 14 Has a study been done to determine the impact of increased foot traffic occasioned by the additional movement of private boat owners with their guests and equipment being added to the present users of the facility and the walking public?

P-4-11

All private slip renters for the proposed southeast docks would be forced to walk the entire length of the facility sidewalk to reach the ramp and share the pump out dock with the transient vessel operators.

Question 15 What if any are the expected advantages envisioned to be created by the proposed dock plan for the public use of the OC Sailing and Event Center?

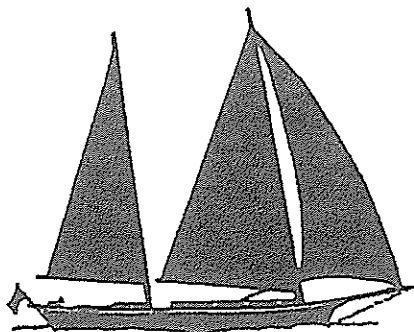
P-4-12

Question 16 What if any are the instructional advantages envisioned to be created by the proposed dock plan?

The Sea Scouts of Dana Point are high school age members of the Boy Scouts of America. The local unit to which all belong is designated as Mariners, Ship 5936. A separate unit for 12 and

P-4-13





13 year old youth, not affiliated with the Boy Scouts of America is designated as Mariner Juniors. The sponsoring organization for both groups of boys and girls is the South Coast Sailing Team, a 501c3 non-profit corporation.

I personally have been honored to serve as President of the Corporation and Skipper of the units since their founding. I have also served as Captain of the PILGRIM for the last twenty-five years and the Captain of the SPIRIT OF DANA POINT for the last six years. My wife and I moved our family to the City of Dana Point before the harbor coffer dam was removed in 1969. Over the years, our six children and fourteen grandchildren have played on Baby Beach and benefitted from the activities at the Sailing and Event Center.

It is extremely important to me as a citizen of Dana Point and Orange County for over forty-one years, that the public at large have an opportunity to enjoy the park land and water access provided by the Harbor. I feel very strongly that removing the public docks from the east side of the facility to the west side would seriously denigrate the mission of the Center and negatively impact the thousands of youth and adults that utilize Baby Beach.

Your kind consideration of my questions is very much appreciated.

Fair winds and following seas,

A handwritten signature in cursive script that reads "Jim Wehan".

Captain Jim Wehan  
President  
skipwehan@fea.net

P-4-13

Habib Hosseiny, Ed. D.  
3347 Paseo Halcon  
San Clemente, CA 92672  
October 30, 2011

Mr. Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana point Harbor Dr.  
Dana Point, CA 92629

Dear Mr. Gross:

Dana Point Harbor Marina has been a safe and pleasant haven for our children and grandchildren. The scenery is attractive and the environment is relatively clean in the area of Baby Beach. The Improvement Project dated September 20<sup>th</sup> unfortunately appears to have a reverse effect to this great and friendly site. The Project suggests building a dock in the area of Baby Beach where all the joyful activities take place. Children of all ages are brought there to get educated in water sports.

P-5-1

As it is now, we sometimes have difficulty to find parking or a place to have our picnic while the children are with their instructors or team leaders. I cannot imagine how people can continue their healthy activities there if the Project squeezes their area.

I am truly hoping that Dana Point Harbor rethink about building the dock in the area of Baby Beach and thus limiting the space for all the necessary projects that are going on there. Further, I will continue my efforts to preserve Baby Beach and stop the construction of decks that would bring a great deal of boats which are definitely harmful for the environment. How can we have a healthy environment with all the motor boats burning gasoline next to our children? I believe OC Dana Point Harbor should think about expanding safe areas instead because the population keeps growing and more space is needed.

P-5-2

Respectfully submitted,

Habib Hosseiny, Ed. D.  
949-388-0995 home phone  
[hhosseiny@aol.com](mailto:hhosseiny@aol.com)

October 30, 2011

Brad Gross, Director  
OC Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to view the Draft Subsequent Environmental Impact Report for The Dana Point Harbor Marina Improvement Project dated September 20th. I'm writing to let you know my concerns with the planned construction of dock at Baby Beach.

P-6-1

I have been stand up paddling in this harbor for 31/2 years and racing outrigger canoes for Dana Outrigger for 2 years. I spend 4 to 5 days a week year round at Baby Beach. It is my home away from home. Baby Beach is such a beautiful location. I have seen many many sunrise and sunsets at the beach.

I'm am opposed to the proposed changes to Baby Beach for a number of reasons. It will take away much of the beauty of the open water. Baby Beach is has been an ideal location for brand new and novice paddlers to learn these wonderful water sports. As an outrigger paddler it will limit our access into the water only allowing one boat at a time in and out of the launch area. This could be dangerous on a crowded weekend given how many paddlers, kayaker and student sailors there are in launch area, especially with so many of them trying these sports for the first time. Not to mention if it is a windy day, which is very common. I also can't imagine how difficult and risky it would be to have the young student sailors trying to navigate straight out into the main harbor channel. This seems like accident waiting to happen.

P-6-2

Therefor the EIR design is inconsistent with the needs of the public and isn't accessing accurately the impact it will have on Baby Beach.

Like I said I spend so much time at this beach and it is already very crowded to take away this space takes away the beauty and pride of this harbor and makes it unsafe.

I hope that the Dana Point Harbor take into consideration my issues and recognizes the importance of the safety hazards and reduces the impact the proposed project at Baby Beach. I will follow this process closely and will be working with my community to expand awareness of the project. I will be one of the many who will work to preserve Baby Beach, the Educational Facilities and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor.

P-6-3

Sincerely,



Leslie Nelson  
[growingplacesild@gmail.com](mailto:growingplacesild@gmail.com)  
949-331-4040

11-22-11P03:28 RCVD

11/1/11

Please do not add docks to Dana Point Baby Beach area. This area is so crowded on the weekends and during the summer as it is. Please talk to the Mariner Sea Scout program and Westwind and the other established users, which are so vital for youth activity and developing leaders in our community. Talk to the people who use baby beach paddle boarding, kayaking and all of the other non-motor sports. It is a peaceful place to decompress from this crowded world.

P-7-1

Please do not add docks in this area. It would really be sad to destroy this wonderful place.

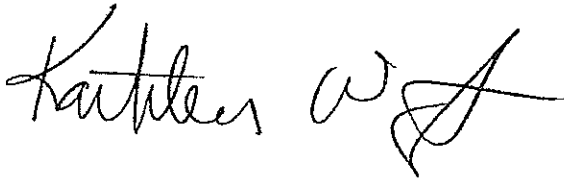
Please don't let money overrule the decision.

Our family uses this area of the harbor 2-3 times a week for sailing, kayaking, learning, bonding and just as a place to appreciate how blessed we are to live in this area. Please don't change that.

P-7-2

Thank you,

Kathleen, David, Jackie, Tim, Spence and Aaron Wetzel  
6 Precipice  
Laguna Niguel, CA 92677



November 2, 2011

Brad Gross  
Director OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20th. I am writing in hopes that my concerns over the planned construction and the proposed dock in the vicinity of Baby Beach will be reviewed and taken into consideration.

P-8-1

I am a 9-year resident to Dana Point and San Juan Capistrano. I moved to the area so that my son, then in 3<sup>rd</sup> grade, could take advantage of the harbor area for recreation and education in water sports. As a single parent, I needed programs that were cost effective, consistent throughout the summer and breaks, and mostly safe for me to leave him and not worry at work all day long.

My concern is that by adding a deeper channel and taking away the safe area where the kids currently sail and play, we will have traumatic accidents. I know many, many families who take advantage of baby beach because it has been such a landmark area for kids. When new folks move to the area the first thing I tell them is to take advantage of the area for their kids. How many kids can say they get to learn how to sail and stand-up paddle in grade school? I understand that adding more slips may relieve a bit of financial burdens from the harbor, but isn't there a better way? Could we not increase classes and usage for the families who already take advantage of this wonderful park area in order to add revenue opportunities for the harbor?

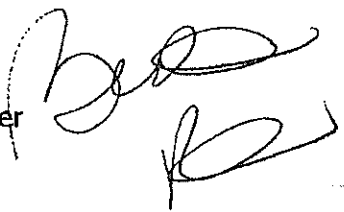
P-8-2

Now my son is getting older but I am in the process of adopting, I truly hope that my new child will have the same opportunities as my son has had to grow up with the benefits of the baby beach activities and educational center. Please consider our ideas and concerns Mr. Gross, I know your main focus is building a better harbor, and we truly appreciate that, but having a safe baby beach is a great value for all of the residents in South Orange County, one we all want to continue with in a safe, affordable way.

P-8-3

I will follow this process closely and continue to work with the community to expand awareness of this project. My goal is for baby beach to remain a safe activity center for all families for years and years to come and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor.

Thank you for your time and consideration,  
Becki Kolander  
San Juan Capistrano resident and homeowner  
949.280.8614  
becki@beachsidemarketinggroup.com



180 Eastsound Shores Road  
Eastsound, Washington 98245  
November 3, 2011

Brad Gross, Director  
Orange County Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

My husband and I and our two sons lived in Laguna Niguel for 25 years before we retired to Washington state. During that time, most of our weekends were spent in Dana Point at the "baby beach".

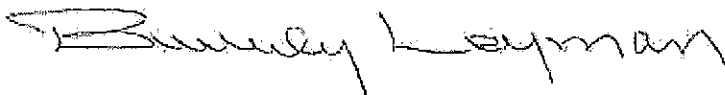
My husband was the first windsurfing dealer in the area and for many years he provided a hub for WS enthusiasts who wanted to launch at the beach. We numbered in the dozens each week, mostly family members, ages 3 years to 70 years of age. We were respectful of the place making sure it was clean and accommodating for other groups.

Later on, we, and many other outdoors people, used the beach to launch surf skis, kayaks, paddle boards and stand-up paddle boards. Again making sure the park rules were followed.

However, the biggest gift from "baby beach" was to our children. They grew up in a healthy environment with other children and adults who loved the space like they did. Their friends were beach goers too. One of our sons still lives in the area.

It is important to allow the same advantages to the community in Dana Point by keeping "baby beach" as it is. It is an important healthy environmental resource.

Sincerely,



Beverly Leyman

P-9-1

Brad Gross, Director

OC Dana Point Harbor

24650 Dana Point Harbor Drive

Dana Point, CA 92629

Dear Mr. Gross,

I have recently reviewed the Draft Subsequent Environmental Impact Report for Dana Point Harbor Marina Improvement Project, dated September 20<sup>th</sup>, 2011. I would just like to express my concerns with some of the changes described in that EIR regarding the area around Baby Beach and the Educational Basin. I am familiar with this area quite well having sailed small boats with Westwind Sailing as well as launching my Stand up Paddle board from the area of Baby beach near the OC Sailing Center.

P-10-1

The existing configuration allows for ease of traffic for both Stand up Paddle boarders, small sailing vessels and bathers and beachgoers while taking into account the designated anchorage area. The plans begin to limit access of baby beach by building a dockage area to accommodate boats up to 14' to 35', several of which are power vessels, would bring some serious concerns to an already crowded area at times.

- Adding these docks would certainly cause concern for electrical hook-ups causing a danger to people in the water nearby at the swimming beach. Has this issue been properly reviewed as the radius of the electrical current in the case of an accident from the closest boat slip to the swimming beach is within range of danger, not only ensuring configuration during construction phase is within normal height and specification above waterline for outlets, but also taking into consideration the Liability the Marina and harbor takes on by allowing electrical power hookups so close to a swimming beach?

P-10-2

- The building of a boat sewage pump-out station is very close to the swimming beach and spillage and leaks are a concern to increase an already heightened bacteria level in the area of the swimming beach. What is being done to ensure that this will not adversely affect the environment of the area of the educational basin used by swimmers and paddlers? Has a proper study been done to ensure that this pump-out station is far enough away from a public swimming beach?

P-10-3

- By adding the docks, the area used by the small boat sailing organizations, such as Westwind Sailing and OC Sailing center will have less room in which to provide a proper learning environment, which is a vital purpose of the educational basin. I am aware that there are plans to lessen the existing slips available overall and the building of a Dry Dock Storage Building to compensate for the lost slips. I have lived several years on the East Coast near similar Dry Dock Storage on the Chesapeake Bay and can say from experience that this will bring about an increased amount of traffic into the public Anchorage Area thus negating the overall area available in the Educational Basin for the small boats and paddling traffic normally seen there. This dry dock storage will also bring about a larger amount of traffic in the main shipping channels. Have studies been done looking at the increased traffic into the anchorage basin and its adverse effects on increased traffic in general within the harbor? What is to ensure that increased traffic here will not affect the Educational Basin?

P-10-4

- The proposed slip configuration within the Educational Basin on the West side of the OC Sailing center will force the small boats to navigate directly into the main boat channel, which as I have suggested above, will likely be a more crowded place. Since these vessels at the OC Sailing center are sail-only vessels with no power, what has been done to ensure them a proper and safe access to the educational basin? Has this been fully considered?

P-10-4

The above comments and concerns are just some items that I can see being problematic to not only myself, but others that use the Educational basin. I would hope that you can comment on my points above and take them into consideration. The most important thing is to understand the value that the Educational Basin gives to the many thousands of people that live within a few square miles of it. There is really no place like it for many miles North or South of Dana Point. Enhancing this area of the Dana Point Harbor rather than restricting its existing capabilities must be explored in more detail.

P-10-5

Regards,



11/03/2011

Josh Smolenak

246 Ave Victoria #C

San Clemente, CA 92672

Cell: 215-840-4277



November 4, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

After review of the Draft SEIR for Dana Point Harbor Improvement Project for the proposed changed to the Orange County Sailing & Events Center docks, I have several critical areas of concern in boat use and safety issues that are outlined below.

P-11-1

SEIR Section: "4.4.5.2 Potentially Significant Impacts" states:

"Renovations to the OC Sailing and Events Center docks result in similar linear footage when compared to the existing facility. Operationally, the OC Sailing and Events Center will continue to use the docks for sailing programs. The uses at the site are not changing, and therefore, **no impacts related to boating use in this area are anticipated.**"

P-11-2

My Comments: In contrast to the SEIR text, this project **will cause significant impact to OC Sailing and Events Center boating use** for the following reasons.

1. Proposed new docks are not long enough to berth the oceangoing keelboats used by South Coast Sailing Team for educational youth training for Sea Scouts, Westsind Sailing, and also adult sail training for Saddleback College.
2. Water depth of the proposed new docks will not be sufficient to accommodate these oceangoing keelboats.
3. The proposed 3-sided docking area with the entrance opening facing directly into the typical prevailing wind presents an extremely unsafe condition for vessels when docking downwind under sail. A sail vessel when docking will be pushed into the opening and unable to stop before hitting far end of the dock. Dangerous condition for sail training.
4. Proposed new dock on end of quay between Orange County Sailing Center and the Dana Point Yacht Club will narrow the channel at an area where strong water current already exist during tidal changes. Currently, it is sometimes hazardous to sail small vessels near this area when tidal current is strong due to loss of steerage, causing vessel to be swept up onto the rocks. This has happened to me on more than one occasion and I have rescued numerous other vessels from this rocky area after same situation has occurred to others. Future vessels

P-11-3

tied up parallel to the newly proposed dock presents potential for small vessels to collide with the vessels tied up to the new dock causing potential for additional damage and liability.

5. Proposed new dock on end of quay between O.C.S. & Events Center and the Dana Point Yacht Club will narrow the channel causing additional concern and increased danger for sail vessels tacking upwind going West when passing through this area.
6. Small vessels operating off the new proposed dock near the "Baby Beach" area will severely restrict beach access the paddle-craft being launched from the beach. Increasing potential for collision between humans and vessels using the new dock.
7. New proposed dock in front of "Baby Beach" will further constraint the anchor basin area that is utilized for the tall-ships "Pilgrim" and "Spirit of Dana Point" as they depart their normal dock area. These vessels have a very small distance to turn and this will further restrict their safe operating area by the numerous small vessels using the new docks.



P-11-3

Section 30213 requires: "... Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. . .

SEIR states: "The proposed project does **not change the cost or availability of visitor and recreational facilities.**

My Comment: **Cost and availability for users of the O.C. Sailing Center is impacted by the following:**

1. Large oceangoing keelboats used for sail training by the Sea Scouts, Westwind Sailing and Saddleback College will not be able use the new docks due to shallow water depth. Moving these vessels to a full rental dock would be cost prohibitive causing a cessation of training with these vessels.
2. Potential for increased liability costs and cost to repair vessels that will be damaged when trying to dock downwind into the proposed 3-sided docking area.

P-11-4

Thank you for the opportunity to express my concerns.

Sincerely,

Kendall S. Bailey

Advisor, Sailing/Seamanship Instructor: South Coast Sailing Team, Sea Scout Ship 936

32921 Calle Miguel

San Juan Capistrano, Ca 926775-4432

Email: buckyb2@pacbell.net

Steve Wyman  
615 Calle Del Cerrito  
San Clemente, CA 92672  
949-361-9920

November 6, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20th. I have been a frequent visitor, recreational boater and dock tenant at Dana Point Marina since 1987. I am writing to express my concerns about the proposed changes to the OC Sailing and Events Center Docks and Baby Beach.

P-12-1

Specifically:

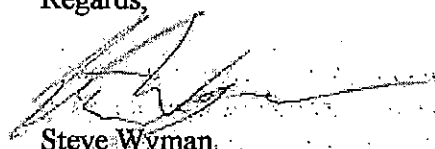
The pump out dock plan would significantly narrow a high traffic channel where there is often more vessel traffic, wind and current than surrounding areas. There are often powerboats mixed in with sailboats, dinghies, kayaks and stand up paddlers in this bottleneck that marginalizes sea room for safe navigation. The proposed dock extending into this area, plus the beam of vessels tied up to pump out will make it even tighter. Boats maneuvering (making u-turns into the prevailing wind) to tie up at the pump out dock will also complicate the traffic pattern. Has the safety and convenience of this dock location been adequately modeled and reviewed?

P-12-2

Moving the docks for the OC Sailing Center to the western, usually upwind side of the Events/Sailing Center complex will also concentrate traffic into a higher risk area near bathers and small man powered vessels. Many of the sailors, paddlers and boaters using the County facility to launch and return vessels in that vicinity are novices that lack the seamanship skills to safely navigate out of or into downwind berths while also avoiding vessel traffic and other obstacles in the crowded basin. The encroachment of the new docks into the Baby Beach area will also severely limit the use and enjoyment of that space. The many kayakers and paddlers that launch from that area will be forced into closer proximity with bathers and larger vessel traffic since much of the currently open water would be filled with dockage. This area is chaotic at times in the current configuration. Aren't you concerned about restricting the water for navigation in this area further? Will it be a safe and pleasant area for users to enjoy, or an unsafe sideshow? The OC Sailing Center, Baby Beach and pump out dock are all serving their intended users well and safely in the current configuration. If it's not broke, why fix it? Thank you for your consideration of these sincere concerns for the continuing safety, functionality and enjoyment of a great public recreation area.

P-12-3

Regards,



Steve Wyman

11-08-11P01:28' ROVDY

November 6, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point CA 92629

Dear Mr.Gross,

I am writing to express my concerns over the planned construction of a new boat dock and other modifications to O.C. Sailing and Events Center.

I have enjoyed the Dana Point Harbor since the early 1990's. The harbor was a frequent weekend sailing destination on our boat berthed in Long Beach. Since moving to Dana Point in 2001 we use the harbor for berthing and launching of sail boats and Baby Beach for launching paddleboards and for peaceful days swimming and relaxing. I have long been a supporter of the South Coast Sailing Team and very familiar with O.C. Sailing and Events Center.

P-13-1

Concerns: A,B,C

A) The new boat dock will extend approx. 150 feet in front of Baby Beach. This is a prime area for paddle boards, kayaks and small boats to launch and get underway. It is also a place where teaching goes on and people learn. People fall from their paddleboards, and boats capsize. People of all ages are in the water attempting to refloat themselves.

P-13-2

**Question:** Does the introduction of new boat docks and boats create a danger in what is now a public use area?

**Question:** Will people be restricted from using Baby Beach and the water in front of it because of any perceived danger in connection with the new boat docks?

B) Baby Beach is a popular location for families and many kinds of human powered watercraft. Because of its popularity, parking is a problem.

P-13-3

**Question:** Will the addition of private yachts with the yacht owners and their visitors create additional parking and traffic problems?

**Question:** What plans have been developed to handle the additional traffic and parking at Baby Beach?

C) The proposed boat dock creates an unsafe learning environment for boating students at OCSEC. Students with no sailing experience will have to sail directly into the main channel with no ability to determine if they are safe from larger boats. The opportunity for serious accidents is great.

P-13-4

OCSEC has made a huge contribution to the knowledge and seamanship of young people for many years. They, and the general public, including me, should be able to safely enjoy and learn at Baby Beach and the basin in front of it. This should not be taken away.

P-13-5

Sincerely,



Ron Cook  
33955 Calle La Primavera  
Dana Point, CA 92629  
949-489-1559  
roncook@cox.net

To Whom it May Concern  
Proposed Construction in West Harbor  
Nov. 7, 2011

I am writing this letter to protest the impact of the current proposal to the OC Sailing & Events Center.

This harbor is unique in the fact that it has such a lovely space for youth activates and accommodates those who do not own boats but would like to enjoy the harbor. My husband leaned to sail at the youth docks and now we are boat owners and slip renters in Dana Harbor.

P-14-1

The new plans do not provide slips of adequate length to accommodate The Sea Scouts boats. The Scouts have finally, after many years, acquired boats of suitable lengths for their sailing activities and sailing for disadvantaged youths of Orange County. The Sea Scout program has provided opportunities for hundreds of Orange County youth to participate in sailing.

P-14-2

The proposed changes to the harbor in this area are hurtful to the general public and the environment. The events center is an affordable venue for family parties, community classes, community meetings and private meetings. In the new plan the parking has been decreased greatly, which would impact the public from easy access to this area. New dock construction will force overcrowding and reduce access in this area for youth activities. The costal act is structured to protect the publics right to the sea. Construction of new docks will put boats within 15 feet for Baby Beach (which is a sensitive costal resource and documented in the Costal Commission's handbook of recreational beaches in California) at mean low tide and increase safety issues.

P-14-3

P-14-4

In closing the harbor was not built for a commercial mall by the sea. Its soul purpose was to provide boating. The foresight of the planners included a wonderful, and very useful youth and public area for water activities. These facilities are still adequate for the youth activities and public water sports after many years so why are you trying to fix something that is not broken?

P-14-5

We do not want or need more commercial development and decreased parking. The harbor is not Orange County and Dana Point's Cash Cow.

Sincerely,



Toni Flores

Leah Nollau Fetah  
30378 Paseo del Valle  
Laguna Niguel, CA 92677

November 7, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I have signed this petition to express my opposition to the Harbor's proposed development in front of and adjacent to Baby Beach as shown in the Environmental Impact Report (EIR) provided for public comment. I understand and support the revitalization of the harbor, but not at the expense of one of the only safe, family-friendly recreation spots in the county.

P-15-1

My family has been utilizing this area since the marina was first built! I have been kayaking from this area for over 25 years, and now my children enjoy kayaking and paddle boarding from this launch area. My 6 year old son is looking forward to Sea Scouts, and I am greatly opposed to this expansion that threatens his safe enjoyment of the harbor.

OC Dana Point Harbor's proposed expansion will negatively impact the safe environment within the Educational Basin by severely limiting access for human-powered crafts that have launched from the Baby Beach for decades, forcing them to compete for space with the children's swimming area. The plan also will bring powerboats even closer to the only designated area for bathers and other recreational activities. Moreover, I object to the potential risks of placing of a waste pump-out station yards from a children's play area. All of these will impact public access, the fragile biodiversity of the basin, and the recreational nature of area.

P-15-2

As part of the local community and visitors from far and wide that see the benefit of keeping Baby Beach and the Educational Facilities free of any development that blocks public access, I encourage you to do the right thing: reverse your decision to privatize the docks used by the community for education, maintain a safer distance of the pump-out stations from bathers, and eliminate the plans to expand docks in and around Baby Beach. The claims in the EIR concerning this development appear to be inconsistent and inadequate as written given the impact this development clearly would have to the public and environment.

P-15-3

Sincerely,  
  
Leah Nollau Fetah

November 7, 2011

Dear Mr. Gross,

I have signed this petition to express my opposition to the Harbor's proposed development in front-of and adjacent to Baby Beach as shown in the Environmental Impact Report (EIR) provided for public comment. I understand and support the revitalization of the harbor, but not at the expense of one of the only safe, family-friendly recreation spots in the county.

P-16-1

OC Dana Point Harbor's proposed expansion will negatively impact the safe environment within the Educational Basin by severely limiting access to human-powered crafts that have launched from the Baby Beach for decades and forcing them to compete for space with the children's swimming area. The plan also will bring powerboats even closer to the only designated area for bathers and other recreational activities. Moreover, the potential risks of placing of a waste pump-out station yards from a children's play area. All of these will impact public access, the fragile biodiversity of the basin, and the recreational nature of area.

P-16-2

As part of the local community and visitors from far and wide that see the benefit of keeping Baby Beach and the Educational Facilities free of any development that blocks public access, I encourage you to do the right thing: reverse your decision to privatize the docks used by the community for education, maintain a safer distance of the pump-out stations from bathers, and eliminate the plans to expand docks in and around Baby Beach. The claims in the EIR concerning this development appear to be inconsistent and inadequate as written given the impact this development clearly would have to the public and environment.

P-16-3

Sincerely,



Becky Leetch  
33971 Silver Lantern  
Apt C  
Dana Point, CA. 92629  
949-240-2846



Donna and Arthur Carter  
215 Calle Roca Vista  
San Clemente, CA 92672  
949-498-5524

November 7, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana point Harbor Drive  
Dana Point, CA 92629

Ref: Dana Point Harbor Marina Improvement Project

Dear Mr. Gross:

We wish to have our voices heard in **opposition** to the proposed dock work next to the OC Youth Facility and Baby Beach. The Carters are members of the Dana Point Yacht Club since 2007 for one reason only: to provide a sailing venue for our two children, Teddy (14) and Hannah (9). Both are heavily involved in youth sailing and would be badly impacted by the proposed so-called improvements to the guest docks. Additionally, Teddy has been in Westwinds, Junior Mariners and now Mariners since 2006 and that facility would be effectively decimated by the guest dock proposal.

P-17-1


The OC Youth Facility has been designed to provide effective programs for youth that will grow up the next generation of boaters. Its mission has been carefully crafted and executed in the able hands of Skip Wehan and his crew. To have the guest docks impinge on the operations of not only Westwinds, but also Mariners and other programs run out of the OC Youth Facility would be simply wrong. This is clearly a money grab on the part of the OC Harbor that would reduce recreation areas to the detriment of youth programs and effectively privatize the waters.

P-17-2

We loudly and vehemently oppose any attempt on the part of the OC Dana Point Harbor to change or impact the OC Youth Facility and Baby Beach by reducing the size of the recreation area or putting guest docks there. We are also disturbed by the blatant attempt to push this through without adequate public review or comment; it was only by the hue and cry of Mariners and other interested parties that had the public comment period extended. This is wrong and we demand an end to this ill-considered proposal.

P-17-3

Sincerely,

  
Arthur Carter      Donna Carter      Teddy Carter      Hannah Carter

cc: California Coastal Commission

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I want to state my strong opposition to the planned changes in Dana Point Harbor. I have been a lifelong resident of South County and have enjoyed using Dana Point Harbor since the breakwaters were erected. I have two major concerns with the proposed changes in and around the turning basin near Baby Beach. I believe these changes will damage long standing and successful programs and uses of the Harbor.

In recent years we have spent vastly more time at the Harbor because our daughter has been involved in the Mariners Sea Scouts program overseen by Jim Wehan. The program has been a defining element of her your adult life, providing leadership training, maritime skills and an introduction to sailing. She has grown into a strong and capable young woman thanks in large part to the program run on County docks. She has particularly loved learning to sail through the Mariners program.

P-18-1

**My first concern is the encroachment of new docks into the turning basin near Baby Beach.**

The Sea Scout program has a collection of boats of various sizes, from small craft up to 35 foot cruising vessels. For safety reasons the sailing of small boats has to take place within the Dana Point breakwater. As it is, the areas of open water needed to learn basic sailing techniques within the Harbor are restricted. If new docks encroach into the turning basin there will be little open water left to navigate. Compounding the problem are the plans of the Ocean Institute to push their docks into the turning basin from the west side. With expansion coming from both sides the turning basis will be significantly reduced in size.

P-18-2

In addition to affecting the Sea Scout sailors, the hundreds and hundreds of people currently enjoying sailing smaller crafts, paddling boards and kayaks and swimming will have nowhere to go. Coming and going from the County beach and docks for years now, I have watched the use of Baby Beach skyrocket. The beach and parking lot are teeming with Stand Up Paddle enthusiasts at all times. The small parking lot and beach are put to the test serving the paddling athletes, young families leading toddlers into the water and large family groups and parties at the tables and barbeques. It is a distinctly happy place serving diverse groups. I believe that proposed changes will restrict the area's current use which would be a mistake.

**My second concern is the impingement of the Sea Scout and Westwind programs through decreased dock space.**

The Sea Scout program has a collection of boats of various sizes up to 35 feet. Their cruises to Catalina and up and down the coast are the testing grounds of all the Sea Scouts have learned in their weekly classroom work. These boats are fundamental to the

P-18-3

program and need to be kept at the docks near the Mariners shed as they are used as classrooms several times each week. It is unclear if the new docks would accommodate all the Sea Scout vessels.

↑  
P-18-3

The Sea Scouts, are the maritime arm of the Boy Scouts of America. The program not only teaches the specifics of maritime skill and safety, it also teaches young people about leadership and responsibility. I am deeply concerned that this long standing and well respected program's dock space is being minimized to accommodate more rental slips. I believe organizations such as Sea Scouts must be encouraged and strengthened, not minimized.

P-18-4

The same argument applies to the Westwind program. Our daughter works for Westwind in the summer and through her involvement we have come to know the exemplary people running a program that teaches countless people to sail and paddleboard all year long. We have seen how many people are served by Westwind and the pure joy in their faces when they return to the docks with a new skill. There is an intensively used dock facility.

In the proposed plans it appears that the Sea Scout and Westwind programs will lose total dock space and will be forced to "double up" on dock facilities. The location of the pumping dock will make maneuvering around this facility more difficult and dangerous as beginning sailors, paddle boarders and kayakers will be crossing paths multiple times a day with boats headed for the pumping station.

P-18-5

The many different groups coming and going from this small section of Dana Point Harbor are pursuing healthy and happy forms of recreation. The number of citizens currently making use of the area is staggering. All hours of every day the docks, turning basin and beach are buzzing with activity. We are all taxpayers being served by this heavily used and greatly enjoyed area. Please let it continue to serve the wide population it does now.

P-18-6

Please do not allow the changes that would expand the docks near Baby Beach. These changes would impinge on the turning basin and negatively impact sailors, paddle boarders, families on Baby Beach, the Sea Scouts and the Westwind programs.

Thank you.  
Cynthia Fletcher  
1774 Rimrock Canyon  
Laguna Beach, CA 92651  
cindyf1774@msn.com

Dear Mr. Brad Gross,

My name is Billy Kho and I am writing you today to express my concerns with the proposed dock expansion that affects Baby Beach, in Dana Point Harbor.

I have been frequenting Baby Beach now for 11 years, ever since my youngest daughter Malia was born. As an avid waterman and ocean fanatic I first started going to Baby Beach back when Malia was born because it was a safe local area to bring my kids without having to worry about waves, shore break, current etc. It was named Baby Beach for a reason, it is an area where families with young kids could enjoy. Baby Beach became a routine family outing for the Kho family, and Dana Point Harbor became a frequent hangout. After a day at the beach we would hit many of the local eateries, El Torito, The Brig, RJ's, Wind n Sea etc. We loved the community so much that our kids joined the local water activities spawned by Baby Beach's perfect location. Sailing classes at Westwind Sailing, Youth outrigger with Dana Outrigger club, countless outings to The Ocean Institute with and without school groups. This area of the Harbor is like no other place in Orange County. It is a safe area for our kids to enjoy the ocean. With the addition of the proposed dock expansion, that safety is extremely compromised. Not only will it bring more boat traffic, but it will also limit public access due to parking accommodations for boaters that will inevitably be developed as well. The spirit of this area we call Baby Beach, that so many of us enjoy and love will be ruined for what? Adding a few more docks for boat owners, for a few extra bucks for the County and Dana Point Harbor to profit. Bringing more boats in this area of the Harbor will also contribute to more pollution in this section of the Harbor, due to the environmental impact more boats produce; diesel fuels, gasoline, oil and also waste due to a the proposed pump out station. All this in an area of the Harbor where the ocean is more stagnant because it is the furthest most area from the outgoing ocean. I also believe that changing the face of Baby Beach will also affect local business. Compromised access will affect local businesses in the Harbor with the reduction of the

P-19-1

P-19-2

P-19-3

P-19-4

population that enjoy Baby Beach for how it is used today. I am drafting this letter not only for myself or for my daughters Malia and Kaeli, but for the thousands of people who comprise the Baby Beach Community. I am drafting this letter in the hopes to preserve a special place, a place where people from throughout the country associate the City of Dana Point, a place that future generations can enjoy. I implore you to please save Baby Beach.

↑  
P-19-4

Sincerely,

Billy Kho and family

11 November 2011  
James E. Talay  
22641 Baltar  
Mission Viejo, CA, 92691  
Boat Slip, West Basin, F133

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing at this time to request your reconsideration of planned changes to the Sea Base located within OC Sailing and Event Center. I have kept a personal sailboat boat in the marina for several years and have followed issues related to the Harbor Redevelopment Initiative. It was not until several weeks ago that I became aware of proposed changes to the Sea Base slip configuration and the nearby Baby Beach.

P-20-1

I have a 14 year old son who has benefitted from the Mariner Program for 3 years now and my 11 year old daughter looks forward to joining in March.

I truly hope you are aware of the positive impact that this program has had on generations of local youth. These confident, responsible young men and women have gone on to do amazing things in life, thanks in no small part to the opportunities and stewardship afforded them by this program and it's group of volunteers.

In addition to the dedicated group of volunteers, the boats used in the program have been donated to the Sea Base. These donated boats are the main training platform for the group and they require minimum water depth and adequate docking space. This is a group that does important work on a very tight budget. It is my understanding that the proposed reconfiguration of the Sea Base will make it difficult for them to continue on its current path and would seem to create a safety issue with regard to the paddlers utilizing Baby Beach. Many of these local folks are new to the sport and would not benefit from the proposed dockage right off the beach.

P-20-2

I would expect that a county engineer visiting the area on a crowded weekend day, at low tide would understand the unworkability of the proposed plan. The floating dock currently used by West Wind Sailing is often high and dry at low tides. Trying to dock the larger Sea Scout boats in that area would be inherently dangerous and, most likely, require periodic dredging.

P-20-3

Please review and take notice of the detailed inputs provided your office by the cognizant mariners associated with the Sea Base. The information provided and the questions posed are of value and should be taken seriously. These people can be a great resource as you go forward. You and your staff are in a position to affect change and, with careful attention, any change would be positive.

P-20-4

Please reconsider your current direction, as it is problematic to this local resource and will negatively impact the opportunity afforded future generations of area youth.

Let me know if I can assist in any way,

Regards,  
Jim Talay

November 11, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20th. I am writing to express my concerns for proposed dock in the vicinity of Baby Beach, the need for improved water quality and reduced sedimentation in Dana Point Harbor.

As a Dana Point resident since 1982, a sailing instructor for the Sea Scouts - Mariners Ship 936 and a member of the Ocean Institute Board of Directors, Dana Point Harbor is very important to the livelihood of my family. My two children grew up in Dana Point and enjoyed the recreational aspects of Baby Beach, the maritime aspects of Sea Scouts and the educational programs of the Ocean Institute.

P-21-1

In reviewing this report I draw on my professional expertise as a Registered Civil Engineer, my 50 years of sailing experience and my 29 years of continuous use of the Dana Point Harbor. I have concerns about the suggested changes to the dock configuration near the current youth and group facility. I also am concerned that nothing is being done to improve water circulation, improve water quality or reduce the excessive sedimentation that occurs in the harbor, particularly in the west marina area.

**Concerns regarding the dock configuration near the youth and group facility**

1. Shoaling in the area of the proposed docks west of the youth and group facility will create dangers for the boats currently operated by the Sea Scouts.
2. These dock slips are for vessels with engines and are too close in proximity to the swimming beach.
3. The dock configuration is incompatible with the prevailing wind direction, creating the need for boats under sail to navigate through shallow water near swimmers. The existing dock configuration for large sailing vessels is much safer as the slips are far away from the swimming beach and the boats are docked in an orientation that is pointed head to wind.
4. The proposed dock configuration creates an unsafe launch / land area for students of the public access small boat sailing programs in the narrow and congested channel between the youth and group facility and DP Yacht Club.

P-21-2

These concerns are in direct conflict with one of the "Specific project objectives" which states:  
*Maintain a safe environment for all levels of the boating community, Harbor users and merchants*

**Concerns regarding water quality and siltation**

1. The water quality in the harbor and baby beach area is generally poor. As noted in Section 3 of the report, the beach has been closed many times in the past due to water quality impairments. The upgraded pump-out stations included in this project are appreciated, as are the water quality mitigation requirements during construction; however, I believe that more should be

P-21-3



done by this project to improve water quality along the lines of the successful "Baby Beach Storm Drain to Sanitary Sewer Diversion and Filtration Project".

- 2. Historically, the west marina area requires periodic dredging to maintain safe passageway for boats, a process that creates degradation in water quality. Water quality could be improved in the harbor if there is anything that can be done to reduce the heavy sediment load entering the harbor that creates the shoals that require periodic dredging.

In support of the stated Project Goal "*promoting practices that improve water quality*", consideration should be made to fund a study that would formulate recommendations for improving water quality and reducing sedimentation in the harbor to be funded as a part of this project.



P-21-3

Please recognize the importance of my concerns regarding this projects negative impact to public safety and water quality. I would appreciate of an alternative dock configuration that would keep the larger Sea Scouts sailing vessels where they are currently docked, on the east side of the youth and group facility. Also, further study of improvements that would improve water quality and reduce sedimentation should be considered.

I plan to follow this project closely and to work to expand community awareness. It is in our best interest to improve all aspects of Dana Point Harbor in a way that increases its aesthetic, educational and recreational value to our community while preserving public safety and enhancing environmental quality.

P-21-4

Thank you for your consideration of these issues.  
Sincerely,

Doug Abramson, P.E.  
33292 Astoria St.  
Dana Point, CA 92629  
949-842-3322



Welcome, Paul Lawrence · LOGOUT

- eFM
- eFM Cases
- New Request
- Quick Tally

« Back to Case List

### Case Details

Case Number: 27554 [make confidential](#)      Status: New [change](#)  
 Tags: [Manage case Tags](#)      Request Type: Complaint  
[suggest related cases](#)  
 Customer: [Black, Doug](#)      Location of Request:  
                  external customer      [edit](#)  
                  Dana Point CA ([map](#))      Facility: N/A  
                  dblack1@cox.net      [edit](#)  
                  [View customer's 1 open cases](#)

Preferred Contact Method: Email  
 Submitted By: Black, Doug      Primary Owner: Smith, Lisa  
                  customer      [reason](#)  
 Topic: Residents>OC Dana Point Harbor (DC Dana Point Harbor)      Secondary Owner: Lawrence, Paul  
                  [change](#)      [reason](#)  
 Date/Time Created: 11/12/2011 11:22  
 Date/Time Closed:

Custom Fields:

#### Original Request

RE DP Harbor "upgrade" plan:

1) Has the County developed appropriate and realistic alternatives? Isn't there a much more appropriate "Alternative 4" that should have been studied? A better plan would be:

Re-lay out the existing slips exactly the way they are now with the relatively minor exception of providing ADA compliance.  
 Do not encroach on the channel,  
 Do not build out in front of baby beach  
 Do not reorient the West basin slips.  
 Do not eliminate any 50' slips,  
 DO build out up to 2-300 35+ slips in the East Anchorage  
 Do not eliminate the 3' overhang and force boaters into more expensive slips  
 Do not strip the Shipyard of any waterside slips or land

2) Replacement of the slips should begin immediately as they are falling - do not force boaters to wait until the expanded stores and restaurants have consumed all of the money and time.

#### Customer Communications

No records of communication activities found

\* Customer Communications are visible on the customer's case status page.

#### Internal Activity

##### Internal Notes

No records for internal activities found

##### Tasks

Close Task	Due	Subject	Assigned By	Assigned To	Status
No records for internal activities found					

#### Case Contacts

Role	Name	Email	Phone
Primary Owner	Smith, Lisa	<a href="mailto:lisa.smith@dphd.ocgov.com">lisa.smith@dphd.ocgov.com</a>	(949) 923-3796
Secondary Owner	Lawrence, Paul	<a href="mailto:paul.lawrence@dphd.ocgov.com">paul.lawrence@dphd.ocgov.com</a>	(949) 923-2286

P-22-1

33011 Terrapin Court, San Juan Capistrano, CA 92675

12<sup>th</sup> November 2011

Dear Sir/Madam,

Re: Proposed Dana Point Harbor Marina Improvement Project

I am writing to object to the proposed changes to the area known as Baby Beach, which would refigure the dock area by the Orange County Sailing and Events Centre.

P-23-1

Having looked at the proposals, it is clear that it is the wrong development in the wrong location. It also appears that the varied impacts of this development have not been addressed or are just being ignored.

While no doubt there has been an estimation of the revenue that these additional slips will generate, has there been an estimation of the revenue that will be lost as a result of this development?

P-23-2

Baby Beach is a place that we visit on a regular basis to paddleboard and kayak. Afterwards we drive to nearby Dana Point restaurants rather than drive all the way back into San Juan Capistrano to eat. Similarly we bring all of our out-of-town visitors to Baby Beach to kayak. Some of these visitors stay at hotels in San Clemente and at Newport Beach but they spend money in Dana Point that they wouldn't have otherwise. I am sure that we are not the only people that live outside of Dana Point (as well as those who do live there) that bring in revenue to Dana Point businesses as a result of the current access to Baby Beach for non-motorised craft. Restaurants will not be the only ones affected. Dana Point businesses such as UP Sports and the several surf shops in town who sell these kinds of crafts will be impacted by fewer sales which impacts City revenues through lower sales tax receipts. The proposed changes with their impact on access by craft such as kayaks and outrigger canoes by the OCSEC area plus the crowding of the basin in front of the beach will result in an unsafe environment for users including the many visitors that use Baby Beach. This will discourage people from using the area. As a result they will go elsewhere and will not spend money at Dana Point businesses they would otherwise have done so.

P-23-3

Another objection concerns the Orange County Sailing and Events Centre dock. The proposed dock configuration will create an unsafe learning environment for boating students at the OCSEC. As a regular paddler in the basin at Baby Beach, I have first-hand experience observing these students. It appears apparent that those behind the proposed changes have not. If they had they would realize that these students will not be able to exit or enter the narrow proposed OCSEC dock area with the level of expertise that will be required with the level of expertise that they have. Even in a wide-open area, they are

P-23-2

unable to adequately control the direction of their boat. To expect them to do so while trying to enter a narrow dock area from a channel reduced in size, which will most likely be occupied by one or more other boats at the same time is simply astonishing. It is unbelievable that anyone would think that an extremely serious accident would not result if these proposals are allowed to go ahead.



P-23-4

Thanks to its current free, easy public access, Baby Beach is an area that is used and enjoyed by a wide variety of people (mostly residents) all year round. Regardless of the time of day (and even in cold weather) I visit there, there are many people using the beach, water, and surrounding lawns: families celebrating life events, fathers teaching children to paddle etc. At the same time I can be there looking out at the basin for an hour or more and not see a single motorized boat coming in or out of the channel. Yet the proposals propose reducing the larger population's access to a well-used resource to provide space for a few that will barely use the area at all. In the greater harbor area the space for non-motorised craft is comparatively small. To reduce it further negatively affecting a vast majority of people who are non-boat owners is financially and in terms of public relations, shortsighted.

P-23-5

Yours faithfully,

A handwritten signature in cursive script that reads "Jacqueline Price".

Jacqueline Price (Mrs.)

November 13, 2011

Dear Mr. Gross,

As I receive news of the new plans for the turning basin of Dana Point Harbor, I feel as though I am witnessing a tragedy take place right before my eyes. I feel obligated, not only myself, but to all my friends and peers in the sailing world to do as much as I can try and stop this new building plan from becoming a reality in our harbor. I started sailing when I was seven years old, almost 12 years later I am now 18 years old, and I spend a good chunk of my free time occupying the harbor. I first learned to sail with Westwind sailing, after which I went on to race with Dana West Yacht Club for 4 years and I recently finished up my fourth year teaching at Westwind sailing (this year as a US sailing certified head instructor) so I can say I've gotten to know the harbor pretty well over the years. Dana point harbor is a wonderful environment for young blossoming sailors. Not too big, but not too small, I would have to say that up to 80% of the time I have spent on the water over the course of my life has been in the turning basin or the outer channel of Dana Point Harbor. Whether I was practicing starts or just cruising with a friend, it's a pretty convenient place to go for a minimum haste little sail.

P-24-1

Looking at these new plans, I fear that the present scenario I just portrayed above might no longer be a reality if these plans are executed. These new facilities will over-complicate small boat sailing for all those who enjoy it and effectively ruin it for those novice sailors incapable of maneuvering around the new facilities. Baby beach, a fun, safe environment for small children and west wind campers will be hindered by the yachts who will be using it for extra parking. Furthermore, I find it doubtful that the west end of the harbor will remain as clean as it is now with the new population of yachts occupying it. Waste and pollutants from the yachts will contaminate the turning basin (or what's left of it) to the point where it is barely inhabitable.

P-24-2

P-24-3

Given the above information, I can do little more then write this letter to the individuals responsible for the construction of these new facilities and urge them that following through with these plans would be an enormous mistake.

P-24-4

Sincerely,

  
Max Monahan

November 14, 2011

Dear Mr. Gross,

My son started sailing at Westwind Sailing when he was 7 years old. Then went to Dana West Yacht Club and raced his sabot for 4 years. Then joined the Mariners (Sea Scouts) and now works for Westwind sailing as one of their head instructors. So as you can see Dana Point Harbor has been and is a big part of our lives.

P-25-1

When my son and I looked at the Harbor plans for the area around the Youth Facility we were very disappointed to think that there was little thought on how this would impact so many people....such as families enjoying the Baby Beach, everyone who participates in Westwind Sailing, the Mariners and all the rest who use the facility. There are health risks with the quality of the water adding more slips for more vessels in that location and there are safety risks from adding more slips as well. If you can visualize the esthetics of the plan, it would look over crowded and cramped plus causing more problems than just the ones above.

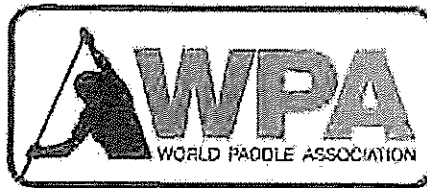
P-25-2

Please take the time to reconsider your decision. There is a lot more at stake than just money. This is about the "good" for everyone.

P-25-3

Thank you.

  
Debra Monahan



Mr. Brad Gross:

We were recently informed of the possible boat slip additions in front of the area commonly known as Baby beach. After viewing the proposed slip expansion we became very concerned with how this new development would impact the Baby beach area.

P-26-1

Since many of the World Paddle Association members frequently launch and bring their families to the Baby beach area we feel that many of these paddlers and families will no longer utilize Baby beach and with this said would also impact the businesses in the area.

The Baby beach area allows for many paddlers and families a safe and friendly area to launch, park and spend the day enjoying the harbor area. The development plans would make the area more congested with parking and increase boat traffic in a smaller area which would bring more danger to those out in the water. We feel the development to the Baby beach area will only deter those who have enjoyed the area for the reasons stated will now seek other places to spend their time.

P-26-2

If you reduce the amount of people coming to the area than you will reduce amount of income that will be spent with the local retailers in and around the Dana Point Harbor area.

P-26-3

On behalf of the World Paddle Association and our members please re-consider your plans with the development at Baby beach and help continue to best serve those who increase the economy for the Dana Point Harbor area.

P-26-4

Sincerely,

Byron Kurt  
President

byron@worldpaddleassociation.com

11-22-11 10:21:51 AM CVD

World Paddle Association

[info@worldpaddleassociation.com](mailto:info@worldpaddleassociation.com) or 888.WPA.4959 (888.972.4959)

November 15, 2011

Brad Gross, Director

OC Dana Point Harbor

24650 Dana Point Harbor Drive

Dana Point, CA 92629

Dear Mr. Gross:

Our family has been involved with the South Coast Sailing Team (SCST) for nearly 20 years. Our son, Christopher, who is now deceased, was an active member of SCST for several years. Christopher passed away in 1996 as a result of a diving accident unrelated to any SCST activities. However, we have continued to support the Sea Scout program over these years because we believe strongly in its mission, the positive impact it has on youth of all walks of life, and its emphasis on ocean safety. We also fund a college scholarship program in memory of Christopher whereby recipients are selected annually based on their leadership accomplishments, including their focus on safety at sea.

P-27-1

While we applaud the vision and the thinking that has gone into the Marina Improvement Project, we are extremely concerned about the negative impact the proposed changes have on the facility previously known as the Youth and Group Facility. As contemplated, the changes would substantially increase the safety risk to the youth in the SCST program and the public at large that uses Baby Beach. The new location for the SCST program is not ideal on many counts, but most of all it exposes the young sailors and the many users of Baby Beach, particularly families with young children, to materially increased risks due to the proximity of the proposed new docks.

P-27-2

One of the most enduring and wonderful aspects of Dana Point Harbor and Marina is the public access that it affords to people of all income levels, backgrounds, and ages. Unfortunately, the proposed project would also be a major step backwards in this regard as parking will be reduced and traffic increased. The negative impact of changing this balance will be most acutely felt in the public areas surrounding Baby Beach and the Youth and Group Facility. These areas are the heart and soul of the public venues for those very users that otherwise have limited access to beach and aquatic facilities in Orange County.

P-27-3

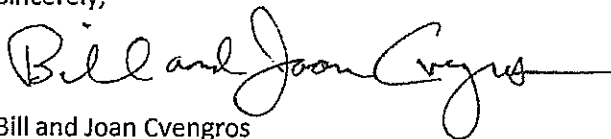


There are other technical aspects of the proposed Improvement Project that should be considered with regard to the impact on the Baby Beach area and the Youth and Group Facility. These relate to inconsistencies and issues that arise when considered in light of the California Coastal Act. I will leave these technicalities to others to point out. However, our concerns are more basic and fundamental. Removing the public docks from the east side of the facility to the west side is a major denigration of the harbor for the youth using the Sailing and Event facilities and the many youth, adults, and families that enjoy the Baby Beach area. While the Improvement Project may provide enhanced docks for a few extra large boats, it will adversely impact several thousand people most of whom are fortunate to have any access to small human powered or wind powered vessels.

P-27-4

We hope that you will reconsider the aspects of the Improvement Project that negatively impact the SCST program, Baby Beach, and the nearby public facilities.

Sincerely,

A handwritten signature in cursive script that reads "Bill and Joan Cvengros". The signature is written in black ink and includes a horizontal line extending from the end of the name.

Bill and Joan Cvengros

November 15, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Brad,

As a frequent user of the Dana Point Harbor, I am writing this letter is to provide comment and express the concerns over the proposed development as indicated in the Draft Subsequent Environmental Impact Report.

I surfed Dana Point before there was a harbor. The very first time I came down the road from the top to park down by the pier and paddle out, I fell in love with the Dana Point area. The view was breathtaking! I was in my teens and back then, it was like going to Baja California from where I lived in Huntington Beach. There were four really good surf spots here, abalone shells everywhere and because of the unique eddies, the wind would blow offshore while everywhere else would be blown out.

To say that Orange County has had very little regard for preserving the natural beauty and keeping it for generations to come is an understatement. Driving down the coast, the ocean view has disappeared in lieu of high cost private developments. I'm embarrassed at what has been done in the name of quality of life. Yet am painfully aware that it is human nature to want to change and develop. I also realize that most of us are so vain that we actually think we can improve on nature. Oh well.

The Dana Point Harbor Revitalization Plan is more of the same, quality of life for those that own and can afford larger boats. If the powers that be would just make what is there better instead of changing and expanding, I wouldn't be writing this letter. The existing docks, the handicap access and parking need do need to be revitalized, if not redone. As a person who expects our taxes to provide resources for the public at large not the few who pay big bucks use resources at the expense of the few. I want to point out a few things that will be impacted if this plan goes forward and how Baby Beach will be changed and the public's access and the environment in this area will never be the same. I believe that access to Baby Beach will be reduced by approximately 25% by extending the Youth Facility and Sea Scouts docks further into the basin. To diminish it by adding more docks would be a greater loss than more revenue. 25% area reduction does not include how much area will be lost by the Ocean Institute dock expansion. I feel this design is in direct conflict with the Coastal Act to protect sensitive coastal resource areas. In addition to being a surfer and board shaper, I am also into standup paddle boarding. As you may be aware, paddle boarding is the fastest growing sport right now with 200% growth in the last 2 - 3 years. As a frequent user at Baby Beach, I know that there is

P-28-1

P-28-2

P-28-3

P-28-4



already not enough parking. On a busy weekend the traffic is at a crawl and parking non-existent. The EIR for this project does not reflect this and appears to indicate there are no issues with traffic or parking or at least I didn't find it in the SEIR. This is in stark contrast with those of us that are there and use the basin nearly everyday. Also, as the more people use the area, the development will cause a definite access issue. What do you think will happen when thousands of new homes are built out in the east county or along Ortega Hwy?


P-28-4

Baby Beach is very unique in the fact that it is the only location between Newport Harbor and Oceanside Harbor where a human powered watercraft can access the ocean without having to go through surf. This makes the basin a unique learning area for all types of beach launched watercraft. This recreational environment is rare. Once again, to reduce the area by constructing more docks is not in the public's best interest. This will put a high burden on Baby Beach, its recreational use and will only add to congestion and create safety concerns.

P-28-5

I realize the Dana Point Harbor revitalization task is monumental with so many varied interests and concerns. I hope that the Dana Point Harbor will consider my concerns. I am available to conserve our precious resource and will follow along with this project. I do intend to work actively with our community to increase awareness of this project.

Sincerely,



Michael Mauri  
P.O. Box 3622  
San Clemente, Ca. 92672

11/15/2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing to express my concerns over the proposed plans to construct docks in the West Basin in front of Baby Beach and to take away the current sailing programs.

I grew up in Dana Point and was part of the South Coast Sailing team. My daughter and family for over 30 years have taken advantage of the wonderful opportunities available through this amazing program. We have and continue to use the small boats to kayaks, to going for day sails on the large boats as well as trips to Catalina Island. I am saddened and upset to hear that the program is in jeopardy due to redevelopment for the wealthy. The kids that have gone through the programs have learned valuable skills from teamwork to leadership. Even though you may view it as only a sailing program, it is so much more! Do not be part of dropping another program for the youth. For you and your team to think that the program will continue on as normal is false. Where will the large boats that take the kids out for day sails and to Catalina be kept? There is a safety issue with these boats next to the small boats and all the children in the same vicinity of Baby Beach. If you think a slip here and there will be sufficient, it will not! The boats should all be kept together for maintenance reasons and for a consistent place for the teens to meet and learn skills together. The success of the sailing programs within your harbor and the amazing safety record for all, should be cause for celebration as to a wonderful job your team has done with the way the facilities are setup for all to enjoy. You should be proud to be a part of it. If you make the proposed changes, you will forever regret being part of closing this door on future generations to use the youth facilities from large boats to small. I hope you will also hold yourself responsible if a large yacht runs into a child and causes physical damage to death. As the Director for the Harbor, do not look at the money that will pour in from the few yachts, yet consider the joy the harbor and sailing programs provide. **PLEASE DROP YOUR CURRENT PLANS!**

P-29-1

P-29-2

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water.
- The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEC and DP Yacht Club.
- The project proposes new docks to be built in shallow water that will cause the boats to bottom out at low tide.
- The plan proposes docks to be built in a sensitive marine environment. The docks will disrupt the Eel Grass and fragile marine ecosystem in the basin.
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEC.
- The proposed project will increase motor vehicle traffic and limit parking near Baby Beach.
- The project proposes that motor boats will be docked in front of Baby Beach which will increase pollution near the bathers.
- The project proposes that a boat pumpout station will be located close to Baby Beach which potentially increases pollution in the area.
- A large dock with big boats in front of Baby Beach will change the character of the area and will be aesthetically undesirable.
- The new dock in front of Baby Beach will be used for motor boats which creates safety concerns for non-motorboat users launching at Baby Beach.

P-29-3

P-29-4

P-29-5

P-29-6

P-29-7

P-29-8

Sincerely,

Therese Hall  
90 Byron Drive  
Pleasant Hill, CA 94523

11-21-11A1-237 2090

11/16/2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing to express my concerns over the proposed construction plans in the vicinity of Baby Beach. I have reviewed the Draft Subsequent Environmental Impact Report for the Harbor Marina Improvement Project dated September 20<sup>th</sup> 2011.

P-30-1

I am very concerned about the disruption of the environment after reading the report and I hope you are too. A project like this cannot go forward. I read the Professional Impact report as stated and I am an everyday user of Baby Beach, so I see the plant, bird and fish life with my own two eyes all the time. Just the other day while Standup Paddleboarding I saw four dolphins inside the west basin. On Halloween two friends of mine went scuba diving to document the Eel grass that is growing on the sea floor where the proposed docks will be constructed.

P-30-2

There are many birds particularly the Egrets that will be disturbed during this project. I have read the Professional reports and I don't like them. We have so much growth here already in Orange County. I feel we need to fight for what little we have left.

P-30-3

Baby Beach is such a special place in Dana Point. I use Baby Beach to Standup Paddleboard daily. My family and I have taken sailing classes from Westwind Sailing. County sponsored programs such as Westwind's was vital to my family's support this year after a trauma. I can't imagine the West Basin's recreational area getting smaller, leaving less room for sailing programs and paddle classes. The new dock construction will force over crowding on the north side of the beach, have you witnessed Baby Beach lately? On a warm day you will find 100 paddlers out on the water at the same time. Paddle sports are growing we need more space water sand and land.

P-30-4

Please do not move forward on placing docks in the West basin near Baby Beach. I hope that Dana Point Harbor will take my concerns into consideration. I will help educate the public on the expanded awareness of this project and the good you do as our Director.

Thank you,



Terri Plunkett  
230 Del Gado Rd.  
San Clemente, CA 92672  
949 307-1396

November 16, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing to express my concerns over the Harbor's proposed development in front of and adjacent to Baby Beach.

I am a resident of Irvine and live near the top of Back Bay at Newport Harbor. Even though I live only a couple of blocks from beautiful Newport Harbor, I make the trip to Dana Point's Baby Beach at least 3 times a week to enjoy watersports at your harbor. The launch area at Baby Beach is special. The launch is safe and protected, with no powerboats in your immediate path. This is especially important for beginners and families. Also what brings me to your Harbor (city) is the atmosphere and friendship at Baby Beach. Just like a yacht club provides a gathering point for boat owners, the Baby Beach area is a special place for friends and families to gather. We have met so many great people at Baby Beach.

P-31-1

Without the Baby Beach area I would not be coming to Dana Point. There is no other safe launch point and with more boats jammed into the harbor it would not be a safe place for human powered vessels. Since coming to the Baby Beach launch site I have discovered your beautiful little city. I have spent a fair amount of tax dollars in Dana Point that could easily be diverted to Newport Beach. As recently as last week I made 2 large purchases at businesses in your city. These are businesses I never would have known about without coming to Baby Beach.

P-31-2

I encourage you to do the right thing: REVERSE your decision to privatize the docks used by the community for education, maintain a safer distance of the pump-out stations from bathers (especially since this area caters to very small children), and eliminate the plans to expand docks in and around Baby Beach. The claims in the EIR concerning this development appear to be inconsistent and inadequate as written given the impact this development clearly would have to the public and environment.

P-31-3

Sincerely,



Jill Cupp Vickery  
26 Los Trancos Dr.  
Irvine, CA 92617

11/16/2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing to express my concerns over the proposed plans to construct docks in the West Basin in front of Baby Beach and to take away the current sailing programs.

My Grandparents live down in Dana Point. I grew up participating in the different sailing programs during the summer months and continue to enjoy the large boats during the year when I visit. With the area decreasing next to Baby Beach, I can't imagine where the small boats will sail. As a child it is a scary experience being out in the open channel. The sailing area next to Baby Beach should not be decreased. It is very much needed.

P-32-1

As a teen, I joined the Mariners and participated in many years of events. I am forever grateful for the positive influence this program had on my life. I not only learned to sail, I grew in love with the ocean, learned invaluable life skills, was part of a team, felt like I belonged, learned how to be a leader and how to accept and appreciate all. I wish all teens could participate in this amazing program. I can't believe the harbor would decide to make big changes to the facilities that would close down the program and/or have it become a smaller venue. The large boats are needed for team bonding and the invaluable lessons learned out at sea.

P-32-2

Please reconsider your proposal of moving the Mariner boats from their current location! The youth that participate in the sailing programs are forever changed for the better. Don't be part of taking this away from us!

P-32-3

Sincerely,

Nicole Hall  
Gonzaga University  
502 E Boone Ave, MSC# 1746  
Spokane, WA 99258



November 17, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach.

I am a resident of Dana Point and have been coming to Baby Beach for 10 years. My friends and I brought our children to Baby Beach when they were young because we liked the proximity of the parking to the beach and the fact that there were no waves. As they grew older, my kids would launch their kayak from the beach and then they learned to sail at the OC Sailing & Events Center. I always appreciated the family friendly atmosphere at Baby Beach and the protected shoal area for my kids to enjoy their boating experiences.

P-33-1

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water.
- The proposed dock configuration privatizes docks at OCSEEC which are specifically earmarked for public access educational purpose.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEEC and DP Yacht Club.
- The project proposes new docks to be built in shallow water that will cause the boats to bottom out at low tide.
- The plan proposes docks to be built in a sensitive marine environment. The docks will disrupt the Eel Grass and fragile marine ecosystem in the basin.
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEEC.
- The proposed project will increase motor vehicle traffic and limit parking near Baby Beach.
- The project proposes that motor boats will be docked in front of Baby Beach which will increase pollution near the bathers.
- The project proposes that a boat pump out station will be located close to Baby Beach which potentially increases pollution in the area.
- A large dock with big boats in front of Baby Beach will change the character of the area and will be aesthetically undesirable.
- The new dock in front of Baby Beach will be used for motorboats which creates safety concerns for non-motorboat users launching at Baby Beach.

P-33-2

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I hope that Dana Point Harbor takes into considerations these issues, recognizes the importance of the above and analyzes other options that will not have such a negative impact on the Harbor's resources. I will follow this process closely and continue to work with the community to expand awareness of this project. Finally, I will be one of many who will work to preserve Baby Beach, the Educational facilities and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor.

P-33-9

Sincerely,

Elizabeth Harrington  
32532 Azores Rd.  
Dana Point CA 92629  
[lizabh4u@cox.net](mailto:lizabh4u@cox.net)

11-21-11 11:38 AM RCVJ



November 17, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach and MY OPPOSITION TO YOUR PLAN.

My mother-in-law has owned a home in Dana Point for close to 30 years and we have been fortunate enough to spend vacations there for the last 13 years with our kids. My young children have thrived in the OC Sailing & Events Center through Westwind Sailing's summer camp program. I cannot see how Westwind will be able to continue to offer the amazing opportunities that they currently provide our kids if this new plan for the Marina is enacted. In addition, I feel you would be creating a variety of safety and health hazards with this new construction. Use of Dana Point Harbor, and Baby Beach area in particular, represent a long tradition for many families and it would be shameful to adjust the quaint atmosphere with additional over-sized boats in that small area. As I say, we have been bringing our kids to Baby Beach since they were born and I have been so grateful to have been able to offer safe and basic sailing training to them as they have grown up through Westwind Sailing. I have always appreciated the family friendly atmosphere at Baby Beach and the protected shoal area for my kids to enjoy their boating experiences. This current setting is one that is far too rare in our kids' modern life experience.

P-34-1

Please note the following key arguments I respectfully put forth in opposition to your plan:

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water.
- The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEC and DP Yacht Club.
- The plan proposes docks to be built in a sensitive marine environment. The docks will disrupt the Eel Grass and fragile marine ecosystem in the basin.
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEC.
- The proposed project will increase motor vehicle traffic and limit parking near Baby Beach.
- The project proposes that motor boats will be docked in front of Baby Beach which will increase pollution near the bathers.
- A large dock with big boats in front of Baby Beach will change the character of the area and will be aesthetically undesirable.
- The new dock in front of Baby Beach will be used for motor boats which creates safety concerns for non-motorboat users launching at Baby Beach.

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I hope that Dana Point Harbor takes into consideration these issues, recognizes the importance of all of the bullet points I have listed above, and analyzes other options that will not have such a negative impact on the Harbor's resources.

I will follow this process closely and am spreading the word to all I know that love and appreciate the character of the Dana Point Harbor and Baby Beach as well as the opportunities provided to our young children to learn safe boating practices in a protected setting. The contamination to the water from a pumpout station alone will prevent any family I know from wanting to expose their young children to the contamination in that area if you go forward with this plan.

P-34-9

Dana Point Harbor, Baby Beach, and the educational facilities offer such a unique and rare opportunity to our children. In this day and age it is yet another sad commentary that you would not be willing to go to the extra effort to preserve some of the treasures from the past for our kids' benefit.

Sincerely,  
Mary Ellen & Dave Brown  
11021 N. 74<sup>th</sup> Street  
Scottsdale, AZ 85260

11-21-11A11:52 REVD

11/17/2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach and to take away the docks for the different sailing programs that utilize the other side (now proposed for large yachts).

Why would you put the sailing programs at risk of closing down? Why make the area so small that the different groups are on top of each other?

Be proud of the harbor and what's available: The OC Sailing & Events Center is an educational boating facility protected by the Tideland Trust and Coastal Act. Its purpose is to provide low cost, public access recreational and educational boating opportunities for the public. The boating programs at the center include: Sea Scouts; Westwind sailing and paddling programs for adults, children, individuals with special needs and youth at risk; Dana Point Outriggers; Saddleback College, Marine Science Tech courses; Coast Guard Auxiliary; KG Beach Camps.

P-35-1

Concerns:

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water.
- The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEC and DP Yacht Club.
- The project proposes new docks to be built in shallow water that will cause the boats to bottom out at low tide.
- The plan proposes docks to be built in a sensitive marine environment. The docks will disrupt the Eel Grass and fragile marine ecosystem in the basin.
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEC.
- The proposed project will increase motor vehicle traffic and limit parking near Baby Beach.
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- A large dock with big boats in front of Baby Beach will change the character of the area and will be aesthetically undesirable.
- The new dock in front of Baby Beach will be used for motor boats which creates safety concerns for non-motorboat users launching at Baby Beach.

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P-35-5

P-35-6

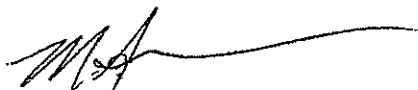
P-35-7

P-35-8

My family has utilized the different programs and facilities for over 30 years. Only help to improve the facilities. Do not be a part of taking them away!

P-35-9

Thank you,



Michael Hall  
90 Byron Drive  
Pleasant Hill, CA 94523

November 17, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. We are writing to express our concern over any modification to Baby Beach and the surrounding marina area.

We are residents of Laguna Niguel and have been coming to Westwind Sailing Facilities and Baby Beach for eight years. Our children and their friends have launched small outriggers from Baby Beach into the safe and calm ocean, and also learned to sail through Westwind. Because of the great experiences fostered, our son pursued the sport, currently racing Sabots, CFJ's, Lasers and 420's as a result of his introduction to sailing and incredible experience with Westwind, owner Diane Wenzel, and staff.

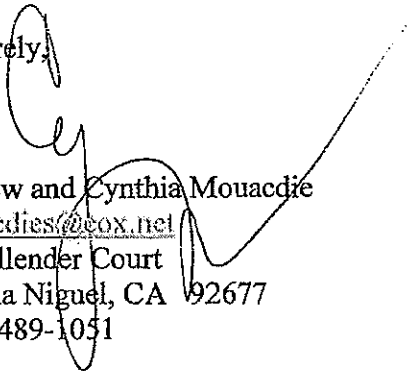
P-36-1

We could easily list numerous reasons why any modification to Baby Beach and the surrounding area would ill affect our current usage, however, -- to put it simply-- we now have teenagers that have grown to treasure and enjoy the special amenity of having access to a sheltered beach within an expansive harbor. Most importantly, Baby Beach in its current configuration provides a safe environment for our son and daughter's ocean exploration. Safety is paramount when children, teens and adults are in the ocean.

P-36-2

We hope that Dana Point Harbor analyzes other options that will not have such a negative impact on the Harbor's resources. Thank you in advance for your consideration.

Sincerely,

  
Andrew and Cynthia Mouacdie  
[mouacdie@cox.net](mailto:mouacdie@cox.net)  
36 Callender Court  
Laguna Niguel, CA 92677  
(949) 489-1051

11-13-11 11:28 RCVD

Nicholas E. Flores  
1285 Linden Avenue  
Boulder, CO 80304

November 18, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

RE: Dana Point Harbor

Dear Director Gross,

I write in opposition of the new development proposed for Baby Beach and urge the Harbor to reverse course. The proposed development will create conflict between paddlers and boaters, making the area considerably less desirable and less safe for paddlers. Losses from this project will grow over time. I elaborate below.

P-37-1

As an economics professor at the University of Colorado Boulder, I study the economic impacts of recreational policies. I believe there are important economic fundamentals that come into play on this decision.

First, the immediate economic impact to paddlers is considerable. Reducing the amount of surface water available for paddlers and increasing sailboat traffic will make the area less desirable without a doubt. Economic losses for paddlers would not be great if there were many similar sites to put in and find some calm water. However Baby Beach is quite unique to the surrounding area. One has to move up or down the coast pretty far (creating more environmental impact) to find another spot like Baby Beach. Lacking these substitutes, Baby Beach is a very valuable site. Degrade the conditions for paddlers and you get large losses on account of this relative uniqueness. People facing considerable losses tend to get up in arms which is exactly what you are experiencing.

P-37-2

Second, stand up paddle boarding (SUP) is a sport that is experiencing amazing growth and this growth will likely be sustained for a long time. SUP is exploding in places like Lake Tahoe, Boulder, and Austin. SUP startup costs are relatively low compared to motor boating and sailing. Boards are relatively inexpensive and they are going to get a lot cheaper as manufacturer competition increases. Deciding in favor of sailing at the expense of SUP boarders is going against the obvious market trends. Economic losses from the proposed dock expansion are going to grow over time in tandem with the growth of the sport. I believe the Harbor wants to make a decision that is right for the public. Weighing the outcomes for the future is where most of the action is on this project. Market trends favor keeping the area in tact for SUP and other forms of paddling.

Overall, I think the economics of the situation favors maintaining or even improving the area for SUP boarders, canoe paddlers, and kayak paddlers. Thank you for considering my plea.

P-37-3

Respectfully,

Nicholas E. Flores (Ph.D., Professor, and Department Chair)

November 18, 2011

Mr. Brad Gross  
Harbor Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Re: DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT  
SCH NO. 2003101142

Dear Mr. Gross:

I provide these comments on the above-referenced as an individual. The comments below and all references contained therein are hereby incorporated into the official record of proceedings of this project and its successors.

For several years I have been talking to the management and board of South Coast Water District (SCWD) regarding their plans to extend the "purple pipe" for recycled water into OC Dana Point Harbor. Specifically, I have talked to them about this extension occurring well before any construction activities would commence in the Harbor. I reference the email stream below as a starting point for these discussions.

P-38-1

From: "Michael Dunbar" <Mdunbar@scwd.org>  
Date: October 30, 2008 10:18:25 AM PDT  
To: "Penny Elia" <greenp1@cox.net>  
Cc: "Dick Dietmeier" <dietmeier@cox.net>  
Subject: RE: Dana Point Harbor Revitalization Plan - "purple pipe"

Penny,  
I have spoken to Brad about the use of recycled water in the Harbor. We currently have purple pipe in the ground along Golden Lantern from Stonehill Drive down to Del Prado. We are also extending the purple pipe along Pacific Coast Highway down into the Town Center of Dana Point. We are also working with City of San Juan Capistrano and Moulton Niguel to get recycled water at the J.B. Latham Plant on Del Obispo. I would venture to guess that we should have purple pipe into the Harbor and Town Center within the next two years.  
Mike

-----Original Message-----

From: Penny Elia [mailto:greenp1@cox.net]  
Sent: Wednesday, October 29, 2008 1:54 PM  
To: Michael Dunbar  
Cc: Dick Dietmeier  
Subject: Dana Point Harbor Revitalization Plan - "purple pipe"

P-38-2

Hi Mike -  
Hope all is well. Sorry I had to leave the last Aliso water reuse meeting early, but so happy to hear we're moving forward.

I am meeting with Brad Gross tomorrow regarding the DP Harbor revitalization plan. One of the issues I keep asking him about is the extension of the purple pipe and how the new plan will implement this much needed program. You know I have the same questions about the whole Headlands project as well. As I was walking along Strands a few weeks ago I saw the sprinklers at the Headlands wasting thousands of gallons of water. The wind was blowing, the sun was out and the sprinklers were just going a mile a minute.

With all that in mind, could you please give me an idea of where SCWD is in the process of getting that famous purple pipe out to the Headlands and Dana Point Harbor?

Many thanks!  
All the best -  
Penny

After repeated unsuccessful attempts to reach SCWD General Manager Mike Dunbar over the past several weeks to discuss the progress of the recycled water extension into the Harbor and my goal to incorporate SCWD's update into these SEIR comments, I contacted SCWD Chairman Wayne Rayfield. Chairman Rayfield provided the following update on November 8, 2011:

- SCWD does have a plan for implementation once renovation of OCDPH is approved.
- SCWD also has a back up plan that would include providing recycled water from the coastal treatment plan or tapping into Moulton Niguel.
- Plan C, depending on variables, would be to take Salt Creek runoff and recycle that. This has been a longstanding hope but there are no approvals at this time and it will require Regional Board approval and a plan for disposal of brine and storage.

P-38-3

Attached is SCWD's five-year Capital Improvement Program. On Page 57, "Recycled, Golden Lantern South" will extend the recycled line in Golden Lantern from Del Prado to the Harbor. These improvements are planned for 2014-2015. OC Dana Point Harbor could commence construction of the Commercial Core in early 2014.

As you can see, there have been several scenarios presented by SCWD over the past three years. It's apparent at this date and time that Mr. Dunbar's original "guess" of the extension occurring by 2010 was miscalculated. It would also appear that a specific extension date is more than fluid.

P-38-4

It is imperative that recycled water be provided to OC Dana Point Harbor by SCWD by the time construction commences. An accurate timeline needs to be provided by SCWD management and its board to OC Dana Point Harbor. Our finite resources cannot be drained by yet another major development in this area. The Headlands/Strands project wasted millions of gallons of potable water during their initial construction phase. We simply cannot afford to have our water supply misused.

I remain committed to my outreach to SCWD management and its board and strongly encourage you to join me in these efforts.

Thank you for the opportunity to submit these comments.

Penny Elia  
30632 Marilyn Drive  
Laguna Beach, CA 92651  
949-499-4499

Attachment: 2011-12 SCWD CIP Budget

Copy: Wayne Rayfield – SCWD  
Mike Dunbar – SCWD  
Sherilyn Sarb – California Coastal Commission  
Teresa Henry – California Coastal Commission  
Karl Schwing – California Coastal Commission  
Fernie Sy – California Coastal Commission  
Robert Morris – San Diego Regional Water Quality Control Board  
Jimmy Smith – San Diego Regional Water Quality Control Board  
Jon Conk – Project Dimensions, Inc.

P-38-5

2011-2012 DISTRICT CAPITAL PROJECTS

PROJECT DESCRIPTION	Account Number	Proposed BUDGET					Budgeted 5 Year Project Total
		2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	
Outside Agency Subtotal		3,124,707	3,915,862	3,763,578	2,099,260	1,914,553	\$ 14,817,960
Water Subtotal		3,140,000	1,740,000	4,312,000	4,130,000	-	\$ 13,322,000
Sewer Subtotal		4,755,000	11,455,000	17,717,000	14,305,000	11,340,000	\$ 59,572,000
San Juan Creek Property Development Subtotal		50,000	200,000	1,650,000	2,350,000	50,000	\$ 4,300,000
Recycled Subtotal		500,000	2,950,000	5,324,000	7,100,000	-	\$ 15,874,000
Groundwater Recovery Facility Subtotal		1,988,000	2,050,000	2,550,000	450,000	-	\$ 7,038,000
City of Dana Point Subtotal		250,000	650,000	1,150,000	-	-	\$ 2,050,000
Other Projects Subtotal		1,230,000	330,000	250,000	450,000	150,000	\$ 2,410,000
Vehicle and Equipment Subtotal		335,000	-	-	-	-	\$ 335,000
<b>TOTAL PRIORITY ONE PROJECTS</b>		<b>\$ 13,184,707</b>	<b>\$ 17,556,862</b>	<b>\$ 16,513,578</b>	<b>\$ 10,248,260</b>	<b>\$ 13,619,553</b>	<b>\$ 73,577,960</b>
<b>TOTAL PRIORITY TWO PROJECTS</b>		<b>\$ 2,138,000</b>	<b>\$ 1,500,000</b>	<b>\$ 9,350,000</b>	<b>\$ 2,700,000</b>	<b>\$ 2,700,000</b>	<b>\$ 17,388,000</b>
<b>TOTAL PRIORITY THREE PROJECTS</b>		<b>\$ 50,000</b>	<b>\$ 1,385,000</b>	<b>\$ 8,041,000</b>	<b>\$ 5,845,000</b>	<b>\$ -</b>	<b>\$ 17,631,000</b>
<b>TOTAL PRIORITY FOUR PROJECTS</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,752,000</b>	<b>\$ 6,440,000</b>	<b>\$ 340,000</b>	<b>\$ 8,512,000</b>
<b>TOTAL CAPITAL</b>		<b>\$ 15,372,707</b>	<b>\$ 23,280,862</b>	<b>\$ 36,716,578</b>	<b>\$ 30,884,260</b>	<b>\$ 13,454,553</b>	<b>\$ 119,718,960</b>
		12.84%	19.45%	30.67%	25.80%	11.24%	

SUMMARY



2011-2012 DISTRICT CAPITAL PROJECTS

Account Number	PROJECT DESCRIPTION	Proposed BUDGET					Budgeted 5 Year Project Total
		2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	
<b>PRIORITY ONE</b>							
<b>OUTSIDE AGENCY</b>							
07-002	Water Reservoir Storage - Santa Margarita Water District						500,000
08-017	JRWSS Capital Projects (2011-2012 JRWSS Budget)	10280	500,000	-	-	-	500,000
08-003	NAWDOC Ocean Dred Study	19320	697,524	1,182,555	107,540	220,765	2,758,655
05-084	SOCWA - JB Latham Plant - PC(ZR)	17160	212,000	291,000	233,000	TBD	989,000
05-065	SOCWA - Coastal Treatment Plant - PC(15R)	32020	1,142,565	1,177,308	898,529	869,292	5,399,287
05-066	SOCWA - Regional Treatment Plant - PC(17R)	32150	480,926	1,100,356	1,375,601	785,016	4,411,783
	Outside Agency Subtotal	32170	91,772	164,633	293,124	154,561	779,265
			3,124,707	3,915,882	3,763,578	2,099,260	14,817,960
<b>WATER</b>							
08-005	4A Reservoir Interior and Exterior Coating	17350	500,000	-	-	-	500,000
11-024	Dana Point Water Service Replacements		250,000	-	-	-	250,000
11-001	S.J.C Property Waterline	11130	890,000	-	-	-	890,000
	Large Valve Replacement Program	19910	475,000	-	-	-	475,000
	Water Subtotal		2,115,000	-	-	-	2,115,000
<b>SEWER</b>							
08-029	Sewer Tunnel Permanent Repair-Main Tunnel and any Access Shafts	26830	2,000,000	10,000,000	11,000,000	11,000,000	45,000,000
11-002	Shaft and Access Tunnel Easement Acquisition	26830	1,500,000	-	-	-	1,500,000
10-008	Cathodic Protection on LS #2 Force Main	17660	25,000	-	-	-	25,000
10-011	LS #2 Replacement Pumps	17700	500,000	-	-	-	500,000
11-005	Gravily Sewer Lines Repairs	19950	150,000	-	-	-	150,000
	Sewer Subtotal		4,175,000	10,000,000	11,000,000	11,000,000	47,175,000

2011-2012 DISTRICT CAPITAL PROJECTS

PROJECT DESCRIPTION	Account Number	Proposed BUDGET	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
<b>SAN JUAN CREEK PROPERTY DEVELOPMENT</b>								
<b>San Juan Creek Property Development Subtotal</b>								
09-013		enrg	500,000	1,500,000				2,000,000
			500,000	1,500,000				2,000,000
<b>RECYCLED</b>								
<b>Recycled Subtotal</b>								
			500,000	1,500,000				2,000,000
<b>GROUNDWATER RECOVERY FACILITY</b>								
<b>GROUNDWATER RECOVERY FACILITY</b>								
10-005		enrg	200,000	1,000,000	1,600,000			2,800,000
08-031	96	enrg	800,000					800,000
10-003		enrg	900,000	1,000,000				1,900,000
			1,900,000	2,000,000	1,600,000			5,500,000
<b>CITY OF DANA POINT PROJECTS</b>								
<b>City of Dana Point Projects Subtotal</b>								

2011-2012 DISTRICT CAPITAL PROJECTS

Account Number	PROJECT DESCRIPTION	Proposed BUDGET					Budgeted 5 Year Project Total
		2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	
<b>OTHER PROJECTS</b>							
11-010	ops	SCADA Upgrades	350,000	-	-	-	350,000
11-011	ops	Tennis Center Improvements	30,000	-	-	-	30,000
11-013	engr	West Street Facility Improvements/Front Stairs	100,000	-	-	-	100,000
09-005	ops	Catholic Protection Upgrades & Replacement	50,000	50,000	50,000	50,000	250,000
09-007	IT	IT Capital Equipment	355,000	100,000	100,000	100,000	755,000
11-053		Operations Center	150,000	TBD	TBD	TBD	150,000
		<b>Other Projects Subtotal</b>	<b>1,035,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>1,635,000</b>
<b>VEHICLE AND EQUIPMENT</b>							
10-021	ops	Yearly Generator Replacement Program LS #13 and #14	75,000	-	-	-	75,000
	ops	CCTV Camera Replacement	40,000	-	-	-	40,000
11-020	ops	Emergency Water Pump to meet AQMD Standards	80,000	-	-	-	80,000
	ops	Tire Changer and Wheel Balancer	16,222	-	-	-	16,222
11-022	ops	Vehicle Replacement Units # 5, 11, 26 High Line Trailer for Piping and Hoses	125,000	-	-	-	125,000
		#5, #26 will be HD 2500 Chevrolet Trucks Unit #11 will be a Ford 250					
		<b>Vehicle and Equipment Subtotal</b>	<b>335,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>335,000</b>
		<b>TOTAL PRIORITY ONE PROJECTS</b>	<b>13,184,707</b>	<b>17,565,862</b>	<b>16,513,578</b>	<b>13,249,260</b>	<b>13,064,553</b>

Vehicles to be Replaced Descriptions  
 Unit #5 2000 106,939 miles Chevrolet 2500 Water Operations BC  
 Replaced with HD 2500 Truck

Unit #11 2003 HD 2500 83,903 miles DM/this unit will be reused  
 by Water Operations

Unit #26 2000 107,596 miles Chevrolet 2500 RC/ Replaced with Toyota Pre-Runner  
 High Line Trailer for Piping and Hoses

2011-2012 DISTRICT CAPITAL PROJECTS

Proposed Budget  
 Account Number  
 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016  
 Budgeted 5 Year Project Total

PRIORITY TWO

PROJECT DESCRIPTION	Account Number	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
<b>OUTSIDE AGENCY</b>							
Outside Agency Subtotal							
<b>WATER</b>							
08-004	ops	120,000	-	-	-	-	120,000
11-025	enpr	-	550,000	-	-	-	550,000
10-002	ops	60,000	-	-	-	-	60,000
11-027	ops	25,000	-	-	-	-	25,000
	enpr	100,000	-	-	-	-	100,000
	ops	200,000	-	-	-	-	200,000
	enpr	400,000	-	-	-	-	400,000
	ops	-	800,000	-	-	-	800,000
	ops	120,000	-	-	-	-	120,000
	ops	1,025,000	1,350,000	-	-	-	2,375,000
Water Subtotal							

<b>SEWER</b>							
09-009	ops	25,000	250,000	1,500,000	1,200,000	-	2,975,000
11-030	ops	-	150,000	1,500,000	-	-	1,650,000
	ops	50,000	-	-	-	-	50,000
	ops	65,000	-	-	-	-	65,000
	ops	15,000	-	-	-	-	15,000
	enpr	300,000	-	-	-	-	300,000
	enpr	100,000	1,000,000	3,000,000	2,000,000	-	6,100,000
	enpr	25,000	-	-	-	-	25,000
	enpr	580,000	1,400,000	6,000,000	3,200,000	-	11,180,000
Sewer Subtotal							

SAN JUAN CREEK PROPERTY DEVELOPMENT							
07-009	enpr	50,000	50,000	50,000	50,000	50,000	250,000
San Juan Creek Property Development Subtotal							

RECYCLED							
09-011	enpr	-	150,000	910,000	-	-	1,060,000
	enpr	-	200,000	1,300,000	-	-	1,500,000
	enpr	-	200,000	-	-	-	200,000
	enpr	-	90,000	20,000	1,000,000	-	1,070,000
	enpr	-	100,000	-	-	-	100,000
	enpr	-	700,000	2,230,000	1,000,000	-	3,930,000
Recycled Subtotal							

2011-2012 DISTRICT CAPITAL PROJECTS

Account Number	PROJECT DESCRIPTION	Proposed BUDGET				Budgeted 5 Year Project Total
		2011-2012	2012-2013	2013-2014	2014-2015	
<b>GROUNDWATER RECOVERY FACILITY</b>						
	Equipment including a Mechanical Mixer	25,000	-	-	-	25,000
	GRF Greensand Replacement I&M Removal System	20,000	-	-	-	20,000
	GRF Discharge Pipeline	25,000	-	-	-	25,000
	WQ Tracking Software	18,000	-	-	-	18,000
	<b>Groundwater Recovery Facility Subtotal</b>	<b>88,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>88,000</b>
<b>CITY OF DANA POINT PROJECTS</b>						
	Doherty Village Infrastructure Improvements	100,000	500,000	1,000,000	-	1,600,000
10-014	Dana Point Town Center Domestic Water Improvements	50,000	50,000	50,000	-	150,000
10-015	Dana Point Town Center Recycled Water System	50,000	50,000	50,000	-	150,000
10-016	Dana Point Town Center Sewer Improvements	50,000	50,000	50,000	-	150,000
	<b>City of Dana Point Projects Subtotal</b>	<b>250,000</b>	<b>650,000</b>	<b>1,150,000</b>	<b>-</b>	<b>2,050,000</b>
<b>OTHER PROJECTS</b>						
06-041	Asset Management Plan	11,100	100,000	-	-	111,100
	Asset Management Plan	-	100,000	-	-	100,000
	Asset Management Plan	15,000	-	-	-	15,000
05-103	Aliso Maintenance Shop Office Improvements	50,000	-	-	-	50,000
05-096	Computerized Maintenance Management System	80,000	-	-	-	80,000
	GIS Additional Applications	24,350	80,000	100,000	100,000	304,350
	<b>Other Projects Subtotal</b>	<b>145,000</b>	<b>180,000</b>	<b>100,000</b>	<b>100,000</b>	<b>525,000</b>
	<b>TOTAL PRIORITY TWO PROJECTS</b>	<b>2,138,000</b>	<b>4,330,000</b>	<b>9,530,000</b>	<b>4,350,000</b>	<b>20,398,000</b>

2011-2012 DISTRICT CAPITAL PROJECTS

Account Number	Proposed BUDGET	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
<b>PRIORITY THREE</b>								
<b>OUTSIDE AGENCY</b>								
Outside Agency Subtotal								
<b>WATER</b>								
06-007	17	enrg						
07-006	20	enrg	22770	50,000	430,000			480,000
07-005	19	enrg	22760	10,000	70,000			80,000
05-009	12	enrg	17400	240,000				240,000
				90,000	2,150,000			2,160,000
				350,000	690,000			780,000
					3,340,000			3,730,000
<b>Water Subtotal</b>								
<b>SEWER</b>								
				25,000	307,000		95,000	95,000
				30,000	400,000			332,000
				55,000	707,000		95,000	430,000
								867,000
<b>Sewer Subtotal</b>								
<b>SAN JUAN CREEK PROPERTY DEVELOPMENT</b>								
08-019	71	enrg	11130	60,000	350,000	200,000		600,000
09-004		enrg	17200	50,000	450,000	700,000		1,200,000
10-023		enrg	17880		50,000	600,000		650,000
10-024		enrg	17800	50,000	750,000	800,000		1,600,000
				150,000	1,600,000	2,300,000		4,050,000
<b>San Juan Creek Property Development Subtotal</b>								

2011-2012 DISTRICT CAPITAL PROJECTS

Account Number	PROJECT DESCRIPTION	Proposed BUDGET	2011-2012				2013-2014				2015-2016				Budgeted 5 Year Project Total
			2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022		
	<b>RECYCLED</b>														
	Monarch Beach & Stonehill Dr Recycled Main Upgrade			300,000	1,374,000										1,674,000
	Tier 2 Conversion Study PBS&J 7-10, RVV-6				120,000										120,000
	Recycled Water Retrofit Conversion Tier 1			50,000	450,000										1,500,000
	Recycled Reservoir			400,000	3,000,000										3,800,000
	Recycled Subtotal			750,000	2,344,000										7,094,000
	<b>GROUNDWATER RECOVERY FACILITY</b>														
	GRF Expansion Well No. 4				50,000										300,000
	GRF Well No. 4 Wellhead Facilities and Pipeline			50,000	900,000										1,150,000
	Groundwater Recovery Facility Subtotal			50,000	950,000										1,450,000
	<b>CITY OF DANA POINT PROJECTS</b>														
	City of Dana Point Projects Subtotal														
	City of Dana Point Projects Subtotal														
	<b>OTHER PROJECTS</b>														
05-104	75	IT	Enterprise Content Management System/Document Storage	13520	50,000										50,000
			Other Projects Subtotal		50,000										50,000
	<b>TOTAL PRIORITY THREE PROJECTS</b>														
				50,000	1,395,000	8,941,000	6,845,000								17,231,000

2011-2012 DISTRICT CAPITAL PROJECTS

Budgeted  
5 Year  
Project  
Total

2015-2016

2014-2015

2013-2014

2012-2013

2011-2012

Proposed  
BUDGET

Account  
Number

PROJECT DESCRIPTION

PRIORITY FOUR

Account Number	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
	OUTSIDE AGENCY						
	Outside Agency Subtotal						

Account Number	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
	WATER						
05-016	Sea Island Drive 820 Zone Meter			162,000			162,000
05-025	Holly Drive Pressure Conversion				392,000		392,000
	Lantern Area Watermain Replacement			800,000	1,238,000		2,038,000
07-035	Dana Point Harbor Revitalization	31,000		10,000	2,500,000		2,641,000
	Water Subtotal			972,000	4,130,000		5,102,000

Account Number	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
	SEWER						
	Del Obispo Village Relief			10,000	10,000	90,000	110,000
	Monarch Bay Dr Sewer Improvements					160,000	160,000
	Camino Capistrano Sewer Upgrade					90,000	90,000
	Sewer Subtotal			10,000	10,000	340,000	360,000

Account Number	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
	SAN JUAN CREEK PROPERTY DEVELOPMENT						
	San Juan Creek Property Development Subtotal						

Account Number	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
	RECYCLED						
	Additional Pump at RPS1			150,000			150,000
	Golden Lantern South Pipeline				550,000		550,000
	Golden Lantern North Pipeline			800,000			800,000
	Recycled Water Retrofit Conversion - Tier 2				1,200,000		1,200,000
	PCH North Pipeline				350,000		350,000
	Recycled Subtotal			750,000	2,100,000		2,850,000

Account Number	PROJECT DESCRIPTION	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Budgeted 5 Year Project Total
	GROUNDWATER RECOVERY FACILITY						
	Groundwater Recovery Facility Subtotal						



2011-2012 DISTRICT CAPITAL PROJECTS

PROJECT DESCRIPTION	Account Number	Proposed BUDGET	Budgeted 5 Year Project Total				
			2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
<b>CITY OF DANA POINT PROJECTS</b>							
City of Dana Point Projects Subtotal			-	-	-	-	-
<b>OTHER PROJECTS</b>							
Other Projects Subtotal			-	-	200,000	200,000	200,000
<b>TOTAL PRIORITY FOUR PROJECTS</b>			-	-	1,732,000	6,440,000	340,000
<b>GRAND TOTAL OF ALL PRIORITY OF CAPITAL PROJECTS</b>			15,372,707	23,280,852	36,716,578	30,884,260	13,454,553
							119,718,960



11-21-11 11:34 RCVD

*THE LEADING EDGE OF COASTAL ACTIVISM*

November 18, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Surfers' Environmental Alliance (SEA) has recently become aware of the Harbor Marina Improvement project. Surfers' Environmental Alliance would like to review the EIR for the project but have not had the opportunity to do so. We are also asking for a ninety day extension for review and additional comment period.

P-39-1

We have been informed by many of our supporters in the Orange County area about the concerns with this development and its impact on public access and public safety. In question is the area known as Baby Beach which is used by thousands of residents and tourists and is one of the only protected beach areas in Southern California.

P-39-2

**As a preliminary matter, Surfers' Environmental Alliance (SEA) is committed to the preservation and protection of the environmental and cultural elements that are inherent to the sport of surfing. Our goals are achieved through grassroots activism, community involvement, education and humanitarian efforts. We engage in projects that strive to conserve the quality of our marine environment, preserve or enhance surf breaks, protect beach access rights, and safeguard the coastal surf zone from unnecessary development. [www.seasurfer.org](http://www.seasurfer.org)**

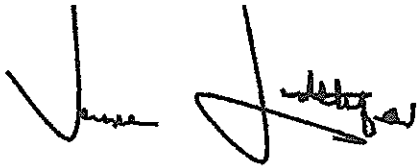
P-39-3

We are based in California on the west coast and in New Jersey on the east coast, and we operate nationally and also overseas when appropriate. Any coastal project that damages beach access, ocean or surf access, or surfing waves is strongly opposed by all members of SEA.

We observe that the coastal community has not had sufficient opportunity to review the project EIS, and this fact is very disturbing given the numbers of people who will be affected by the proposed project. Therefore, because of the importance of this project to the legal coastal access rights of the many thousands of surfers and beach goers making public use of "Baby Beach" we ask for a ninety day extension for review and additional comment period.

P-39-4

For the sea and the surf,



James Littlefield, West Coast Environmental Projects Director  
Surfers' Environmental Alliance (SEA)

[www.seasurfer.org](http://www.seasurfer.org)

November 18,2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20th, 2011. I am writing to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach.

P-40-1

I am a resident of San Clemente and have been coming to Baby Beach for 15 years paddling Outrigger Canoes and Standup Paddle boards, often 5-6 days a week throughout the year. I have also worked with a number of Volunteer Groups to gather trash and debris in and around the Harbor to preserve and protect this area.

I have a number of concerns with the proposed plan...especially impeding upon Public access to launch human powered crafts at Baby Beach which reduces Public Access to the water....also increasing the number of motorized vessels in the Educational Basin near Baby Beach creating an unsafe environment.

P-40-2

I hope that Dana Point Harbor takes into considerations these issues, recognizes the importance of Safe Public access to analyze other options that will not have such a negative impact on the Harbor's resources. I will follow this process closely and continue to work with the community to expand awareness of this project.

P-40-3

Finally, I will be one of many who will work to preserve Baby Beach, the Educational facilities and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor.

Sincerely,

Thomas M. Shahinian  
PO Box 3044  
San Clemente, CA 92674  
949-350-3913

11/18/2011

88 Ridge Rd.  
Rumson, NJ 07760

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

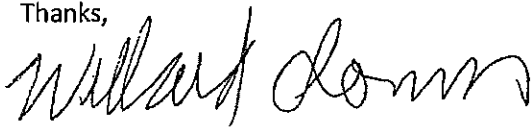
Dear Mr. Gross:

For many years, I have visited Dana Point as a tourist. It is one of my favorite spots on the California Coast.

I was disappointed to hear that the Dana Point Harbor commission is considering expanding the harbor further at the expense of the small beach adjacent. Dana Point has always been famous for its beaches (back to the days of Henry Dana). I hope we won't make an expansion in this case. Please keep the beauty and convenience of the beach for us as tourists.

P-41-1

Thanks,



Willard Somers

Cc: Mr. Andrew Mencinsky  
Surfers Environmental Alliance

11-21-11 11:35 AM RCVD

November 18, 2011

Brad Gross  
OC Dana Pt Harbor  
24650 Dana Point Harbor Drive  
Dana Point CA 92629

RE: Public Access at Baby Beach

Dear Mr. Gross:

It is with great urgency that I write to you to reverse your decision to privatize the docks in question that are evidently used by a wide variety of activities, much more so than the private docks. The large vessels at these private docks never seem to leave their slips. The local community needs and deserves this area to remain as it has been for so many years. As you are most likely aware, Baby Beach is world re-known for its beautiful location, ease of access, and safe harbor!

Today, myself, my family, and visitors from all over use Baby Beach for kayaking, swimming, and of course, paddleboarding. Some areas of the harbor needs to be updated; BUT, to cater only to large vessels, and to impact the area in question is just wrong.

P-42-1

I have signed the Save Baby Beach petition, as have other family members, to express my opposition to the Harbor's proposed development around Baby Beach as express in the EIR. Baby Beach is a little jewel that needs to be preserved as a safe, family friendly spot for beach access, in its entirety.

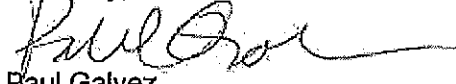
You know all of the reasons why you need to reverse your decision: among them, danger to swimmers, maintaining public access, etc. I implore you to do the right thing; reverse your decision to privatize the docks. You will save the docks for the community for education, protect swimmers, protect the biodiversity of the area, protect the health of swimmers by keeping pump out stations out of this fragile area.

P-42-2

The EIR claims are inconsistently and inadequately written as have been presented to the public. Please do the right thing.

P-42-3

Sincerely,



Paul Galvez  
31 Montgomery  
Mission Viejo CA 92692

11-21-11 11:58 AM

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

November 18, 2011

Dear Mr. Gross,

Thank you for the opportunity to comment on the Draft Subsequent Environmental Impact Report (DSEIR) of The Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>. After carefully reviewing the DSEIR it has become apparent to me that the proposed changes for the West Marine area, specifically the planned modification of the OC Sailing and Event Center, is not appropriate due to the negative impact it would have on the public use of the Baby Beach. The proposed changes, including new dock construction on the south and west sides of the OC Sailing and Event Center, are inconsistent with the purpose of the Marina Improvement Project as stated on page 3-7 to "maintain the Harbor's current character and family atmosphere". Building new docks at these locations would reduce the amount of space dedicated to public swimming, launching, and the use of non-motorized paddle boats. It would create hazardous conditions for the public by adding more boats in an already highly used area. Finally, this proposed dock construction would have a negative impact on the students of the education programs at the center.

P-43-1

The Baby Beach is a popular destination for families and provides unique recreational opportunities for low and moderate income persons. By proposing additional docks in the Baby Beach area the DSEIR is in direct violation of the California Coastal Act. Baby Beach has been documented by the Coastal Commission as a sensitive coastal resource which must be protected. According to Section 30116 of the Coastal Act, sensitive coastal resource areas are highly scenic areas that possess significant recreational value. New docks in this area will reduce the public's use of the area as well as altering the beach's scenic view. Instead of looking at the lovely open swimming area, the public will be looking at just more docks.

P-43-2

Because no other area in the harbor offers the public the ability to launch and operate paddle boats, the construction of docks in this public area is also in violation of Section 30220, which states: "Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses". In addition, the proposed changes would greatly reduce public parking. Using public transportation to this beach would not be possible for individuals bringing kayaks, paddleboards, outriggers, and the like.

P-43-3

P-43-4

The proposed changes for the West Marina would have a negative impact on the Sea Scouts program, which is an educational program open to children and youth from ages 13 thru 18. My son has been involved with the Sea Scouts program for over six years and has held multiple leadership positions including the most senior youth position. The life skills and leadership experience he gained during his time in this program is invaluable. The proposed dock construction on the south side of the center would create unsafe conditions for these young sailing students by forcing them to launch directly into a busy channel. The DSEIR states that the new docks will only accommodate boats up to 32 feet long. The Sea Scout Program operates with four ships that are 35, 36, 37 and 39 feet in length. Therefore, the proposed dock configuration would delete space dedicated for public educational purpose and is inconsistent with the Coastal Act as well as the wishes of the original planners of the Dana Point Harbor.

P-43-5

For these reasons, I believe that the DSEIR is flawed and would have a negative impact on the West Marina area. Any new dock construction must be relocated to the mouth of the Harbor, or the east side where it will not encroach upon these public programs and the space dedicated to the public.

P-43-6

Thank you for your attention.

Sincerely,



Marcie Frolov  
28501 Via Primavera  
San Juan Capistrano



November 18, 2011

Brad Gross  
OC Dana Pt Harbor  
24650 Dana Point Harbor Drive  
Dana Point CA 92629

RE: Public Access at Baby Beach

Dear Mr. Gross:

It is with great urgency that I write to you to reverse your decision to privatize the docks in question that are evidently used by a wide variety of activities, much more so than the private docks. The large vessels at these private docks never seem to leave their slips. The local community needs and deserves this area to remain as it has been for so many years. As you are most likely aware, Baby Beach is world re-known for its beautiful location, ease of access, and safe harbor!

I remember when the Youth Facility was built in the mid 80's, having first used it as a visiting Sea Scout from Newport. We, even as teenagers, commented on what a cool location and facility it was. Today, myself, my family, and visitors from all over use Baby Beach for kayaking, swimming, and of course, paddleboarding.

P-44-1

Yes, some areas of the harbor needs to be updated; BUT, to cater only to large vessels, and to impact the area in question is just wrong.

I have signed the Save Baby Beach petition, as have other family members, to express my opposition to the Harbor's proposed development around Baby Beach as express in the EIR. Baby Beach is a little jewel that needs to be preserved as a safe, family friendly spot for beach access, in its entirety.

P-44-2

You know all of the reasons why you need to reverse your decision: among them, danger to swimmers, maintaining public access, etc. I implore you to do the right thing; reverse your decision to privatize the docks. You will save the docks for the community for education, protect swimmers, protect the biodiversity of the area, protect the health of swimmers by keeping pump out stations out of this fragile area.

P-44-3


Mr. Gross, I ask you: have you recently taken the time to kayak or paddleboard over on the lee of the jetty? If you have, you would notice the abundance of garibaldi and starfish that have returned to the harbor, that I haven't seen in years. The water is clearer, to me anyway, than I have seen in a long time.

P-44-4

The EIR claims are inconsistently and inadequately written as have been presented to the public. Please do the right thing.

P-44-5

Sincerely,

  
Yvonne Heusler Galvez  
31 Montgomery  
Mission Viejo CA 92692

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Kristin Thorpe Thomas  
28852 Alta Laguna Blvd.  
Laguna Beach, CA 92651  
949-735-7537

November 18, 2011

RE: SEIR for the DP Harbor Marina Improvement Project

I'd like to offer comments specific to the plans to expand the dock in the corner basin of the harbor. Much of the plan is well thought out and thoroughly researched, but there are numerous problems with the small portion of the plan that seeks to expand the number of docks/slips into the educational basin we call Baby Beach.

P-45-1

Hopefully you're getting feedback on the very valid concerns of safety, impact to environment, feasibility, and loss of useable space, but I'd like address what I believe the developers of the plan may have overlooked: The bottom line economics.

I have never lived in Dana Point.

I have never owned a sail or fishing boat.

But for over 30 years, I have been spent significant amounts of time in the Baby Beach Area of Dana Point Harbor. More importantly, I have spent thousands of dollars at Dana Point businesses as a direct result of my time spent there. The harbor's recreational and educational uses are what make it special. From my days as Camp Counselor at Three Caves Day Camp in 70's, Windsurfing in the 80's, taking my own three children to activities such as sailing camps, the Pilgrim, and the Marine Institute in the 90's and most recently Stand Up Paddleboarding, I am a regular. The Meals, coffees, refuels, car washes and retail purchases small and large (Surfboards, Stand Up Paddling equipment, and 100% of windsurfing equipment) I have made in the harbor and neighboring areas of Dana Point are almost entirely in conjunction with visits to Baby Beach. And I am not alone. I can't imagine that any portion of the Harbor brings in a bigger crowd ready to use, enjoy and do business in the area. Any reduction in this access and area or downgrading of safety, access or environmental habitats, would be a bad business decision.

P-45-2

If anything, the Improvement Project should be looking at ways to EXPAND this highly used space; The myriad of activities that occur at and around what we know as Baby Beach keep it in high demand.

P-45-3

The importance of Stand Up Paddling to Dana Point Harbor should not be overlooked. either. Touted as the fastest growing water sport – perhaps the fastest growing recreational sport of any kind – the potential for business through this sport is phenomenal.

↑  
P-45-3

Please do not expand docks into the Baby Beach area. If not for more altruistic reasons of maintaining the vast educational and recreational opportunities, or to avoid increased hazards, safety and environmental risks, then simply to maintain or increase the volume of business the harbor and the city of Dana Point gains from this corner of the harbor.

P-45-4

Although I write as an individual, I am a member of Stand Up Paddle Alliance which seeks to ‘Protect What We Love’; We love Baby Beach.

Thank you for your careful consideration of these comments and the many others you have received. I urge you to reformulate this small portion of the current plan to avoid negatively impacting the safety, environment, access, and economics of the harbor.

P-45-5

Sincerely and urgently yours,



Kristin Thomas, MEd  
949-735-7537

November 18, 2011

Brad Gross, Director  
 OC Dana Point Harbor  
 24650 Dana Point Harbor Drive  
 Dana Point, CA 92629

Dear Brad Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to you to express my concerns over the proposed plan to build and lay out docks in the West Basin in front of Baby Beach.

I am a current resident of Dana Point for the last 13 years and have been using Baby Beach and the harbor ever since I moved here 13 years ago. I'm a professional athlete and waterman and train with a large group of athletes out of Baby beach 5-6 days a week; paddling my outrigger, prone paddle board and my Stand up paddle board. I was also a US Ocean Safety lifeguard for 5 years patrolling Baby beach, Strands and Salt Creek.

I have worked with several special needs kids programs like "Miracle for Kids" and "The Best Day"; that depend on Baby beach because of how safe, accessible and clean it is for them to enjoy the water.

I come down to Baby beach with my friends and family and their kids several times a week in the Summer because the parking is user friendly and its a safe place for the kids to play and enjoy the beach. My family and friends also enjoy taking sailing classes at the OC Sailing & Events Center.

The Baby beach area is a one of a kind, special place for friends, family, fisherman, athletes and tourists to enjoy a clean safe beach in our community.

Many of us who use Baby beach daily; have given back by doing beach and harbor clean ups several times a year to help keep this place clean and safe for all to enjoy.

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach; making it very unsafe for beach users and paddlers to launch and land safely.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%. The Baby beach area (as small as it is), is the only clean and safe sand beach inside the harbor.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water. This is a huge deal for us because in the Summer the beach is crowded and we need that access and space to share the beach with everyone.
- The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose. The boaters, paddlers and the public rely on the access of the OCSEC docks. in case of an emergency or for elderly and handicap and children to use.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEC and DP Yacht Club. this area is very narrow as is and with the new dock configuration so far out in the channel, it will create a bottleneck making it super unsafe for boaters and paddlers to navigate through during the normal afternoon high winds.
- The project proposes new docks to be built in shallow water that will cause the boats to bottom out at low tide. this would mean you would have to dredge the beach even more creating erosion and disrupting the fragile eco system as well as unhealthy water conditions for beach users.
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEC. This will create unsafe conditions for new students having to navigate through

P-46-1

P-46-2

- such a small area especially when its windy.
- The proposed project will increase motor vehicle traffic and limit parking near Baby Beach and will overflow into other parking lots that are meant for other business's.
- The project proposes that motor boats will be docked in front of Baby Beach which will increase pollution near the bathers. The use of 2 & 4 stroke engines as well as for the big boats will bring more oil and gasoline into the beach area which is an environmental hazard as well as unsafe for any of us, using the beach.
- The project proposes that a boat pump out station will be located close to Baby Beach which potentially increases pollution in the area bringing more environmental hazardous damage to the marine eco system and water quality.
- The new proposed dock in front of Baby Beach will be used for motor boats which creates safety concerns for paddlers, sailors and boaters that get pushed by the wind into that unsafe, hazardous area while launching from Baby beach.

↑ P-46-2

P-46-3

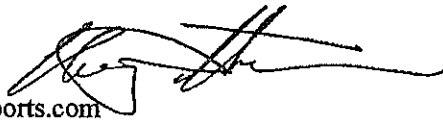
P-46-4

P-46-5

I really hope that Dana Point Harbor takes all of these issues into consideration, recognizing the importance of safety for all beach users, the accessibility and protecting the fragile marine eco system; analyzing other options that will not have such a negative impact on the Harbor's resources. I will follow this process closely and continue to work diligently with the community and beach users to expand awareness of this project. Baby beach is very special to the community and all of us who use it every day and we will continue to preserve it any way we can to ensure that it stays that way.

P-46-6

Thank you for your time and consideration,  
Sincerely,  
Chuck Patterson



chuckpattersonsports.com  
24431 Lantern Hill Dr. #E  
Dana point, Ca 92629



P-47

P.O. Box 958  
Wheatland, CA 95692  
Telephone 530-633-4858  
Fax 530-633-0365  
[www.CaliforniaShipstoReefs.org](http://www.CaliforniaShipstoReefs.org)

November 19, 2011

Mr. Brad Gross, Director  
Orange County Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

RE: Dana Point Harbor Marina Improvement Project  
Draft SEIR Dated September 2011  
Section 3.7 Project Phasing

Dear Mr. Gross,

California Ships to Reefs (CSTR) has been communicating with the Dana Point Harbor for several years with regard to the pier pilings (approximately 1,200) removal and disposal as part of the Dana Point Harbor Marina Improvement Project. It is with concern that the Draft SEIR Dated September 2011 identifies the method of disposal of the pier pilings as "lifted from the water using a crane and then trucked off site". This disposal method is cumbersome, costly to the Harbor and environmentally flawed. CSTR would like to recommend three alternate disposal options that would both benefit the ocean environment of Orange County as well as beneficially impact the Dana Point Harbor Marina Improvement Project budget.

P-47-1

1. The Dana Point Harbor could remove the pier pilings and place them in the ocean as artificial reefs under the direction of CSTR. Science shows that this type of artificial reef is good for kelp forest development and includes nooks and crannies where fish could hide and breed. A site outside the harbor on Dana Point's Legislative Granted Lands (Exhibit A) has been identified as a potential location for this project. This site has a depth of approximately 30-35 feet which is ideal for kelp forest development. In addition, there are other municipalities near Dana Point that have expressed interest in having similar sites developed. This option would have Dana Point retain ownership of the pier pilings and be the project(s) leader and developer.

P-47-2

2. The Dana Point Harbor could remove the pier pilings and place them in the ocean as artificial reefs under the direction of CSTR. CSTR can identify locations on the site mentioned in #1 above as well as on CSTR's proposed sink site 1-1/2 miles southwest of the harbor (Exhibit B), or on any number of sites near other interested municipalities. One such site has been identified

P-47-3

(Exhibit C) and is currently being surveyed to determine suitability for both a ship-based reef, as well as reefs of other materials. On CSTR’s site near Dana Point, we can also place pier pilings surrounding the proposed *USS Kawishitiwi* reef, which will be the first ship-based artificial reef to be created at this location. This will allow for a more diverse biomass at that site. This option would also have Dana Point retain ownership of the pier pilings and be the project(s) leader and developer.

↑ P-47-3

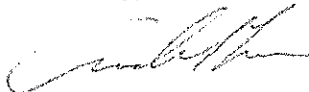
3. The Dana Point Harbor could remove the pier pilings and place them in the ocean as artificial reefs under the direction of CSTR as described in option 1 and 2 but not retain ownership. In this 3<sup>rd</sup> option the Dana Point Harbor would donate the pier pilings to CSTR who would take ownership at some mutually agreed point in the reefing process and be the project(s) leader and developer.

↑ P-47-4

We urge the consideration, recommendation and implementation of one of these alternate disposal options for the pier pilings to be removed during the Dana Point Harbor Marina Improvement Project.

↓ P-47-5

Sincerely,

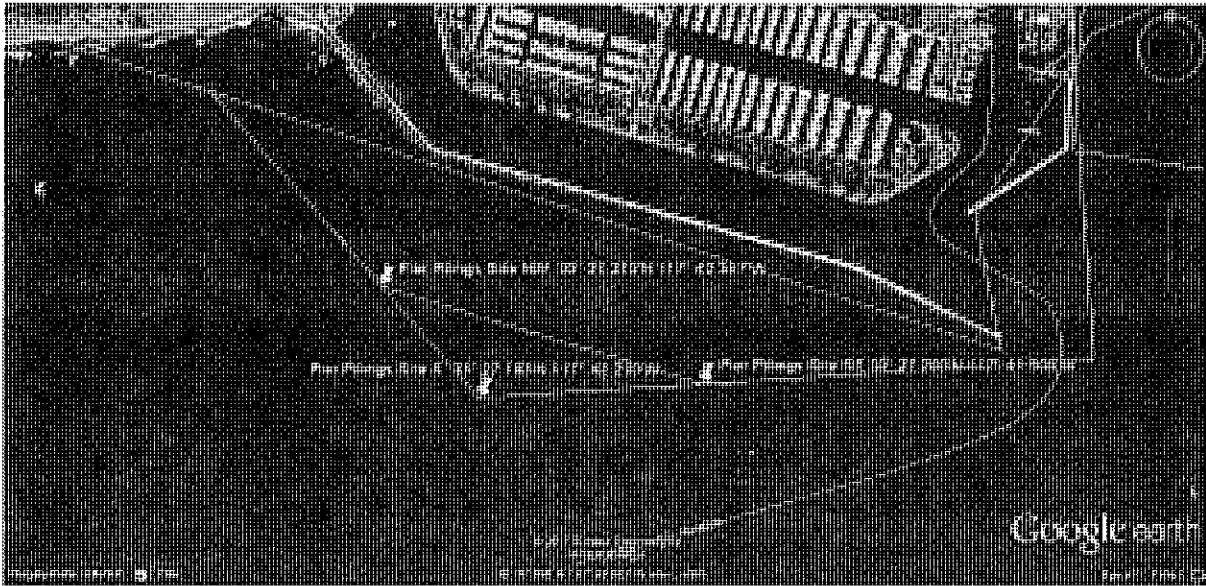


Andrew Lee  
Vice President, Science

Attachments: Exhibit “A”  
Exhibit “B”  
Exhibit “C”

↓ P-47-6

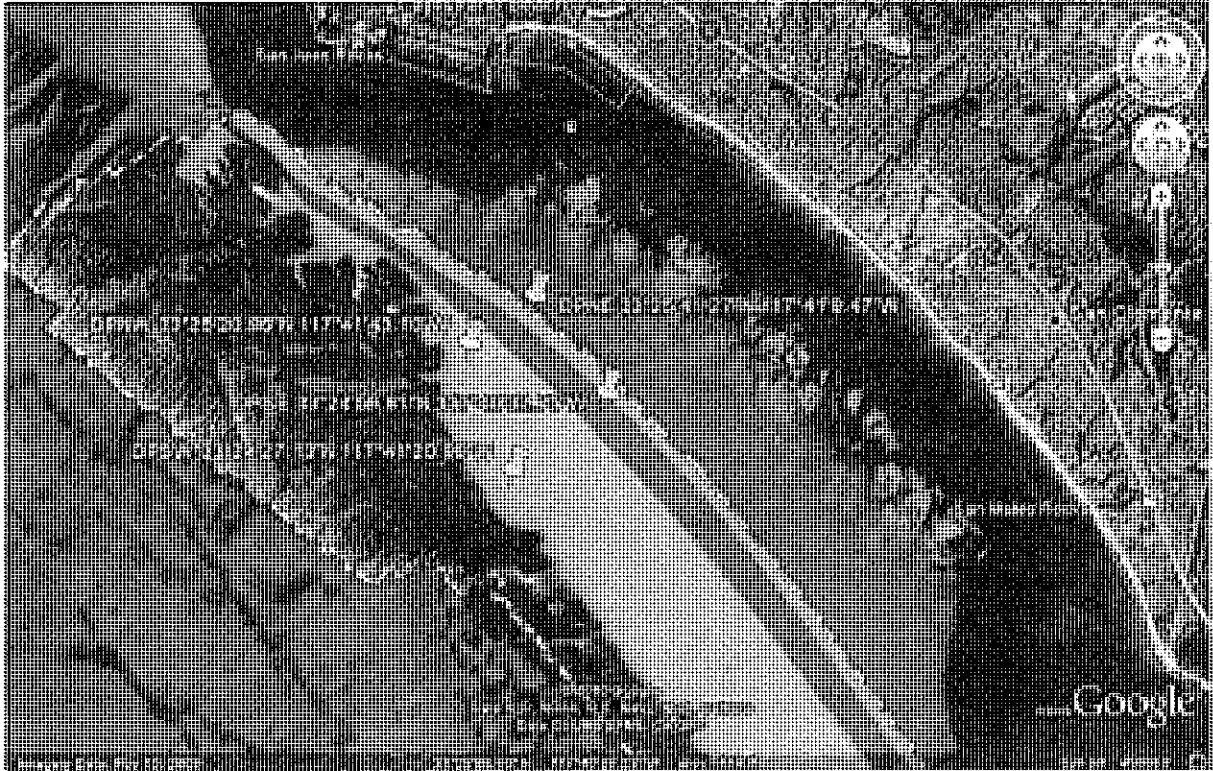
**Dana Point Harbor Marina Improvement Project  
Draft SEIR Dated September 2011  
Section 3.7 Project Phasing  
Exhibit "A"**



P-47-6

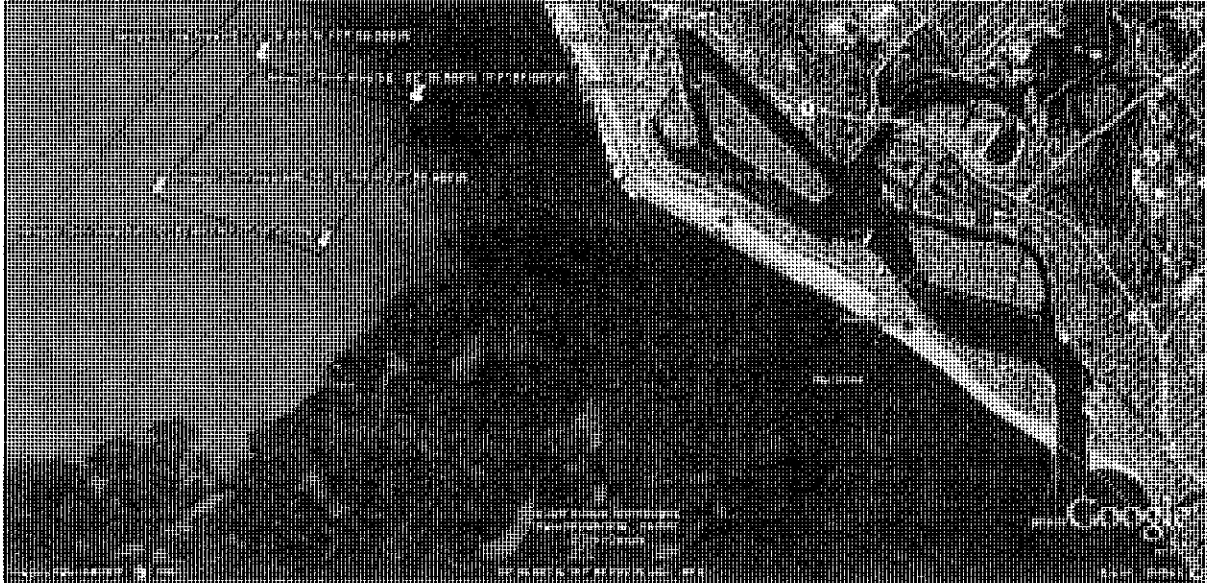


Dana Point Harbor Marina Improvement Project  
Draft SEIR Dated September 2011  
Section 3.7 Project Phasing  
Exhibit "B"



P-47-6

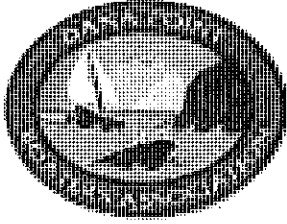
**Dana Point Harbor Marina Improvement Project  
Draft SEIR Dated September 2011  
Section 3.7 Project Phasing  
Exhibit "C"**



P-47-6

# Letter of Transmittal

P-48



Date: November 20, 2011

To: Mr. Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

From: Steve Carpenter, Secretary  
Dana Point Boaters Association  
P.O. Box 461  
Dana Point, CA 92629

Dear Mr. Brad Gross,

Please find enclosed our response to the "Draft Subsequent Environmental Impact Report" (SEIR), for the Dana Point Harbor Marina Improvement Project. A copy of this document was previously email to [MarinaEIR@dphd.ocgov.com](mailto:MarinaEIR@dphd.ocgov.com) and yourself [BGross@ocdph.com](mailto:BGross@ocdph.com) on November 19<sup>th</sup>, 2011. This Letter of Transmittal and enclosed DPBA Draft SEIR Response was hand delivered to OC Dana Point Harbor's Office on Sunday, November 20, 2011.

If you should have any further questions or comments please do not hesitate to contact us at the contact information below.

Sincerely,  
Steve Carpenter, Secretary  
Dana Point Boaters Association  
[SteveCarpenter@DanaPointBoaters.org](mailto:SteveCarpenter@DanaPointBoaters.org)  
DPBA Voice Mail: 949-485-5656  
Direct Cell: 714-715-8784

P-48-1

Dana Point Boaters Association  
P. O. Box 461, Dana Point, CA 92629  
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### Executive Summary

The existing Dana Point Harbor Revitalization Plan was developed some years ago during times of prosperity and readily available financing for most any purpose. The Dana Point Boaters Association (DPBA) understands that today the costs for major commercial construction projects are running well below what they were when the estimates for this project were announced some years ago. However, given the current economic climate it is unlikely a full business case for the current form of this project would be found to be financially viable from an independent and prudent financial perspective.

There are compelling reasons why continuing with a status quo project plan is not appropriate from a financial perspective. The current lending environment features a reduced number of sources for debt financing, a reduced amount of funds available and a reduced ability / willingness to lend. Indeed the amount of financing available today from the sources specified within the plan reportedly falls far short of the current cost estimate. Given current economic conditions as well as the actual project design approved by the California Coastal Commission, the income component of an updated, appropriately conservative financial business case would have to be significantly reduced from the original estimates prepared during the previous prosperous economy.

Given even a smaller capital requirement, and given the reduced financing now actually available, as well as reduced cash flow available to service debt, it is improbable that the entire status quo implementation agenda, inclusive of land-side and on-water redevelopment, can be affordably executed within a timeframe even approaching that originally envisioned.

Most relevant and important from a recreational boating perspective, the status quo implementation agenda calls for completing the entire land side redevelopment project prior to undertaking water side construction. We therefore fear that redevelopment funds will run out and on-water redevelopment objectives will not be achieved.

With these thoughts in mind, DPBA has prepared this proposal for changes in scope, approach and financing, including these key recommendations:

- The commercial core revitalization should proceed but perhaps with some reduction in scope.
- Complete water side reconfiguration should be changed to a systematic replacement of docks over a period of years.
- Boaters should receive various improved amenities before or during the commercial core revitalization.
- Financial reporting should be enhanced to provide separate public visibility of commercial core and water side revitalization funding and expenses.
- Increased transparency should be established regarding the sources and uses of all harbor revenues committed to harbor replacement reserves accounts.
- A revised long-term operations revenue and expense budget should be developed and published to the general public. This revised financial plan should feature realistic income projections, and forecast minimal increases in slip rental rates in keeping with the goal of protecting of affordable boating.

The specifics of the DPBA proposal are contained within the pages which follow.

P-48-2

P-48-3

### Situation Assessment

The existing Dana Point Harbor Revitalization Plan was developed conceptually during a period some years ago when planning constraints and assumptions were much different than they are today. The key project scoping and financing decisions occurred during the years from 2004 to 2006 and these were times of economic prosperity. Then "easy money" was readily available to finance residential and commercial development nationwide and thus enabled many projects with incomplete and untested value-versus-cost assessments. The Dana Point Harbor Revitalization Project, while clearly worthy in concept, was not an exception.<sup>1</sup> Times have since changed to say the least, and the current economic climate is expected to continue into the foreseeable future.

The existing redevelopment plan features broad scope construction on both the land and water sides - a 53% increase in commercial square footage and a complete teardown and recasting of the existing on-water dock facilities. Given current project scope, inclusive of land and water side expenditures, some estimates of the yet to be quantified project costs approach perhaps \$300 million<sup>2</sup>, including two boat barns and a hotel – convention center which we understand is highly unlikely. The current official financing plan available to the general public includes private financing for the majority of land side construction and DBW loans plus larger reserves built from slip fee increases to finance the water side construction. The trouble is, many of associated economic assumptions are no longer valid and other factors introduce new constraints upon detailed planning. DPBA believes:

– Private financing of commercial development is now extremely difficult and expensive. Such financing may not even be available given the currently available business case.

–DBW financing of water side reconstruction is highly unlikely, in whole and perhaps even in material significant part. This is due to well-known State economic conditions and associated budget constraints.

– Currently over 1400 of a total of 2409 of recreational boat slips within the harbor are less than 30', the slip size range defined loosely as "affordable" by the California Coastal Commission and others. As many as 150 slips of these slips have been vacant for the past 2+ years since the onset of the economic downturn. These slip vacancies are expected to continue for the foreseeable future, unless rates are significantly reduced, and foretell a corresponding reduction in future net slip revenue yield.<sup>3</sup>

– Poor economic conditions for the foreseeable future, translated into lost purchasing power for the young and many / most other recreational boaters, argues strongly against the current financing plan assumption that significant slip fee increases can occur. Slip fee increases must, of necessity, be contained or vacancy rates will increase further. The notable exception: a small portion of 2409 slip inventory in the largest slip sizes which will likely continue to be 100 percent occupied. This necessity also means less net revenue to repay construction debt than was originally expected.

<sup>1</sup> The economic viability of the total project has not been publicly established using more accurate cost estimates, currently sources of available financing and updated estimates of funds available for debt service.

<sup>2</sup> Per Chris Street, former OC Treasurer and Tax Collector, summer, 2010.

<sup>3</sup> The Coastal Commission disapproved the original plan which would have significantly decreased the number of these smaller slips, a total proposed reduction of about 1100 slips in favor of smaller number of larger slips with zero vacancy rates.

**DPBA Recommendations**

1. Commercial revitalization is needed and should proceed as rapidly as possible<sup>4</sup>. Core commercial revitalization goals and benefits should be fully protected. However, reductions in commercial scope should be investigated as a real possibility and seriously considered if opportunities are found to exist to reduce construction costs.
2. A revised commercial core reconstruction financing plan, in part funded by the portion of accumulated Tidelands Trust reserves generated from slip revenue, should be considered. These slip revenue based revenues can then be replenished from expanded commercial core revenues on an accelerated schedule beginning immediately following commercial core reconstruction.

*Note that DPBA strongly believes this is viable only given public support and trust (especially amongst recreational boaters) is earned and can be sustained. Other recommendations contained within this proposal are directed to achieving this goal.*

3. The scope of waterside revitalization should be revisited. A key learning from many, many public hearings is that recreational boaters like the harbor the way it is today. Boaters welcome improvements but wish to retain the existing character as much as possible. The Coastal Commission directed that the existing slip size mix can be only slightly modified and the total number slips should not be reduced. Therefore a major goal of complete redesign has also been eliminated. Finally, a complete on-water design rework is also a less attractive for financial reasons.

So instead DPBA believes that it now makes sense to identify and focus on providing as many key recreational boating improvements as possible, given retention of the existing dock configuration. Design and permitting costs will be substantially reduced and some planning related costs, those associated with the Coastal Commission approval process for example, will be entirely eliminated by retaining the existing design. A table containing DPBA suggestions begins on page 6.

4. The current waterside implementation approach should be shifted from accelerated (as fast as possible) reconstruction of all slips to a *systematic replacement of facilities as needed*<sup>5</sup>.

Regarding the impact that systematic replacement will have on water side reconstruction project scheduling, many (most) of the existing dock infrastructures have remaining useful life. From a needs standpoint, it is therefore obviously not essential to replace all docks during a single construction project. Moving to a staggered, systematic waterside facilities replacement will allow cash flow and replenished reserves to finance some of the work, reducing the risk that insufficient funds will be available for the waterside reconstruction when needed. *The net impact will be to reduce the contentious conflict which exists today between competing demands for the same, limited reconstruction reserve funds.*

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<sup>4</sup> Beyond project benefits themselves, there is substantial cost avoidance possible if construction is done during the current depressed economic climate. The project will also provide a badly need boost to the local economy.

<sup>5</sup> An engineering study will likely be necessary to determine the most appropriate dock replacement schedule. Publishing results from a formal study and committing to this plan of replacement actions will also minimize a potential boater concern as to currently needed reserves (derived primarily from slip revenue) being misdirected to commercial reconstruction.

To clarify the DPBA recommendation, a systematic replacement approach features reconstruction of docks individually. It also assumes increased maintenance to existing docks, on a case-by-case basis, where the opportunity exists to affordably extend useful life while at the same time maintaining the full recreational value necessary to justify the harbor's high slip rental rates that already exist today.

5. Significant recreational boating improvements should be introduced during/before commercial core reconstruction wherever practical; to help assure public support for what will otherwise be perceived to be a reduced support for recreational boating versus the commercial core. A table listing specific DPBA improvement suggestions begins on page 6.

The goal here is to introduce as many targeted recreational boating improvements as possible, as soon as possible. *The significance and timing of these improvements should compare favorably with the commercial core reconstruction timetable.*

6. The new plan must avoid forecasting significant increases in slip rates to assure recreational boating support for the recommended changes in the revitalization plan approach and financing. *Otherwise, boaters will strongly oppose the other recommendations within this proposal.*
7. That said, the slip rates for the harbor should be normalized on a revenue neutral basis to assure that slip rates paid by individual boaters throughout the harbor (both east and west basins) are the same and reflect the actual square footage each standard slip size employs<sup>6</sup>. Today small slip renters pay a disproportionately higher rate per square foot, as do east basin slip renters versus west basin slip renters with the same size slip. While it can be argued what impact slip rate normalization will have on the current small boat slip vacancy rate<sup>7</sup>, the net effect will be to demonstrate fairness and support for affordable boating and thereby to incur favor amongst those who may in turn rent slips in sizes where increased slip occupancy is possible and desirable.
8. Given other recommendations within this proposal related to use of reserves for commercial core reconstruction are enacted, it is necessary to expand current Fund 108 financial reporting in order to demonstrate to all harbor stakeholders, especially recreational boaters, that revenues are being fairly and appropriately collected to cover construction and operating costs. It is also necessary to demonstrate that reserve funds are being fairly accumulated and deployed over the long term (with a planning horizon of 15-20 years), even while reserves are being deployed per DPBA recommendation, in the near term to complete commercial reconstruction. This reporting will be new for Fund 108 and most likely would require additional ongoing accounting resources to accomplish on the outgoing basis required. However, the costs for these additional resources will be more than offset by reconstruction related cost savings and avoidance (greatly reduced debt interest payments for example).

P-48-5

<sup>6</sup> The dimensions of slips vary slightly. Yet today there are standard rates based on the approximate linear footage. The same pricing philosophy is recommended to price slips based on approximate square footage.

<sup>7</sup> Lower small boat slip rates may translate into higher slip occupancy rates. Higher small slip occupancy rates would yield increased slip revenue and fund increased reconstruction reserves.

*We emphasize that this additional reporting is essential to the viability of the other recommendations contained within this proposal. Note also that these changes will contribute to the general wellbeing of the harbor through increased transparency that will in turn create new general public support, especially amongst recreational boaters.*

DPBA has specific ideas regarding what changes to make and how they could be accomplished procedurally. We would welcome the opportunity for discussion with appropriate County Finance team members. However, here we would like to focus only upon two outcomes that we view to be essential:

- a. A routinely published demonstration to the general public that the Funds Balance Available (FBA) figure for both recreational boating and non-recreational boating harbor operations is the same (i.e. zero<sup>8</sup>), after contributions to reserves, rather than having one of these two revenue centers with a positive FBA and the other a negative FBA while collectively netting to zero FBA.
- b. A routinely published demonstration to the general public that the sources and uses of reserve funds are being discretely and properly collected, deployed and accounted for between the recreational boating and non-recreational boating aspects of harbor operations<sup>9</sup>.

The first outcome will address arguments heard for years throughout the recreational boating community that merchants are somehow “not paying their fair share”. The second outcome plays a similar role regarding the perception that reserves accumulated from boaters are somehow being deployed elsewhere and as a consequence, slip rents are (unfairly) higher than they would be otherwise.

Stepping back, the overarching goal here is to create transparency such that amounts accumulated and withdrawn can vary significantly year to year as harbor management sees fit (for example based upon short term reconstruction funding needs, first more on the land side and later more on the water side), while the general public possesses the informational means to continue to be confident that over the long run that reserve funds are being fairly accumulated and used.

9. Because the Tidelands Trust is a self-sufficient and entirely separate legal entity with a strong financial record, it may be a win-win strategy for the County General Fund to buy bonds issued by the Trust, thereby to reduce / optimize the draw against reserves. In light of an even more cost effective Revitalization project scope, combined with the funding and implementation approach this document describes, this financing alternative seems attractive from perspective of both the General Fund and Fund 108. From a General Fund perspective, such a loan would be well collateralized, quite safe and pay a reasonable return. From a Fund 108 perspective, the cost of funds could be (should be) less than if borrowing was done on the commercial market.

<sup>8</sup> Technically the amount must be less than \$240,000 or by law the surplus is to be surrendered to the State General Fund.

<sup>9</sup> DPBA believes that a more definitive breakdown in the reserve accounts themselves will aid in achieving this outcome.



**DANA POINT BOATERS ASSOCIATION PROPOSAL TO CALIFORNIA COASTAL COMMISSION  
REVISED DANA POINT HARBOR REVITALIZATION PLAN**

**P-48**

**DPBA Suggestions: Recreational Boater Oriented Amenities Maintenance and Improvements To Be Launched Before / During Commercial Core Reconstruction**

<i>Harbor Water Recreational User Amenity Improvement / Amenity Maintenance</i>	<i>Relative Impact</i>
1. Maintain the harbor in an attractive condition during reconstruction.	High
2. Decrease slip fees to mid-market, rather than the current 15-30% above market average.	High
3. Move guest docks and a new dinghy dock to the east end of the cove (i.e. near Wind & Sea).	High
4. Improve conditions for trailer boaters e.g. widen and lengthen the ramp temporary parking spaces and provide after hour's access to the Vintage Partners storage yard.	High
5. Create concession and actively promote small boat charter opportunities for experienced sailors (use already vacant slips under 30' for chartering boats bigger than at Embarcadero but smaller than by Aventura).	High
6. No longer employ boater dedicated parking, within the Embarcadero or elsewhere within the Harbor, for Catalina Express parking under ANY circumstance.	High
7. NO other uses of boater parking except slip renters. PERIOD! NO EXCEPTIONS!	High
8. Provide a concierge service "we can believe in" for the boater parking area most impacted by new construction. For example, follow the boater to another parking area, perhaps far away, & transport their provisions + all passengers both to and from dock.	High
9. Rebuild (renovate) all boater services buildings during commercial core construction.	High
10. Renovate bathrooms to employ most modern air treatment and humidity control.	High
11. 24/7/365 harbor-wide boater "help desk" service for slip renters (same functionality for all boaters rather than tied to a particular marina operator). a. Telephone VM box "with a press 9 if this is an emergency" (to live transfer to sheriff's office).	High
12. One boater oriented public website for the entire harbor with the service just mentioned, a. Plus public tracking of complaints filed and resolutions, trends by type of complaint, etc. b. Plus links to (at least a list of) every single authorized vendor & organization servicing the harbor (including us) c. Plus lots of other services such as wait list status and means to apply, slips	High

P-48-6



**DANA POINT BOATERS ASSOCIATION PROPOSAL TO CALIFORNIA COASTAL COMMISSION  
REVISED DANA POINT HARBOR REVITALIZATION PLAN P-48**

<i>Harbor Water Recreational User Amenity Improvement / Amenity Maintenance</i>	<i>Relative Impact</i>
<p>available for sub lease (now and in the future),</p> <p>d. Create and actively promote use of an email address to send complains to, with publicly visible logging and automated 1st response.</p> <p>e. Consider “social media” spin: boaters talking to boaters about whatever we want to talk about.</p>	
13. For boaters with slips in the East Basin Cove (minimum, but perhaps for all slip renters) provide a key card with their name and slip assignment embossed on the front. On peak volume days, post an attendant at the East Basin Cove gates to enforce a new rule which has no exceptions: no matching gate pass, no entrance to lot.	High
14. Have trained and supervised attendants at the gates during all weekend daylight hours during the summer months to assure that only slip and dry storage renters gain access to boater dedicated parking.	High
15. Provide some sort of temporary (summer?) tie up for small boaters at “Danalina” sand bar area near the west end of the outer breakwater. Maybe an anchored dock for Med tying?	Medium
16. Establish a boater volunteer list. Use to volunteer list to lower DPH operating costs in various ways to be determined. (For example, staffing the boater parking gates during summer month weekends and special events.) Provide recognition and/or special consideration, maybe even a small reduction in rent.	Medium
17. Install gates and provide key cards for West Basin slip renters.	Medium
18. Use the same cards as we use at gates to electronically unlock dock gates.	Medium
19. For the boater parking areas most impacted by new construction: assign a parking space to each slip renter.	Medium
20. Add a boater services building at the Embarcadero.	Medium
21. Add a boater services building at the west end of in the West Basin Island parking lot.	Medium
22. Add (separately rentable) boater storage boxes (size TBD, the Public Storage concept) in/near the rebuilt/renovated boater services buildings.	Medium
23. Add no charge (for slip renters) dinghy / yacht tender launch and retrieval areas in all 4 areas of the marinas (east and west, cove and island).	Medium
24. Provide key card enabled access to free ice for slip and dry storage renters.	Low



P-48-6

P-49

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949-492-6760 H 949-842-1428 M

November 19, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross:

This letter is to voice my concerns about the Draft Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20th of this year. My comments only concern changes proposed to the OC Sailing & Events Center which has historically been known as the Dana Point Youth & Group Facility. I believe the changes proposed are extremely ill conceived and the facility should be left intact.

I have been a volunteer with the Mariner Sea Scouts for about a decade. My son is currently in this outstanding program. I have also received a certificate from Saddleback College in Marine Science Technology in which the vessels currently based at the OC S&E Facility are instrumental to the program. The proposed changes either plan to eliminate or will cause by negligence these programs to cease being able to effectively operate from the facility.

P-49-1

This facility functions fantastically serving a broad range of Orange County citizens. Many thousands of orange county citizens have learned to sail at this facility through programs provided by the Mariner Sea Scouts, Saddleback College and Westwind Sailing. The proposed changes would eliminate completely certain aspects of and threaten the safe use of many other aspects of these programs. Though not directly related to these programs, the use of Baby Beach for launching stand-up paddle boards and kayaks would become problematic at best. If you observe the numbers of people using this facility and baby beach ... they are very large and this small bit of the harbor getting full public access and use is a precious commodity.

P-49-2

The plans propose to take the protected dock currently the base for many vessels - but of particular concern to me... the four larger 35 - 38 foot Sea Scout vessels primarily used by the Mariner Sea Scouts and Saddleback College and convert these into private dock space for large yachts. Rather disingeniously the dock space on the baby beach side is modified into an odd shape which will be of little use to anyone and then in the only key figure to the persons writing the EIR, claims that the dock space is just about the same as before on both sides. No fair minded person could state there was any equivalency in dock space or utility of the space. Clearly the vessels using the space on the dock being converted into private slips have no place

P-49-3

P-49

and it would seem the supposedly expanded docks on the baby beach side would be of less utility than the existing configuration.

P-49-3

I am vexed that the county has made no attempt to speak to the persons who are currently running the very successful programs from the facility and seem to want to make the facility into a very lightly used facility (at least by the public). The planning does not seem to incorporate any concern for the very successful public uses in which tens of thousands of persons have been afforded the opportunity to learn to safely use watercraft and enjoy the harbor. Clearly the interests of providing additional spaces for large private yachts seems to be the only desired goal. The goals of the county officials overseeing these changes does not seem to be concerned with the vast numbers of persons (versus those few using private slips) who will be negatively impacted by the programs becoming impossible to implement through the facility modifications.

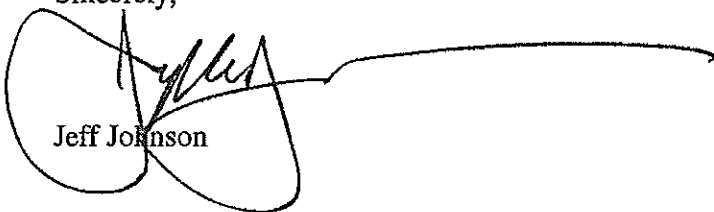
P-49-4

I fully concur with the detailed assessment and questions posed by Captain Jim Wehan for the South Coast Sailing Team (chartering organization for Ship 936 - Mariner Sea Scouts) in his letter to you dated October 29, 2011. I think any changes to the facility should collaborate with persons knowledgeable about the actual use of the facility. So far as the OC Sailing & Events center, the proposed changes do not make any improvements but only detract strongly from a fine facility essentially eliminating about 40% of the space currently in use by the facility by taking away the most useful dock at the facility and dedicating it to private slips. The practical use of the dock modifications on the basin (baby beach side) are patently absurd. Just drawing lines and making some figure of the linear dock the same by some strange measure which ignores slip dockage provides no equality to what is being taken away from the public part of the facility. The dock space being privatized is by far the most useful space at the facility. For many reasons the dock space on the basin side is not safely vessel usable due to shoal waters, currents and human powered craft use. The expansions to this space would actually provide less truly usable vessel space than what already exists. The vastly greater space and utility of the docks on the side proposed to be turned into private space would be lost along with the publicly accessible programs run from these docks. I think the county should have its upmost concerns for the greatest public good and use of the facility and clearly this is very low on the design objectives being accomplished by the changes proposed to the OC Sailing & Events Center. I believe the facility as currently configured very well serves the people of Orange county and changes to the facility first seen by us in the EIR should be eliminated from the plan.

P-49-5

P-49-6

Sincerely,

  
Jeff Johnson

850 Avenida Salvador  
San Clemente, CA 92672

November 19, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Subject: Comment on Dana Point Harbor Marina Improvement Project

Dear Mr. Gross:

I have the following concerns regarding the modifications to the OC Sailing and Events center. I believe the proposed modifications are not in the public interest and violate California Coastal Commission rules.

P-50-1

1) Social stewardship: The current plan would eliminate effective public and Sea Scout Base use of the facilities. This is unacceptable. There are no other public area within Dana Point that would be adequate substitute for this elimination.

2) Environmental access: The current plan would eliminate the ability for the public and the Sea Scout Base to use the facilities to their fullest as the law requires. All people should be able to use the environment to enjoy the ocean and the beaches. This plan would eliminate many uses and severely hamper many other current uses.

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3) Visual pollution: The changes would increase visual pollution to the area and would greatly impact the visual line from the coast and from the ocean for the public. This is unacceptable and against the California Coastal Commission policies.

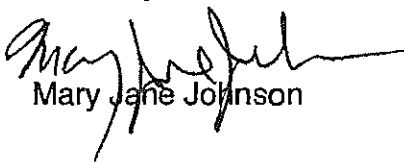
P-50-3

4) Emission (air pollution) impact: The additional large yachts will increase the air pollution emissions to the environment

P-50-4

Thank you for your immediate attention to this matter and I look forward to your response to my concerns.

Sincerely,

  
Mary Jane Johnson

November 19th 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach as this impacts the Mariners Sea Scout program which I have been personally involved with as an Adult Advisor for many years.

I am a resident of San Clemente and have been coming to Baby Beach for over 20 years. My friends and I brought our children to Baby Beach when they were young because we liked the safety of this particular beach. The gradually sloping beach and very small waves made Baby Beach the perfect place to take my daughter when she was a baby (she is now 28 years old). The proximity of the parking to the beach was a big factor also because of the obvious convenience to me and my family. As Jessica grew older, she learned to sail at the OC Sailing & Events Center with the Sea Scout Mariner program. I always appreciated the family friendly atmosphere at Baby Beach and the Youth Educational Facility where Jessica could enjoy the beach when she was young and learn to sail when she became a teenager. Now that she is a young mother herself, she and my granddaughter hopefully will continue the tradition of passing along the wonderful experience that this area provides our community.

P-51-1

As a user of Baby Beach for over 20 years I have significant concerns about the proposed changes to a facility that has served so many residents for so very many years. The following issues are of particular concern to me and my family:

- 1) The increased motorized vessel traffic in the baby beach area is a potential danger / safety hazard to swimmers as well as relatively inexperienced new sailors coming and going from the youth facility. These waters are used to train youth to sail and should not be congested with new traffic coming and going from the new proposed docks located just West of the youth facility.
- 2) The new proposed dock privatizes the docks at OCSEC which have always been identified as being used for public educational purposes.
- 3) Public access to the water at Baby Beach, used to launch private small paddle boards and other small hand carried water craft, will be reduced in size by at least 20%. This is a very heavily used part of the harbor due to the proximity of parking to the water which is valuable to roof top carried water craft.
- 4) The new proposed docks located on the West side of the youth facility will not provide sufficient depth of water at low tide to keep our Mariner larger vessels from bottoming out at low tide. This will make ingress or egress impossible and our fleet useless.
- 5) The additional privatized docks on the East side of the youth facility will cause additional strain on the already crowded automobile parking lot.
- 6) The new proposed dock expansion would put a boat waste pump-out facility near Baby Beach which potentially could pollute the whole beach and present a health risk for the public. It would be very bad politics to poison Baby Beach!
- 7) Even though the added revenue to Dana Point Harbor from renting the new boat slips to private individuals would be welcomed in these economically trying times, the losses to the community facility would be significant as described above. These losses would be tragic and irreversible in my opinion, and all to make a buck?

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I hope that Dana Point Harbor takes into considerations the issues mentioned previously and, recognizes the importance of safety to our communities swimmers, safety for our youth learning to sail, and analyzes other options that will not have such a negative impact on the Harbor's community resources. I will follow this process closely and continue to work with the community to expand awareness of this project. Finally, I will be one of many who will work to preserve Baby Beach, the Educational facilities and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor

P-51-6

In conclusion, please reconsider the current plan to change the wonderful educational youth facility and famous Baby Beach that has served so many, so well, for so many generations.

Stephen Hill  
2129 Entrada Paraiso  
San Clemente

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(949) 338-3948

*Westwind Sailing, LLC*

November 19, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express our concerns over the proposed plan to alter the dock configuration at OC Sailing and Events Center which includes privatizing the east docks at the Center, building docks on the south side of the Center at the mouth of the inside channel, and by building a dock structure on the west side of the Center that encroaches into the educational basin and doesn't serve the needs of the educational boating programs that Westwind Sailing provides.

Westwind Sailing was created in 1987 to work in cooperation with the County of Orange, Youth & Group Facility (now OCSEC), to provide low cost safe boating and sailing education for the general public. Our school and its leaders have earned numerous national awards including the country's highest honor possible for Community Sailing. Additionally Westwind is recognized as one of the premier US Sailing – Community Sailing Sanctioned Centers which identifies programs that offer the highest level of boating education, safety and public access.

Westwind staff members are highly trained professionals with certifications and licenses from leading agencies including US Sailing, US Coast Guard, American Red Cross and Academy of StandUp Paddle Instructors.

In 2011, our school provided public access safe boating instruction to over 5500 unique. In addition, we work directly with the Dana Point Aquatic Foundation to create and provide free educational boating scholarships for at-risk youth and boaters with special needs in our community.

Our mission is:

To provide community sailing & boating safety education which inspires responsibility for the aquatic environment; to promote overall health and wellness through sailing and boating instruction; and to create an atmosphere that is safe, fun and encourages personal success.



While reviewing the Draft SEIR last month, we noted numerous deficiencies with the proposed dock project at OCSEC that would curtail the public access educational boating programs we offer and limit the public's access to safe boating education in Dana Point Harbor:

- The proposed dock configuration creates an extremely challenging launch / land area for students of the public access small boat sailing and boating programs at OCSEC. The proposed configuration requires that student sailors launch and dock directly into traffic in the narrow and congested channel between OCSEC and the Dana Point Yacht Club. This is an already challenging area to navigate because of the Venturi effect that funnels wind eastward from the basin into the channel. In the interest of safety, this situation alone will significantly impact Westwind's public access educational boating program.
- Currently, Westwind Sailing utilizes both the east and west docks at the Center. The proposed dock configuration requires that all users of OCSEC operate solely from the west dock. During peak times, this will potentially exceed safe capacity limits on the dock which increases potential risks and hazards. At present, the west dock is severely in need of repair and access to this dock for public boating education has been limited. This impact has affected Westwind's educational boating programs at OCSEC since September, 2011. If access was restricted to the west dock only, as is indicated in the proposed plan, the current dock situation would severely impede the public's access to the educational boating programs.
- The proposed dock configuration encroaches into the educational basin and reduces the shoal area utilized for most of Westwind's educational boating programs by approximately 25%. This portion of the Educational Basin is the only non-motorized, public access recreational zone in Dana Point Harbor. It is relatively safe and the calm water void of motor boat traffic combination creates the perfect learning environment for student boaters. Reducing this area by 25% would create excessive congestion in the area and would hinder the learning process for students in the educational boating program.
- ADA docks at the Center are a welcomed enhancement. But the lack of ADA docks has not stymied Westwind's thriving Adaptive educational boating programs for individuals with special needs. If we had to choose, it would be more valuable for the Adaptive community to have a Lift to transfer individuals with special needs from their mobility

P-52-2

P-52-3

equipment into the boats, rather than ADA docks. It only takes one person to assist adaptive boaters up and down the current gangways but it takes 2 or more people to assist with transfers. Maintaining safety and personal dignity are our main concerns when transferring challenged boaters. Unfortunately our requests have been denied to install a simple hand operated Lift to assist with transfers which has resulted in a more significant impact to our Adaptive educational boating program than the lack of ADA docks.

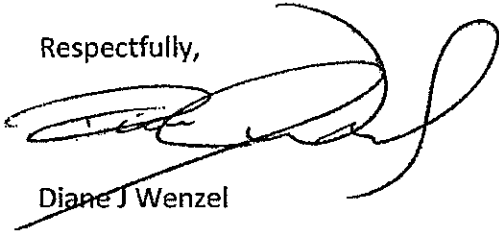
- Currently our adaptive sailors launch and land on the east dock at the Center with the boats secured according to the wind direction and in an area that is greatly protected from the effects of the prevailing wind. In the proposed dock project, the east docks will not be available to the Adaptive community forcing the program to be moved entirely to the west docks. The west docks are much more exposed to strong prevailing winds which increases the difficulty of transfers, launching and landing for challenged sailors. Moving our adaptive program entirely to the west docks will significantly impact the Adaptive educational boating program.

P-52-3

Low cost public access educational boating programs are vital to Dana Point Harbor. According to the California Department of Boating and Waterways, in 2010 there were 281 boating accidents in Southern California resulting in 101 injuries and 23 fatalities. 63 of these accidents occurred in Orange County which registers almost 60,000 vessels annually. Last year, Orange County recorded the highest number of boating accidents in the state – doubling the number of accidents in 98% of the remaining California counties. There is an absolute need for public access safe boating education in Dana Point Harbor. Impacts from the EIR should be positive and enhance public access educational boating programs and the public’s access to these programs should be promoted. It is Westwind’s opinion that the effects resulting from development of the proposed dock project at OCSEC will neither enhance nor promote the potential of this vital resource. Therefore we implore OC Dana Point Harbor to reconsider development of its proposed dock project at OCSEC.

P-52-4

Respectfully,



Diane J Wenzel

Westwind Sailing, LLC – Executive Director  
P.O. Box 62  
San Juan Capistrano, CA 92693-0062  
[www.westwindsailing.com](http://www.westwindsailing.com)  
[diane@westwindsailing.com](mailto:diane@westwindsailing.com)  
(949) 492-3035

# Dana Point Aquatic Foundation

a California non-profit 501(c)(3) corporation

P.O. Box 73474  
San Clemente, CA 92673  
Phone: (949) 235-2252  
www.DPAquaticFoundation.org  
Info@DPAquaticFoundation.org

November 19, 2011

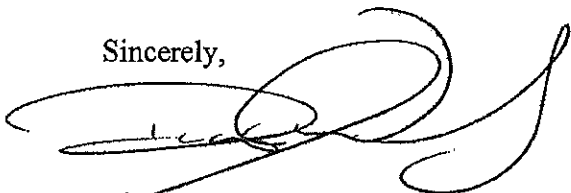
To: OC Dana Point Harbor Department  
From: Dana Point Aquatic Foundation  
Comments on the Subsequent Environmental Impact Report, Dana Point Harbor Marina Improvement Project – 2003101142

The Dana Point Aquatic Foundation would like to take this opportunity to comment on the planned Dana Point Harbor Marina Improvement Project. While the planned improvements have a number of good points, particularly with respect to ADA access, the Foundation is very concerned about some of the other aspects of the plan. These include the proposed privatization of a portion of the OC Sailing and Events Center dock which is currently used for public access educational and recreational boating and is strictly protected by the Tideland Grant established for the development of the Center, and the expansion of the dock area in the tidal basin.

Our concerns involve issues of public safety, public access and the effective operation of well-subscribed public access safe boating educational programs at the OC Sailing and Events Center. They are detailed in the attachment accompanying this letter.

The Foundation appreciates the time and effort that has gone into the plan and the intention of enhancing public access opportunities, providing updated amenities and promoting coastal resource preservation. We share OC Dana Point Harbor's commitment to public access and education in the harbor and are eager to contribute our expertise to this project.

Sincerely,



Diane J Wenzel  
Dana Point Aquatic Foundation - Chairperson

P-53-1

## Dana Point Aquatic Foundation

a California non-profit 501(c)(3) corporation

The Dana Point Aquatic Foundation (DPAF) is a California nonprofit 501(c)3 that was incorporated with the following mission:

To provide access to and support for community sailing and boating, and boating safety education, regardless of physical, developmental or economic limitations; to promote environmental stewardship, with particular reference to the Dana Point area; and to support diverse recreational, social, and cultural experiences for the general public at the OC Sailing and Events Center.

Our volunteer Board of Directors and Committee members represent the public access educational boating and recreation programs at OCSEC – programs which have been in existence for over 25 years and have served thousands of individuals in our community including scout groups, youth groups, adults, students, at-risk youth, and individuals with special needs, and have provided stimulating summer employment for hundreds of area youth. The organizations represented by the Foundation and affected by the EIR’s proposed dock project are: Mariner Sea Scout – ship 936, Westwind Sailing, Saddleback College - Marine Science/sailing & seamanship, and the Dana Outrigger Canoe Club. In 2011 alone our combined programs provided public access boating education and recreation to over 7000 unique individuals in the community.

P-53-2

The Harbor Revitalization Plan was developed with the intent to enhance public access opportunities, provide updated visitor-serving commercial and marine recreational amenities, and promote coastal resource preservation throughout the Harbor. It is the opinion of DPAF that the proposed plan creates a significant negative impact to the public access recreational and educational programs at OCSEC, the public access open water area in the Educational Basin, the public access hand craft launch area and the Baby Beach. These areas represent a large and growing number of users in Dana Point Harbor.

The SEIR proposed project for renovation of the docks at OC Sailing and Events Center states the following:

*OC Sailing and Events Center Docks (PAs 8/9). The proposed project includes the renovation of the OC Sailing and Events Center docks (previously known as the Youth and Group Facility docks) on the cove side of the West Marina, as shown in Figure 3.11. Because the OC Sailing and Events Center docks accommodate a varying number and size of boats on a fluctuating basis, capacity is discussed in terms of linear feet, not number of slips. The existing docks consist of 890 lf; an increase to 893 lf is included in the proposed project. The new docks will be provided on the westernmost side of the facility near Baby Beach. It is anticipated that the new dock will be utilized by small boats used by the facility for teaching purposes. Due to the shallow depths in this area, only small boating craft would have access. Buoys with low tide warnings will be placed*

P-53-3

*in this area to warn boaters during tidal fluctuations. The docks on the eastern side of the OC Sailing and Events Center will become part of the West Basin Marina. The new OC Sailing and Events Center docks are an expansion into an area not currently occupied by docks and will create additional slip space in the West Marina. The renovations to the OC Sailing and Events Center docks will result in an increase of only 3 lf and will not significantly alter the existing uses and activities associated with this facility. The docks will not replace any existing docks or slips and will not conflict with any existing boat uses but may require the designated hand launch area and swim buoys to be moved approximately 50 ft to the west. Continued provision of small boat access and opportunities is consistent with CCC policies.*

P-53-3

While the footprint of the proposed addition to the dock may appear to be small, its impacts and effects are significant to the public access educational and recreational boating programs at OCSEC. The basin and channel between OCSEC and the DP Yacht Club already are over-crowded at peak times. Any infringement on this space will endanger the public and threaten the continuation of well-subscribed existing programs. In addition, the layout of the new dock as highlighted in the EIR and its intended uses do not support the needs of longstanding community serving boating programs at the Center. Specific concerns include the plan's impact on the following:

**Public Access Educational Programs at OC Sailing and Events Center**

- The proposed project “anticipates that the new dock will be utilized by small boats used by the facility for teaching purposes. Due to the shallow depths in this area, only small boating craft would have access”. The majority of boats used by the Sea Scout youth program are keelboats up to 38’ in length. The proposed project makes no provisions for the Scout boats and would significantly impact and curtail the Sea Scout youth program at the Center.

- The EIR is inconsistent with its designation of the new west dock. Although the text states the dock will be utilized by small boats, the diagrams denote large vessels. If indeed Sea Scout keelboats will be required to dock in this area, the space required to maneuver would be significantly inhibited by the shallow depths in the educational basin and the relative effect of the prevailing wind on the vessels. These environmental factors plus the reality that the operators of the vessels are students - not professional skippers, the consequences may be dubious.

P-53-4

- The proposed dock configuration creates an extremely challenging launch / land area for students of the public access small boat sailing and boating programs at OCSEC. The proposed configuration requires that student sailors launch and dock directly into traffic in the narrow and congested channel between OCSEC and the Dana Point Yacht Club. This is an already challenging area to navigate because of the Venturi effect that funnels wind eastward from the basin into the channel. In the interest of safety, this situation alone will significantly impact public access educational boating at OCSEC.

- Currently, users of OCSEC utilize both the east and west docks at the Center. The proposed dock configuration requires that all users of OCSEC operate solely from the west dock. During peak times, this will potentially exceed safe capacity limits on the

dock which increases potential risks and hazards. At present, the west dock is severely in need of repair and access to this dock for public boating education has been limited. This impact has affected public recreation and educational boating programs at OCSEC since September, 2011. If access was restricted to the west dock only, as is indicated in the proposed plan, the current dock situation would severely impede the public's access to the educational boating programs.

P-53-4

- The proposed west dock configuration does not support the docking needs of the Dana Outrigger Canoe Club. The Club's long outrigger canoes have specific requirements for docking that the proposed dock configuration fails to provide. DOCC will be forced to make concessions in order to run a successful outrigger program.

**Public Access to Recreational Facilities**

- The EIR proposes privatization of the Center's east docks that are specifically earmarked for public access educational purpose as defined in the Tideland Grant for development of the Dana Point Youth & Group Facility (OCSEC). The purpose of OCSEC is strictly protected and deviation of the docks and facilities from uses other than public access educational boating and recreation is in violation of the Grant.

P-53-5

- If private slips were introduced in the area, the parking requirements for private slip owners will limit the already congested public parking in the vicinity of OCSEC, Baby Beach and the hand launch area.

P-53-6

- The number of hand launched craft has increased significantly in the last 5 years. The proposed dock configuration encroaches into the educational basin and reduces this water oriented recreational area by approximately 25%. This portion of the Educational Basin is the only non-motorized, public access recreational zone in Dana Point Harbor.

P-53-7

**Public Safety for All Harbor Users**

- The proposed west dock configuration supports motorized vessels within the shoal area at Baby Beach. The infiltration of motorized vessels amongst hand launch craft and bathers creates an unsafe aquatic environment. The shoal area is the only public access recreational area in the harbor that currently restricts motor boat traffic.

P-53-8

- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between the OCSEC and the DP Yacht Club. This is an already challenging area to navigate because of the Venturi effect that funnels wind eastward down the channel. The new dock configuration will increase the difficulty of navigating through this area for all boaters.

- In the proposed west dock plan, bathers, paddlers and rowers will be subject to increased pollution from fluid runoff of motorized vessels docked nearby and leakage from the pump-out station in close proximity to Baby Beach.

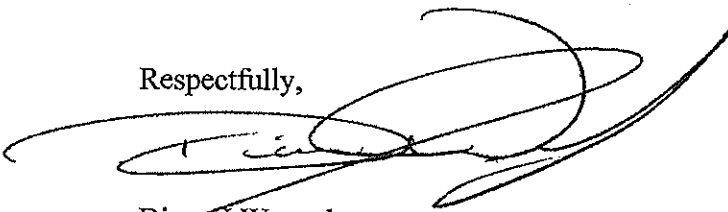
P-53-8

In light of these points, it is the opinion of the DPAF that the proposed project at OC Sailing and Events Center negatively impacts existing public access educational and recreation boating programs at OCSEC; impedes access to public recreation facilities at OCSEC, the Educational Basin and Baby Beach; and jeopardizes the safety of the users at OCSEC, Baby Beach, and the general boating public, and therefore is inconsistent with the County's General Plan, the intent of California Coastal Act policies and the Dana Point Youth & Group Facility Tideland Grant.

P-53-9

Our constituency represents literally thousands of people annually with the public access educational and recreational boating programs we provide. Yet our Foundation, neither collectively nor individually, was consulted on the impacts the EIR would have on public we serve. We share OC Dana Point Harbor's commitment to public access, educational and recreational boating in the Dana Point Harbor and we are eager to contribute our expertise to this project.

Respectfully,



Diane J Wenzel  
 Dana Point Aquatic Foundation - Chairperson





November 20, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

In addition to signing the petition to reverse the decision for the development of docks and slips in the Baby Beach area I wanted to take the time to write a letter to you as well.

This past summer, with the support of Miracles For Kids, I created a Stand Up Paddle day at the beach program in affiliation with Children's Hospital Orange County (Choc) where each patient was able to participate in stand up paddle and beach activities. These kids are able to spend a day at the beach together to celebrate their health and life with other cancer survivors.

P-54-1

Baby Beach is the ideal location due to the calm flat water, accessible and free parking, small crowds, limited boat activity, picnic benches and it is located right next to our educational partner in the program, The Ocean Institute. With the proposed development and expansion will come more power boat traffic, and less room for children to participate in a safe manner.

P-54-2

I encourage you to not move forward with the plan to develop the docks.

Sincerely,

Tom Swanecamp  
Board Of Directors  
Miracles For Kids

2002 Dew Avenue  
Suite 502  
Tustin, CA 92780  
P: 714.730.3040  
F: 714.730.8267  
www.miraclesforkids.org

Barbara Merriman  
34300 Lantern Bay, Villa 4  
Dana Point, CA 92629

November 20, 2011

Mr. Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

I am writing to comment on the current alternatives for the waterside revitalization of Dana Point Harbor. Planning for this has been disappointing, and incomplete.

DISAPPOINTING, because the focus group meetings, carefully orchestrated by the harbor department did not create a plan that is satisfactory to the large majority of the boating community. Only a few "representatives" of the boating community were allowed to participate, and they were outvoted by the harbor stakeholders and county employees attending these focus group meetings.

P-55-1

INCOMPLETE, because the alternatives presented for review and approval do not meet all the objectives of the revitalization. In particular, alternatives 2 and 3, each leave out different parts of the objectives!


I will repeat an earlier letter sent in regarding the Land-Side portion of the revitalization. Planning for this project has been piecemeal. Because of that, there are constraints on how and where to add docks because of boater parking which has been curtailed and already eliminated in parts of the harbor near the commercial core.

P-55-2

A project this important, which will have a lasting effect for decades on this harbor, should have been a cohesive plan. The original harbor is a gem, although the infrastructure needs serious repair or replacement as soon as possible. It doesn't, however, need to be completely changed. The current plan which will eliminate slips (particularly in the 50ft. range), narrow the main channel (already dangerous with the explosion of paddleboarders and kayakers) and build on "Baby Beach," needs to be re-worked and "revitalized" itself!

P-55-3

Please look to the future and remember that this is a harbor, and a harbor is for boats!

Cordially,  
  
Barbara Merriman  
Doubleagle1@cox.net

11-20-2011 Comments on SEIR for Harbor Rebuild

DOUGLAS HEIM  
25331 Yacht Dr  
Dana Point, CA 92629

To:

OC Dana Point Harbor Office  
24650 Dana Pt Harbor Dr  
Dana Point, CA 92629

I believe we need to rethink the current direction of this project and look at the following issues:

- 1.Repair the slips and boater service buildings before the commercial core
- 2.Facelift current Harbor buildings ie Proud Marys, Wind and Sea
- 3.No new slips at Baby Beach
- 4.No Boat Barn to destroy our precious views
- 5.No 60' plus buildings or 5 story structures
- 6.Keep the channel the same width, new trends such as paddle boarding demand it for safety reasons

P-56-1

Regards,

Doug Heim  
25331 Yacht Dr  
Dana Point, CA 92629  
Storage and slip renter since 1977  
Currently in West Basin F-5

11-20-11

Brad Gross,  
Director OC Dana Point Harbor  
24650 Dana Point Harbor Dr.  
Dana Point, Ca. 92629

Dear Brad,

I've been enjoying the "Baby Beach" area since I used to surf Dana Cove back in the 1960's. Besides the Cove surf, the harbor has messed up the surf at Doheny quite a bit too. Nevertheless, I have come to enjoy the things that the harbor has to offer by sailing a catamaran or paddling surf ski's and SUP boards from Baby Beach. The harbor has taken away from some, but given to others. I feel that the boaters have gotten the most and the surfers and paddlers the least. Therefore, I am against the Marina Improvement Project # SCH 20031101142.

P-57-1

When I walk around the docks in the harbor any day of the week, including weekends, I see that most of the boats are not being used. Mostly, the dock areas appear abandoned. I would say that the boats are under utilized. True, an under utilized boat provides a slip rental fee to the harbor, but the County and the harbor has enough boat slips. What the county does not have enough of is protected water for swimmers and paddlers.

As far as I know, the Baby Beach parking is the only free public beach parking in all of Orange County. I assume that if these docks were inserted into the open water area of the turning basin that a portion of the Baby Beach parking would be cordoned off for the boaters like all the other dock area parking is. Thousands of the tax paying public utilizes the beach, picnic areas and parking for Baby Beach. Unlike the docks, the area is over used with not enough parking on weekends. This area is the least that the County can offer the public, this is not time to take any part of it away. We can't be like San Diego with thousands of free parking spaces surrounding all parts of Mission Bay, but we can keep the only spot that we do have.

P-57-2

There are two critical traffic points in the Dana Point Harbor. One is of course the harbor entrance and the other is at the West end of the inside channel as it opens into the turning basin. This spot is difficult to navigate because of the wind venturi created by the headlands. Wind surfers used to call this channel the "black hole". Even now, I often see sail boats and paddlers have a hard time against the heavy head wind getting back to the open water of the turning basin. Lengthening the channel with additional boat docks and reducing the open water area of the turning basin, would greatly decrease the safe passage of all non-motorized craft in that channel.

P-57-3

I was a catamaran sailor in the 70's and 80's and have become a paddler since then. What I see is a reduction in boat usage in the harbor, including the launch ramp, and a big increase in the number of human powered craft launched at Baby Beach. Considering

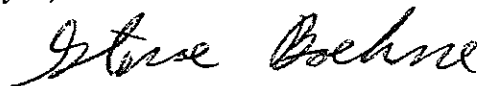
P-57-4

P-57

this changing public utilization of the harbor, this is not a time to reduce beach and open water space in the harbor so that more boats can be added.

↑ P-57-4

Thank you,



Steve Boehne  
Infinity Surfboards  
24382 Del Prado  
Dana Point, Ca. 92629

949-661-6699



*THE LEADING EDGE OF COASTAL ACTIVISM*

November 20, 2011

Brad Gross, Director  
 OC Dana Point Harbor  
 24650 Dana Point Harbor Drive  
 Dana Point, CA 92629

Re: Extension Request for Harbor Marina Improvement Project

Dear Mr. Gross,

I am writing in regard to the above captioned matter and to follow up on our recent SEA (Surfers' Environmental Alliance) Executive Board Meeting and our West Coast Environmental Director, Jim Littlefield's letter to you concerning the same.

As per Mr. Littlefield's communication to your office SEA is respectfully requesting a review of your "Improvement Project" and a *ninety day extension* to provide adequate time to review the same and retrieve input from our membership, many of whom reside in Orange County.

SEA is a 501(c) California nonprofit entity with offices in California on the west coast and in New Jersey on the east coast. Any coastal project that impedes beach access, ocean or surf access, or surfing waves is strongly opposed by all members of SEA.

We would like to resolve this extension by consent as opposed to the possibility of litigation. Please advise as to how you wish to proceed so I may advise our board and membership. Thank you in advance for your time and consideration and I would ask that you please feel free to contact me directly with any questions.

Very truly yours,

Andrew Mencinsky  
 Executive Director

Tom Forkin, JD, General Counsel  
[tforkin@comcast.net](mailto:tforkin@comcast.net)  
 Surfers' Environmental Alliance (SEA)  
[www.seasurfer.org](http://www.seasurfer.org)

543 2<sup>nd</sup> Ave, Long Branch NJ 07740 • 732-864-4096 • [seasurfers.org](http://seasurfers.org)

P-58-1

November 20, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express my concerns over the proposed plan to construct docks in the west basin in front of Baby Beach.

I am a Dana Point native and third-generation member of this community. My family has been coming to the harbor to sail, swim, walk, picnic, and connect with friends and community members literally for as long as the harbor has been in existence. When I was about nine years old, I began taking classes with Westwind Sailing, learning sailing, water safety and rules of the road within the protected waters of the Harbor's west basin. I could pilot a boat singlehandedly long before I could legally drive a car, and I loved the sense of independence I felt while at the tiller—whether racing my classmates, playing a sailing scavenger hunt, or simply exploring the harbor.

P-59-1

After years as a student, I was invited to become one of Westwind's sailing instructors—it was my first job, and a position I held proudly for more than five years until I graduated from Dana Hills and went off to college. I was also a five-year member of the Mariner Sea Scouts team based at the Youth and Group facility. In addition to deepening my sailing skills and knowledge of maritime culture, I learned teamwork and leadership, benefitted from the guidance of cherished mentors, and developed longstanding friendships that continue to this day.

These educational programs would not be possible without a safe learning environment. I am deeply concerned that the proposed development undercuts the community by limiting public access and decreasing safety in the west basin of the harbor. And I am *strongly against* the proposed privatization of the docks at the OCSEC, which are specifically earmarked for public access educational purpose.

By encroaching into the basin and reducing the shoal area by at least 20%, the proposed dock configuration will block the public access small craft launch at Baby Beach and reduce public access to the water. This altered design will negatively affect the launching and docking of students in boating programs at OCSEC, and will increase boat traffic in the channel, creating safety concerns. Moreover, the increase in motorized vessels in the educational basin near swimmers and non-motorized small craft poses a number of hazards related to safety, pollution, and traffic, and will negatively affect the aesthetics and character of Baby Beach and the OCSEC.

P-59-2

P-59-3

I strongly urge you take into consideration these issues and to recognize that education, community access and public safety are *the* top priorities for any proposed change to the design of the west basin. I recommend that you analyze other options that will not have as negative an impact on the harbor. Please know that I am dedicated to preserving Baby Beach, will follow this process closely, and will continue to work with the community to build awareness of this project.

The Dana Point Harbor holds a very special place in my heart. My family has celebrated three weddings and held both my grandparents' memorial services at the harbor. It is where I held my first job and worked my way through high school, learned how to be a responsible member of society and even fell in love for the first time. And our family is not unique. The harbor—and the publicly accessible and community-oriented west basin in particular—has been a very special community space from hundreds, if not thousands of families. I sincerely hope that you will choose to keep the public interest in the forefront of your mind as you make decisions regarding the future of Baby Beach and the design of the harbor's west basin.

P-59-4

Most sincerely,

Lis DuBois  
719 N. 2<sup>nd</sup> Street ♦ San Jose, CA 95112  
Mobile: 617-510-5089 ♦ lismarie1@hotmail.com

11-23-11A11:28 RCYB

**Joseph F. & Barbara M. Gildner**  
2450 CALLE AQUAMARINA  
SAN CLEMENTE, CA 92673

November 21, 2011

County Of Orange  
Dana Point Harbor Department  
Dana Point Drive  
Dana Point, CA 92629

To Whom It Might Concern:

I am a slip holder in Dana Point and have been for over 20 yrs. I have been a good tenant and have always paid my rent on time and have asked nothing from the Harbor but a safe, attractive and convenient spot to dock my boat for my family and friends to enjoy. I am dismayed at the proposal to use funds that we have built up over the years for a commercial expansion of the harbor without renewal of the docks. The present proposal is overblown and not fair to the over 2,000 slip holders and the trailer boaters and others who use the harbor. Anyone who is near the commercial core in the East Cove will be adversely affected by this proposal and I know this has to change.

P-60-1


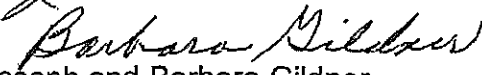
A reasonable reduction in the commercial rebuild and the inclusion of rebuilt docks would certainly be in order if any changes are considered. Just look at the docks and you will see cracked concrete, hanging wires, old and beat up dock boxes, rusting, peeling and leaning posts, sinking and leaning docks and gates that stick and keep hardly anyone out. The proposal for boater parking in the commercial core is non-existent and this is the area that the large boats that pay the most are docked. How can private enterprises take the funds that the public (the boaters) has built up over many years paying one of if not the highest rates in the nation for a public slip. Is this what we have come to expect from our government. I would hope not.

P-60-2

I am in favor of more large slips in the 30 to 40 ft. range as I believe that this is the range in most demand with a built in waiting list which would increase the income of the Harbor. The original plan was hatched without boater input by a very few who would benefit from the current proposal and not the vast majority who support the Harbor. I respectfully request that the current proposal be downsized to better accommodate the needs of all that use and support the Harbor.

P-60-3

Sincerely,

  
  
Joseph and Barbara Gildner





November 21, 2011

Mr. Brad Gross  
Director  
O C Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Re: Adequacy and Appropriateness of the Draft Subsequent Environmental Impact Report for Dana Point Harbor Marina Improvement Project

Dear Brad,

The SEIR is inadequate and inappropriate.

#### OVERVIEW

The planning process for revitalizing Dana Point Harbor continues to suffer due to 1) the County's ongoing placement of commercial interests ahead of boating needs, 2) the County's efforts to increase slip size, and 3) the complete omission of the harbor's largest boating community (human powered watercraft) from the Project.

P-61-1

#### COMMENTS

1. The County's ambition to dramatically expand commercial facilities by 40% will cause a tremendous omni-directional impact on the harbor's environment and character. The County's relentless pursuit of "bigger is better" requires that you ignore key tenants of trust placed in your hands by the State of California. We are a harbor, and the Project as proposed ignores your obligation to protect boating interests above all else. We feel the vision for this project is dated and out of touch with the need for publically funded harbor projects to demonstrate environmental leadership and protect priceless coastal dependent access for our nation's 75 million boaters.
  - a. Preferred Alternative – Accomplish a Plan that immediately places the revitalization of boater facilities ahead of commercial interests, prioritizes the protection and expansion of coastal dependent access for recreational boating, and demonstrates the highest level of environmental leadership by limiting commercial expansion.

P-61-2

2. The County's efforts to increase slip size is the single most disruptive and inappropriate part of the waterside plan. There is no stakeholder support for this. The impact on the environment, boater access and aesthetics is profound.

- a. Preferred Alternative – Replace the slips exactly as they are with the small exception of meeting ADA compliance. Slip replacement should be given the highest priority in the revitalization plan, ahead of commercial interests. Slips can then be replaced section by section prioritized by levels of deterioration. This eliminates the unacceptable impacts of slip loss and channel encroachment (a major confrontation between safe boat operation and the significant growth of in-harbor recreational use by small watercraft). Channel encroachment of 20 feet along the entire channel width also poses an environmental impact of sun shading. Finally, the suggestion that docks should overflow into the Baby Beach West End where children swim and human powered watercraft operate will be eliminated.

P-61-3

P-61-4

3. Human Powered Watercraft represent the harbor's largest boater user group, yet the revitalization plan, and this SEIR ignores the needs of this vibrant boating community. Water traffic studies done by the County, and subsequently by the Dana Point Boaters Association clearly document the rapid growth of this boating group. HPW vessels represent the highest levels of environmental friendly, affordable, healthy and coastal dependent boating. Their needs must be immediately added into the revitalization plan. Critical increases in parking, waterfront access, boat storage, wash down facilities, lighting, training and educational facilities and docking will have environmental impacts that must be an integral part of the revitalization plan.

- a. Preferred Alternative – As we have discussed at length with your office, HPW operations need to be integrated into three key areas:
  - i. Complete a West End Plan that meets the needs of the varied user groups while prioritizing HPW boating operations. Our lengthy efforts to propose an integrated plan show that HPW facilities can be implemented while expanding access for all user groups including swimming and picnic activities.
  - ii. Complete a plan for HPW launching at the east end of the island parking lot (past the new Nordhavn building) so that paddlers who want fast ocean access can bypass in-harbor transit. This is an ideal way to increase HPW facilities while reducing in-harbor traffic – both having the highest priority.

P-61-5

- iii. Complete an approved in-slip storage capability to facilitate the high number of slip renters that have HPW's; kayaks and paddle boards. The new docks can offer an accessory means to safely store these and prevent them from encroaching into the walk ways as they often do. This could represent an incremental revenue stream and be far more effective than HPW storage in the car parking lots.

Brad, we appreciate the collaboration we experienced with your office in the development of the LCPA that mentioned "hand launched" and "human powered" at least 17 times! Omission of the needs of the harbor's largest boating community is clearly unacceptable. We are ready to assist you with our 1800 members and the other harbor user groups to quickly insert HPW requirements into the plan. Failure to insert HPW facilities into the plan is not an option.

The Human Powered Watercraft Association appreciates the opportunity to comment on the SEIR, and we look forward to assisting with a timely process to address these key issues.

Finest regards,



Steven Alan Fry  
Director

P-61-5

From: Pam Patterson [mailto:outdoorpeach@yahoo.com]  
Sent: Monday, November 21, 2011 5:03 PM  
To: Gross, Brad  
Subject: Save Baby Beach

November 21, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

In reviewing the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011, I would like to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach.

As an expert in my field, community advocate, and an instructor of Adapted Outdoor Education and Recreation for Saddleback College, who fortunately uses the EAST Basin, specifically, for the physically challenged and special needs student population for all our water sport classes, activities, and camps, I believe it will be very difficult and much more constrained to safely transfer, launch and land our Adaptive Sailors from the new docks on the West side of OCSEC if the proposed project is passed and the current docks used for the Adaptive community are annexed by the County and changed into private slips.

The proposed dock will be extremely unsafe. If this dock goes through we will no longer be able to hold our classes and camps in this area because our needs are special, in that we require persons to transfer adaptive sailors into boats, in non-prevailing winds, with least amount of motorized traffic, and more room during shore launches for equipment and certain disabilities. For the past 2 years we repeatedly requested that the County allow a lift, which Saddleback College received a grant specifically to use for Adaptive Sailing, to be installed for safe transfers, not only for the challenged sailors, but for persons assisting. It only takes one person to assist adaptive boaters up and down the ramps but it takes 2 or more people to assist with transfers. Some challenged sailors may be able to assist themselves if the dock had the right type of lift. I realize you have proposed a lift but that will take up to 10 years to actually be in use.

The Adapted Sailing program has been a success for our Adapted Community Members. People with challenged abilities desire and want the same opportunities as anyone. This population, which is growing and will continue to be a significant part of our community, need barriers lessened, like they may need a piece of equipment modified, a certain piece of equipment to assist them, a skill (wind) broken down into baby steps so they may build their confidence and self-esteem at their own challenged pace. Having the chance to do something that they thought they could never do, whether it be sailing, stand up paddle, or kayaking, our students and participants have overcome barriers, renewed all their self-concepts, and have a sense of belonging to their community.

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water.
- The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEC and DP Yacht Club.
- The project proposes new docks to be built in shallow water that will cause the boats to bottom

P-62-1

P-62-2

P-62-3

- out at low tide.
- The plan proposes docks to be built in a sensitive marine environment. The docks will disrupt the Eel Grass and fragile marine ecosystem in the basin. ↑ P-62-3  
P-62-4
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEC. P-62-5
- The project proposes that motor boats will be docked and a boat pumpout station in front of Baby Beach which potentially increases pollution in the area P-62-6
- The new dock in front of Baby Beach will be used for motor boats which creates safety concerns for non-motorboat users launching at Baby Beach. P-62-7

I beg you to not take this away from them. This new dock will present fears and discourage them. Do Not prevent them from improving their quality of life.

I hope that Dana Point Harbor takes into considerations these issues, recognizes the importance of the east dock staying available to adaptive sailing and analyze other options that will not have such a negative impact on the Harbor's resources. I will follow this process closely and continue to work with the community to expand awareness of this project. Finally, I will be one of many who will work to preserve Baby Beach, the Educational facilities and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor.

Sincerely,

Pamela Patterson

{ HYPERLINK "mailto:ppatterson@saddleback.edu" \o "mailto:ppatterson@saddleback.edu" }  
(949)291-8100

**Pamela Patterson**

**(949) 291-8100**

*~Saddleback College*

*Part-Time Adapted Kinesiology Instructor*

*Adapted Outdoor Education & Recreation,*

*Adapted Fitness Conditioning, Adapted Stretch,*

*and J.A.W.S. Camp Director*

{ HYPERLINK "mailto:ppatterson@saddleback.edu" \o "mailto:ppatterson@saddleback.edu" \t "\_blank" }

*~I.C.A.N. Program Director*

{ HYPERLINK "http://www.icantoo.org/" \o "http://www.icantoo.org/" \t "\_blank" }

{ HYPERLINK "mailto:icanpam@gmail.com" \o "mailto:icanpam@gmail.com" \t "\_blank" }

*~3D Massage Therapy*

*Owner and Therapist*

Boaters for Dana Point Harbor

November 21, 2011

OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

Re: DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT  
SCH NO. 2003101142

This document is in response to the "Notice of Availability/Notice of Intent" issued on September 20, 2011 and the "Supplemental Notice of Availability" issued on October 27, 2011 by the County of Orange, OC Dana Point Harbor. These comments by Boaters for Dana Point Harbor address the Draft SEIR for the "Marina Improvement Project".

P-63-1

Boaters for Dana Point Harbor is a volunteer-based California Not-For-Profit Corporation that works to insure that recreational boating within Dana Point Harbor is preserved and protected to the full extent prescribed by California law.

In Section One we discuss the serious issue we have with the Draft SEIR and in Section Two we discuss the serious issues we have with the process being followed.

**SECTION ONE**

We believe that the Draft SEIR, while professionally prepared, fails to meet the requirements for such a document in the California Environmental Quality Act (CEQA)<sup>1</sup>. CEQA is designed, among other things, to

take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise.<sup>2</sup>

P-63-2

It further states (emphasis ours):

<sup>1</sup> California Public Resources Code § 21000 et seq.  
<sup>2</sup> California Public Resources Code § 21001(b)

21002. The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

21002.1. In order to achieve the objectives set forth in Section 21002, the Legislature hereby finds and declares that the following policy shall apply to the use of environmental impact reports prepared pursuant to this division:

(a) The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.

(b) Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.

(c) If economic, social, or other conditions make it infeasible to mitigate one or more significant effects on the environment of a project, the project may nonetheless be carried out or approved at the discretion of a public agency if the project is otherwise permissible under applicable laws and regulations.

P-63-2

CEQA provides a definition of feasible:

"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.<sup>3</sup>

We believe that the County's Draft SEIR is fundamentally flawed, because it violates the requirements of Section 21002. Specifically, the requirement to consider alternatives which is so central to the CEQA process, does not allow the County to only generate alternatives which are "doomed to fail" by arbitrarily leaving out items required to meet the project's objectives.

In the Draft SEIR, there are 3 alternatives to the County's preferred project. The first of these is the "Do Nothing" alternative, which is included as a statutory requirement of CEQA. We believe this alternative has been correctly included, considered, and rejected.

However, alternatives 2 and 3 each have been carefully constructed to only include a portion of the necessary elements of the project, thereby being rejected for failing to meet the objectives.

P-63-3

<sup>3</sup> California Public Resources Code § 21061.1

These alternatives are no more than incomplete plans designed to allow the County to approve their project without a serious consideration of the "significant effects" mentioned in sections 21002 and 21002.1.

This is a fatal flaw for the entire Draft SEIR. There is no feasible alternative considered, and no comparison of the significant effects of such an alternative with the County's desire. We will propose such an alternative in some detail, and we suggest that the entire document needs to be reworked to consider whether our proposal is superior under CEQA to the County's.

P-63-3

The Problem with Alternatives 2 and 3

Alternatives 2 and 3 were carefully chosen to split up attractive features that, if included in a single alternative, would meet the CEQA tests for feasibility, a substantial reduction in the significant environmental impacts of the project, and that there are no overriding "economic, social, or other conditions" that the County can claim (in their discretion!) make the alternative truly infeasible.

1. Alternative 2 claims a loss of 155 slips, but that number is not tied to any design, and appears to be chosen simply as the minimum number the CCC might accept.
2. Alternative 2 also does not include redo of the marine services docks, or temporary docks (with conversion to permanent possible) for no obvious reason.
3. Alternative 2 does not include any alternative to the dry boat stack, again for no obvious reason and without any analysis of that possibility.
4. Alternative 3 does not include renovation of the East and West basins, including simple replacement as built (but with ADA), and includes all the items left out of Alternative 2.

P-63-4

Alternative 2 was rejected because it leaves out certain items, so it doesn't meet the project objectives. It's NOT defined to be reasonable, and thus isn't. This fails to meet the CEQA requirement, because there was no reason to leave those items out.

The same logic applies to Alternative 3, but with the included and left-out elements exchanged.

The conclusions stated for alternative 2 in the Draft SEIR are (emphases ours):

**5.7.3 Attainment of Project Objectives**

Alternative 2 would achieve most of the project objectives, but not to the same extent as the proposed project because this alternative would not improve the level of boater services at the Marine Services docks or provide ADA access at the OC Sailing and Events Center docks. In addition, under Alternative 2, the temporary dock would not be constructed, and therefore, the yacht broker slips would not be relocated to another area of the Harbor. Further, utility infrastructure would not be upgraded in all areas of the Marinas. The goals of the Dana Point Task



Force would be furthered, but not to the degree that would occur under the proposed project since this alternative does not include improvements, including ADA access, to all of the areas included in the proposed project.

So, if you don't include something, it won't be there. This remarkable fact is then the missing items that were used to reject the alternative, even though there was no reason stated as to why those things weren't included. The alternative was "Doomed to Fail!"

5.7.4 Conclusion

Compared to the proposed project, land use impacts are slightly greater for this alternative due to the lack of ADA access at a portion of the Harbor areas as compared to the proposed project. Construction-related geology, hazardous materials, hydrology/water quality, noise, and aesthetic impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor. However, operational impacts for these same topics would be similar to the proposed project. Operational circulation and boat traffic impacts would be reduced as compared to the proposed project, due to the reduction in the number of slips as compared to the proposed project. However, with mitigation these impacts were less than significant for the proposed project. Operational impacts related to land use and recreational resources would be greater as compared the proposed project for this alternative.

This alternative would not avoid significant and adverse project-related impacts to construction and cumulative air quality effects or avoid significant and adverse cumulative construction noise in the project vicinity. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, this alternative would avoid the significant and adverse biological shading impacts as compared to the proposed project.<sup>4</sup>

So by leaving out a part of the project, as detailed above, the impact is lessened. But then, they don't meet the project objectives.

The conclusions stated for alternative 3 in the draft SEIR are (emphases ours):

5.8.4 Conclusion

Compared to the proposed project, land use impacts are slightly greater for Alternative 3 due to the lack of ADA access at a portion of the Harbor as compared to the proposed project. Construction related hydrology and water quality impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor. However, operational water quality impacts would be similar to the proposed project. Because Alternative 3 does not include any renovations to the existing dock and slip facilities in the East and West Marinas, the number of slips would remain similar to existing conditions (2,409 slips), resulting in approximately 116 more slips than under the proposed project. Operational circulation impacts would therefore be greater than the proposed project, because the

<sup>4</sup> Draft SEIR, volume 1, page 5-18

P-63-4

P-63-5

number of slips would be greater, although with mitigation these impacts were less than significant for the proposed project. Construction-related traffic impacts would be reduced when compared to the proposed project. Aesthetic impacts related to construction would be less than the proposed project because construction would not occur in as many areas of the Harbor; long-term views would be similar to the proposed project. Impacts related to recreational resources both during construction and for long-term recreational opportunities would be fewer than under the proposed project. Impacts related to hazardous materials would be similar to the proposed project for this alternative.

This alternative would avoid significant and adverse project-related impacts to construction and cumulative air quality effects and cumulative construction noise in the project vicinity. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, this alternative would avoid the significant and adverse biological shading impacts as compared to the proposed project.<sup>5</sup>

On the basis of these conclusions, one might decide the alternatives were in fact better, yet they were rejected. This was because they were never designed to work! Alternative 3 is particularly egregious, because it doesn't even try to replace the crumbling marina docks. What were the objectives for the water-side development in this project?

Section 5.9 rejects all alternatives on the grounds that they don't meet project objectives.

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the physical impacts that would not occur with Alternative 1. ... However, none of the identified project objectives would be achieved with Alternative 1.<sup>6</sup>

This is certainly logical. However, the same method was used to reject the other alternatives, despite their attractiveness.

The Environmentally Superior Alternative, in terms of avoiding, reducing, or minimizing direct physical effects on the environment under short-term conditions, is Alternative 3, the Reduced Project with ADA Improvements. Besides construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, Alternative 3 does not include any renovations to the existing dock and slip facilities in the Harbor. By eliminating the replacement of docks throughout the Harbor, construction impacts under Alternative 3 would be significantly reduced in both scope and duration.

Alternative 3 meets only a few of the project objectives, such as satisfying ADA requirements for some dock areas. Other project objectives attained to a lesser extent include enhancing the level of

<sup>5</sup> Draft SEIR, volume 1, page 5-25

<sup>6</sup> Draft SEIR, volume 1, page 5-25

P-63-5

P-63-6

services for boaters and maintaining a safe environment for the boating community. Although several ADA gangways would be installed with this alternative, the benefits of renovating the dock facilities and bringing the Harbor into compliance with all DBW standards would not be achieved with Alternative 3.

...

However, as noted above, Alternative 3 would not achieve the project objectives except to provide ADA access in the East and West Basins and at the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks.<sup>7</sup>

P-63-6

And so we reach the SEIR's major conclusion—if enough of the project is left out, it doesn't meet the objectives!

So why not get this right?

A Feasible Community Alternative – Number 4

For clarity and simplicity we describe Community Alternative 4 by articulating how it achieves each of the project's Objectives. At the highest level the County has stated these as (emphasis ours):

As described in Section 3.0, Project Description, the primary goals of the project are to revitalize the Harbor as a popular destination for boaters, local residents, and tourists while maintaining the **unique character of the Harbor**.

Dana Point Harbor for the last 35+ years has been a large Orange County Park housing over 3,000 boats and offering many low or no cost alternatives. With minimal commercial intensification, more than 2000 trees, view corridors, very low massing, very low building heights predominantly offset by majestic trees all of which creates a very **"unique character of the Harbor"**.

P-63-7

Hundreds of trees have already been eliminated, with more destined for removal as part of the revitalization. Also, significant massing, along with equally significant building heights, are planned that will in large part change the **unique character of the Harbor** to that of a modern urban feel from the existing recreational park atmosphere. These issues are partially out of scope for the Waterside SEIR, but are important as a back drop to insure that what happened landside does not propagate to the waterside.

Maintain the Harbor's overall current character and family atmosphere

Community Alternative 4 achieves this goal by not eliminating, to any significant extent, the affordability of boating, including the even more important no-or-low-cost recreational boating.

<sup>7</sup> Draft SEIR, volume 1, page 5-28

Minimal channel encroachment and no additional build out in front of Baby Beach will allow the bulk of the harbor's recreational water area to continue to be accessible.

Renovate and replace the deteriorating docks and slips

In 2006 the Harbor Director, the Lead Project Manager and the Lead Project Engineer made it clear to the community that our docks are beyond their serviceable life. Further it was pointed out that we were a "winter storm" away from some docks catastrophically failing. Any plan that does not include the rapid replacement of all docks (of 35 year vintage) should validly be rejected.

Community Alternative 4 will use existing financial resources (Funds Balance Available and significant positive cash flow from slip fees) to immediately begin replacing all docks in the harbor along with building out new, larger and permanent docks in the East Anchorage.

Satisfy ADA requirements for dock areas of the Harbor

With ADA for harbors now established, using Federal Law and coherent California Department of Boating and Waterways guidelines it is straight forward to calculate the impact (loss of slips) of implementing ADA access. As the total impact is expected to be on the order of 1%, the loss is readily mitigated by the permanent slips built out in the East Anchorage. This Alternative will implement ADA access per applicable guidelines and the law.

Maintain a full-service Harbor

The Harbor Department has modified this goal from what was originally passed by the Harbor Task Force under Supervisor Wilson. It should read: Maintain marine full-services in the Harbor. We believe that this was meant to include an affordability element as well and not just the absolute minimum using space from another minimized area. This would obviously include a marine chandlery and ample space for shipyard and Do-It-Yourself boat repair and maintenance. To this end Community Alternative 4 does not remove any of the waterside area in front of the existing Shipyard allocation (i.e., not the Harbor Director's planned reduced shipyard). Per the commitment to the Coastal Commission, additional Do-It-Yourself boat repair maintenance areas will be provided in accessible areas of the launch ramp and dry boat storage.

Enhance the level of services for boaters

During the life of this harbor the population in California has exploded with the most significant expansion impacts along the coastal regions. Recreational infrastructure has not come close to matching this growth. The Harbor Director's proposed project and alternatives would actually retract the level of service despite clear evidence of increased demand (wait list and ability to charge the highest slip fees in North America for a municipal marina). Boaters' level of service will be enhanced by expanding the number of larger boat docks (East Anchorage) and maintaining the existing number of dry boat storage locations (684).

Upgrade commercial fishing facilities

P-63-7

It is unclear what the intent of this goal is in light of the fact that it appears that the commercial fishing area was moved, without required permitting, from the Wharf area into recreational guest dock area in the east basin.

Maximize the number of slips available in the East and West Marinas for public rental by relocating many of the yacht broker slips to another area of the Harbor.

While this is a valid and important goal it is paired with inappropriate tactics. This improperly allows alternatives that meet the goal while being dismissed because it fails to be implemented in the way the Harbor Director specified. The goal is:

Maximize the number of slips available in the East and West Marinas for public rental.

Community Alternative 4 achieves this goal by replacing the slips exactly as they are today. This will allow for eventually zero slip loss while allowing the waterside community character to be maintained and replacement of all the worn out docks. Docks will maintain their existing dimensions and simply be replaced with new and more modern materials. While the Department of Boating and Waterways has updated their guidelines the operative word is "Guidelines", not "rules" or "laws". Some harbors have been revamped using these guidelines and resulted in the loss of hundreds of slips. Others have replaced their docks as they were originally constructed with no loss of slips and no negative environmental or safety consequences, including the ability to obtain grants and loans from the Department of Boating and Waterways.

P-63-7

Thus Community Alternative 4 in the East and West Basin will:

1. Replace all docks as they exist today (with correction for unpermitted Harbor Department Developments)
2. Maintain existing slip orientations including the West Basin
3. Continue utilization of all side tie and end tie locations
4. Continue 3' overhang allowance
5. Allow for minimal (multihull and beamier vessels) encroachment into the main channel

In the past we've seen and anticipate that the Harbor Director will be dismissive of Community Alternative 4 by simply stating that he fully intends to follow the letter of the Guidelines from the Department of Boating and Waterways. These state wide guidelines were developed to cover the entire state of California and hence covering a very broad range of berthing scenarios and prevailing conditions. We believe that each harbor and the conditions of each vary widely and should viewed individually. Dana Point Harbor is an extremely well protected and sheltered harbor offering some of the more benign conditions in our state.

Relocate guests dock facilities and provide new dinghy docks convenient to Day-Use Commercial uses

What is the goal that this tactic is trying to address? Increase business for the stores and restaurants? Increased convenience for the tenant boaters to the stores and restaurants? Reduced parking requirements for the slips? The Harbor Director needs to state the goal and then articulate how his chosen approaches met the goal. Community Alternative 4 would build out

additional dinghy docks throughout the harbor increasing water based mobility and minimizing the need for movement of vehicles. Guest Docks in Dana Point Harbor are often rented out for long periods of time, up to 90 days. To claim that parking is not needed for Guest Docks is inconsistent with how they are used.

Upgrade utility infrastructure to all areas of the Marinas

Community Alternative 4 will replace and modernize all electric, cable, water, sewer and pump out facilities. These items will be sized to meet expected demand for the next 50 years. Sorely needed pump outs in the East Basin will be accomplished by the addition of a pump out on the permanent docks in the East Anchorage.

Maintain a safe environment for the boating community, Harbor users, and merchants

Community Alternative 4 offers significant benefits over the Harbor Directors plan. Community Alternative 4 does not build out slips in front of Baby Beach which will maintain the same high safety standards that we have today. It also does not significantly encroach into the main channel improving the safety of recreational vessels as well as human powered and day use vessels as they navigate the inner channel.

Provide improvements in accordance with DBW standards, including placing boats in appropriately sized slips

Again we would ask the Harbor Director to separate out his implementation plan from goals. As we've stated earlier the Department of Boating and Waterways standards are guidelines developed to cover the entire state of California and wildly varying harbors and local conditions. Dana Point Harbor is one of the most protected and benign environments. Dana Point Harbor's safety record speaks for itself; it is an extremely safe harbor. We do not need to eliminate slips, reduce access and narrow channels to chase guidelines that are not mandatory or warranted in this particular case.

Update sports fishing dock.

The sports fishing docks have already been replaced once since they were constructed. This project should provide for their eventual replacement. However, first it must be determined if their current use is consistent with the Coastal Development Permits. These docks were originally built as sports and commercial fishing docks. The boater guest docks were then rebuilt under an Executive Director Waiver that stipulated that the docks would not be repurposed. It would appear that they were repurposed by moving the Commercial Fishing and displacing one whole dock of the recreational boating guest slips in the East Basin.

Conclusion

We believe that there is valid, feasible alternative to the proposed project, and that alternatives 2 and 3 are "Red Herrings" designed to distract attention from that fact. To comply with CEQA's requirements, feasible alternatives must be considered, and the County has constructed their



P-63-7

P-63-8

alternatives 2 and 3 for the specific purpose of failing to meet enough objectives to be feasible. It is a clever construction to take the plan elements and simply eliminate different parts in each of them. But it makes the entire Draft SEIR invalid under CEQA.

↑  
P-63-8

We also believe that Community Alternative 4, as outlined above:

1. Is a feasible alternative that would accomplish the objectives of the project.
2. It produces a substantial reduction in the significant environmental impacts of the project.
3. It can be shown that there are no overriding "economic, social, or other conditions" that the County can claim make the alternative truly infeasible.

P-63-9

These are the requirements we believe should apply, and that the County needs to produce a new Draft SEIR which will pass the CEQA test.

We also need to point out Section 21151(c) of the Resources Code:

(c) If a nonelected decision-making body of a local lead agency certifies an environmental impact report, approves a negative declaration or mitigated negative declaration, or determines that a project is not subject to this division, that certification, approval, or determination may be appealed to the agency's elected decision-making body, if any.

P-63-10

We would hope that OC Dana Point Harbor does not take it upon itself to certify this report. We would like to see public hearings before the Orange County Planning Commission and the Orange County Board of Supervisors on the adequacy of any Draft SEIR prior to a vote by the elected Supervisors.

SECTION TWO

CEQA is intended to be a public process encouraging full involvement of the community affected. It is the Lead Agency's responsibility to insure full compliance with the Act. We believe that the Lead Agency has fallen far below this standard.

- 1) **Timely Submission and Piecemeal Community Planning.** The Initial Study Document was issued on November 27, 2007 approximately four years ago with a commitment by the Harbor Director that it would be through the CEQA process by the end of the following year. However, the Harbor Director put the process on hold to benefit the landside plan to clear detriment of the waterside development. The Coastal Commission has now granted the Harbor Director's request for the land side development which has boxed in many elements of the waterside development.

The most egregious element of this is the refusal of the Harbor Director to build out larger slips for the boating community in the East Anchorage. Multiple times he has reported out that there is not adequate parking in that area for slips. This is only true because the Harbor Director has instead chosen to take land away from boaters in the trailer launch ramp, dry boat storage area and shipyard and force the boating community into a smaller foot print. This is in direct contradiction of Section 50224 of the California Coastal Act.

P-63-11

As the Local Coastal Program granted to the City of Dana Point through the work and planning of the Harbor Director allow this to occur it also does not mandate that it happen this way. For example, the Harbor Director fought for and won the right to take an acre away from marine services but he does not have to do that. As the Harbor Director has chosen to pursue a piecemeal form of Community Planning we believe the only viable way for a meaningful CEQA evaluation of this SEIR to occur is if items approved during the LCPA process are allowed to be adjusted to allow for a meaningful evaluation of viable alternatives.

Building out a significant number of larger slips in the East Anchorage is viable. Finding enough parking for these additional slips near the East Anchorage is also viable. The Harbor Director must consider a plan that seriously evaluates this alternative even if it reduces available land for the lower priority visitor serving amenities (stores and restaurants).

- 2) **Scoping Meeting – poorly executed and out of date.** Had this 903 page document been issued in April 2008 as originally committed to by the Harbor Director, it is reasonable to believe that the public might have been able to deal with the sheer volume of material required to be reviewed. Instead the Harbor Director, despite formal requests, has only allowed 60 days to review what he and his teams have generated in four years. The Harbor Director had over 1400 days and the community was only able to get 60.

P-63-12

During the Scoping in December 2007, the Harbor Director treated the process as a political game and not a professional community planning activity. He encouraged



boaters to not speak during the meeting if another boater was making the same point. Yet he and his staff called around to supporters, boat brokers, restaurant and store owners, and consultants that work directly for him. He also asked East and West Basin Marina Operators Along with the General Manager of the Embarcadero to step to the podium to show support for the project. This is certainly not in the spirit of the Lead Agency's responsibilities.

P-63-12

3) CEQA law allows and encourages the developer/applicant to be meeting with interested parties during the drafting process. Boaters for Dana Point Harbor made it clear to the Harbor Director that we wish to be considered an interested party. Our desires to be recognized as such were acknowledge but we were never afforded the opportunity to meet with the Harbor Director or his staff on this topic. Why do we have such a massive undertaking met with unwillingness to have meaningful discussions with interested parties that are:

P-63-13

- a) clearly putting a lot of time and effort into this effort and
- b) trying to make it move forward as efficiently as possible?

4) Boater Focus Group – Not a healthy or acceptable public process. The Harbor Director carefully crafted the membership of this group such that at most meetings 50% of the participants were County Employees, Agents for the County or Consultants that work for the County. When the group challenged the appropriateness of all of these folks voting on the various options it was pointed out that they were all boaters too.

The Harbor Director stated that the information discussed at the meetings were to remain within the meetings and only with the participants. The Harbor Director subsequently claimed that it was the participants that requested this. However, this was never brought up at a meeting and discussed. We find this kind of rules particularly difficult when you are representing 1000's of boaters. Unless you have all of the boaters in the meeting it would seem that not allowing them to understand what is going on and obtaining their opinions to be the opposite of open and transparent. At one meeting a reporter for the Log newspaper tried to join but was not allowed to enter the room by a County Official. The reporter never tried to attend again.

P-63-14

The agenda was usually distributed at the beginning of the meeting making it impossible for people to prepare for the meeting in advance. Staff reports, drawings or white papers were not made available in advance of the meeting which would have allowed for proper review and meeting preparation. When members of the group did prepare documentation in advance it was not distributed and frequently not discussed.

The Harbor Director used this process to drive the LCPA and his proposal to eliminate up to three hundred slips. We feel the process needs to be re-started with proper representation for the boating community and properly run public meetings.

- 5) Harbor Director is dissuading members of the community from getting involved, submitting comments and studying the proposal in detail. As the person that is in charge of the Lead Agency on this project the conversations he is having with people unhappy about the plan and the quotes in the press are totally inappropriate and call into question the validity of the entire process.

From Voice of OC, Critics Call Proposed Dana Point Docks a Hazard to Swimmers 11/16/2011.

....Brad Gross, director of OC Dana Point Harbor, the agency that runs the marina, cautioned that officials are "a long ways away" from finalizing the plans.

Gross said the draft environmental impact report describes the "ultimate extreme" of the project for the environmental review process. "There will be ample opportunity" for public comment on the plans, he said.

"What ends up being built is usually different from what the document says," he added. ...

P-63-14

**Conclusion**

We believe that accuracy, openness, transparency, fairness and professional execution of an EIR is vital as it forms the foundation for the project. In this case there are so many problems with the way the OC Dana Point Harbor (Harbor Department) performed as Lead Agency that we believe that the County Board of Supervisors should consider assigning a different Lead Agency.

P-63-15

As we have articulated in Section One of this document there is at least one meaningful Alternative. We believe it would meet all of the project objectives while reducing the environmental impact. We hope that this alternative is given a fair and professional evaluation.

P-63-16

Boaters for Dana Point Harbor

November 21, 2011

OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

Re: DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT  
DANA POINT HARBOR MARINA IMPROVEMENT PROJECT  
SCH NO. 2003101142

This document is in response to the "Notice of Availability/Notice of Intent" issued on September 20, 2011 and the "Supplemental Notice of Availability" issued on October 27, 2011 by the County of Orange, OC Dana Point Harbor. These comments by Boaters for Dana Point Harbor address the Draft SEIR for the "Marina Improvement Project".

P-63-1

Boaters for Dana Point Harbor is a volunteer-based California Not-For-Profit Corporation that works to insure that recreational boating within Dana Point Harbor is preserved and protected to the full extent prescribed by California law.

In Section One we discuss the serious issue we have with the Draft SEIR and in Section Two we discuss the serious issues we have with the process being followed.

**SECTION ONE**

We believe that the Draft SEIR, while professionally prepared, fails to meet the requirements for such a document in the California Environmental Quality Act (CEQA)<sup>1</sup>. CEQA is designed, among other things, to

take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise.<sup>2</sup>

P-63-2

It further states (emphasis ours):

<sup>1</sup> California Public Resources Code § 21000 et seq.

<sup>2</sup> California Public Resources Code § 21001(b)

3/7

21002. The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

21002.1. In order to achieve the objectives set forth in Section 21002, the Legislature hereby finds and declares that the following policy shall apply to the use of environmental impact reports prepared pursuant to this division:

(a) The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.

(b) Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.

(c) If economic, social, or other conditions make it infeasible to mitigate one or more significant effects on the environment of a project, the project may nonetheless be carried out or approved at the discretion of a public agency if the project is otherwise permissible under applicable laws and regulations.

P-63-2

CEQA provides a definition of feasible:

"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.<sup>3</sup>

We believe that the County's Draft SEIR is fundamentally flawed, because it violates the requirements of Section 21002. Specifically, the requirement to consider alternatives which is so central to the CEQA process, does not allow the County to only generate alternatives which are "doomed to fail" by arbitrarily leaving out items required to meet the project's objectives.

In the Draft SEIR, there are 3 alternatives to the County's preferred project. The first of these is the "Do Nothing" alternative, which is included as a statutory requirement of CEQA. We believe this alternative has been correctly included, considered, and rejected.

However, alternatives 2 and 3 each have been carefully constructed to only include a portion of the necessary elements of the project, thereby being rejected for failing to meet the objectives.

P-63-3

<sup>3</sup> California Public Resources Code § 21061.1

These alternatives are no more than incomplete plans designed to allow the County to approve their project without a serious consideration of the "significant effects" mentioned in sections 21002 and 21002.1.

This is a fatal flaw for the entire Draft SEIR. There is no feasible alternative considered, and no comparison of the significant effects of such an alternative with the County's desire. We will propose such an alternative in some detail, and we suggest that the entire document needs to be reworked to consider whether our proposal is superior under CEQA to the County's.

P-63-3

The Problem with Alternatives 2 and 3

Alternatives 2 and 3 were carefully chosen to split up attractive features that, if included in a single alternative, would meet the CEQA tests for feasibility, a substantial reduction in the significant environmental impacts of the project, and that there are no overriding "economic, social, or other conditions" that the County can claim (in their discretion!) make the alternative truly infeasible.

- 1. Alternative 2 claims a loss of 155 slips, but that number is not tied to any design, and appears to be chosen simply as the minimum number the CCC might accept.
- 2. Alternative 2 also does not include redo of the marine services docks, or temporary docks (with conversion to permanent possible) for no obvious reason.
- 3. Alternative 2 does not include any alternative to the dry boat stack, again for no obvious reason and without any analysis of that possibility.
- 4. Alternative 3 does not include renovation of the East and West basins, including simple replacement as built (but with ADA), and includes all the items left out of Alternative 2.

P-63-4

Alternative 2 was rejected because it leaves out certain items, so it doesn't meet the project objectives. It's NOT defined to be reasonable, and thus isn't. This fails to meet the CEQA requirement, because there was no reason to leave those items out.

The same logic applies to Alternative 3, but with the included and left-out elements exchanged.

The conclusions stated for alternative 2 in the Draft SEIR are (emphases ours):

5.7.3 Attainment of Project Objectives  
 Alternative 2 would achieve most of the project objectives, but not to the same extent as the proposed project because this alternative would not improve the level of boater services at the Marine Services docks or provide ADA access at the OC Sailing and Events Center docks. In addition, under Alternative 2, the temporary dock would not be constructed, and therefore, the yacht broker slips would not be relocated to another area of the Harbor. Further, utility infrastructure would not be upgraded in all areas of the Marinas. The goals of the Dana Point Task

Force would be furthered, but not to the degree that would occur under the proposed project since this alternative does not include improvements, including ADA access, to all of the areas included in the proposed project.

So, if you don't include something, it won't be there. This remarkable fact is then the missing items that were used to reject the alternative, even though there was no reason stated as to why those things weren't included. The alternative was "Doomed to Fail!"

5.7.4 Conclusion

Compared to the proposed project, land use impacts are slightly greater for this alternative due to the lack of ADA access at a portion of the Harbor areas as compared to the proposed project. Construction-related geology, hazardous materials, hydrology/water quality, noise, and aesthetic impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor. However, operational impacts for these same topics would be similar to the proposed project.

Operational circulation and boat traffic impacts would be reduced as compared to the proposed project, due to the reduction in the number of slips as compared to the proposed project. However, with mitigation these impacts were less than significant for the proposed project. Operational impacts related to land use and recreational resources would be greater as compared the proposed project for this alternative.

This alternative would not avoid significant and adverse project-related impacts to construction and cumulative air quality effects or avoid significant and adverse cumulative construction noise in the project vicinity. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, this alternative would avoid the significant and adverse biological shading impacts as compared to the proposed project.<sup>4</sup>

So by leaving out a part of the project, as detailed above, the impact is lessened. But then, they don't meet the project objectives.

The conclusions stated for alternative 3 in the draft SEIR are (emphases ours):

5.8.4 Conclusion

Compared to the proposed project, land use impacts are slightly greater for Alternative 3 due to the lack of ADA access at a portion of the Harbor as compared to the proposed project. Construction related hydrology and water quality impacts would be fewer than those under the proposed project because construction activities would occur in fewer areas of the Harbor. However, operational water quality impacts would be similar to the proposed project. Because Alternative 3 does not include any renovations to the existing dock and slip facilities in the East and West Marinas, the number of slips would remain similar to existing conditions (2,409 slips), resulting in approximately 116 more slips than under the proposed project. Operational circulation impacts would therefore be greater than the proposed project, because the

<sup>4</sup> Draft SEIR, volume 1, page 5-18

P-63-4

P-63-5

number of slips would be greater, although with mitigation these impacts were less than significant for the proposed project. Construction-related traffic impacts would be reduced when compared to the proposed project. Aesthetic impacts related to construction would be less than the proposed project because construction would not occur in as many areas of the Harbor; long-term views would be similar to the proposed project. Impacts related to recreational resources both during construction and for long-term recreational opportunities would be fewer than under the proposed project. Impacts related to hazardous materials would be similar to the proposed project for this alternative.

This alternative would avoid significant and adverse project-related impacts to construction and cumulative air quality effects and cumulative construction noise in the project vicinity. Geology and soils impacts related to the existing liquefaction conditions would continue to exist, similar to the proposed project. However, this alternative would avoid the significant and adverse biological shading impacts as compared to the proposed project.<sup>5</sup>

On the basis of these conclusions, one might decide the alternatives were in fact better, yet they were rejected. This was because they were never designed to work! Alternative 3 is particularly egregious, because it doesn't even try to replace the crumbling marina docks. What were the objectives for the water-side development in this project?

Section 5.9 rejects all alternatives on the grounds that they don't meet project objectives.

The No Project/No Development Alternative would be environmentally superior to the proposed project on the basis of the physical impacts that would not occur with Alternative 1. ... However, none of the identified project objectives would be achieved with Alternative 1.<sup>6</sup>

This is certainly logical. However, the same method was used to reject the other alternatives, despite their attractiveness.

The Environmentally Superior Alternative, in terms of avoiding, reducing, or minimizing direct physical effects on the environment under short-term conditions, is Alternative 3, the Reduced Project with ADA Improvements. Besides construction of the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks, Alternative 3 does not include any renovations to the existing dock and slip facilities in the Harbor. By eliminating the replacement of docks throughout the Harbor, construction impacts under Alternative 3 would be significantly reduced in both scope and duration.

Alternative 3 meets only a few of the project objectives, such as satisfying ADA requirements for some dock areas. Other project objectives attained to a lesser extent include enhancing the level of

P-63-5

P-63-6

<sup>5</sup> Draft SEIR, volume 1, page 5-25

<sup>6</sup> Draft SEIR, volume 1, page 5-25

services for boaters and maintaining a safe environment for the boating community. Although several ADA gangways would be installed with this alternative, the benefits of renovating the dock facilities and bringing the Harbor into compliance with all DBW standards would not be achieved with Alternative 3.

...

However, as noted above, Alternative 3 would not achieve the project objectives except to provide ADA access in the East and West Basins and at the Embarcadero/Dry Boat Storage Staging docks, sport fishing docks, and guest docks.<sup>7</sup>

And so we reach the SEIR's major conclusion—if enough of the project is left out, it doesn't meet the objectives!

So why not get this right?

A Feasible Community Alternative – Number 4

For clarity and simplicity we describe Community Alternative 4 by articulating how it achieves each of the project's Objectives. At the highest level the County has stated these as (emphasis ours):

As described in Section 3.0, Project Description, the primary goals of the project are to revitalize the Harbor as a popular destination for boaters, local residents, and tourists while maintaining the **unique character of the Harbor**.

Dana Point Harbor for the last 35+ years has been a large Orange County Park housing over 3,000 boats and offering many low or no cost alternatives. With minimal commercial intensification, more than 2000 trees, view corridors, very low massing, very low building heights predominantly offset by majestic trees all of which creates a very **"unique character of the Harbor"**.

Hundreds of trees have already been eliminated, with more destined for removal as part of the revitalization. Also, significant massing, along with equally significant building heights, are planned that will in large part change the **unique character of the Harbor** to that of a modern urban feel from the existing recreational park atmosphere. These issues are partially out of scope for the Waterside SEIR, but are important as a back drop to insure that what happened landside does not propagate to the waterside.

Maintain the Harbor's overall current character and family atmosphere

Community Alternative 4 achieves this goal by not eliminating, to any significant extent, the affordability of boating, including the even more important no-or-low-cost recreational boating.

<sup>7</sup> Draft SEIR, volume 1, page 5-28

P-63-6

P-63-7



Minimal channel encroachment and no additional build out in front of Baby Beach will allow the bulk of the harbor's recreational water area to continue to be accessible.

Renovate and replace the deteriorating docks and slips

In 2006 the Harbor Director, the Lead Project Manager and the Lead Project Engineer made it clear to the community that our docks are beyond their serviceable life. Further it was pointed out that we were a "winter storm" away from some docks catastrophically failing. Any plan that does not include the rapid replacement of all docks (of 35 year vintage) should validly be rejected.

Community Alternative 4 will use existing financial resources (Funds Balance Available and significant positive cash flow from slip fees) to immediately begin replacing all docks in the harbor along with building out new, larger and permanent docks in the East Anchorage.

Satisfy ADA requirements for dock areas of the Harbor

With ADA for harbors now established, using Federal Law and coherent California Department of Boating and Waterways guidelines it is straight forward to calculate the impact (loss of slips) of implementing ADA access. As the total impact is expected to be on the order of 1%, the loss is readily mitigated by the permanent slips built out in the East Anchorage. This Alternative will implement ADA access per applicable guidelines and the law.

Maintain a full-service Harbor

The Harbor Department has modified this goal from what was originally passed by the Harbor Task Force under Supervisor Wilson. It should read: Maintain marine full-services in the Harbor. We believe that this was meant to include an affordability element as well and not just the absolute minimum using space from another minimized area. This would obviously include a marine chandlery and ample space for shipyard and Do-It-Yourself boat repair and maintenance. To this end Community Alternative 4 does not remove any of the waterside area in front of the existing Shipyard allocation (i.e., not the Harbor Director's planned reduced shipyard). Per the commitment to the Coastal Commission, additional Do-It-Yourself boat repair maintenance areas will be provided in accessible areas of the launch ramp and dry boat storage.

Enhance the level of services for boaters

During the life of this harbor the population in California has exploded with the most significant expansion impacts along the coastal regions. Recreational infrastructure has not come close to matching this growth. The Harbor Director's proposed project and alternatives would actually retract the level of service despite clear evidence of increased demand (wait list and ability to charge the highest slip fees in North America for a municipal marina). Boaters' level of service will be enhanced by expanding the number of larger boat docks (East Anchorage) and maintaining the existing number of dry boat storage locations (684).

Upgrade commercial fishing facilities

P-63-7

It is unclear what the intent of this goal is in light of the fact that it appears that the commercial fishing area was moved, without required permitting, from the Wharf area into recreational guest dock area in the east basin.

Maximize the number of slips available in the East and West Marinas for public rental by relocating many of the yacht broker slips to another area of the Harbor.

While this is a valid and important goal it is paired with inappropriate tactics. This improperly allows alternatives that meet the goal while being dismissed because it fails to be implemented in the way the Harbor Director specified. The goal is:

Maximize the number of slips available in the East and West Marinas for public rental.

Community Alternative 4 achieves this goal by replacing the slips exactly as they are today. This will allow for eventually zero slip loss while allowing the waterside community character to be maintained and replacement of all the worn out docks. Docks will maintain their existing dimensions and simply be replaced with new and more modern materials. While the Department of Boating and Waterways has updated their guidelines the operative word is "Guidelines", not "rules" or "laws". Some harbors have been revamped using these guidelines and resulted in the loss of hundreds of slips. Others have replaced their docks as they were originally constructed with no loss of slips and no negative environmental or safety consequences, including the ability to obtain grants and loans from the Department of Boating and Waterways.

P-63-7

Thus Community Alternative 4 in the East and West Basin will:

1. Replace all docks as they exist today (with correction for unpermitted Harbor Department Developments)
2. Maintain existing slip orientations including the West Basin
3. Continue utilization of all side tie and end tie locations
4. Continue 3' overhang allowance
5. Allow for minimal (multihull and beamier vessels) encroachment into the main channel

In the past we've seen and anticipate that the Harbor Director will be dismissive of Community Alternative 4 by simply stating that he fully intends to follow the letter of the Guidelines from the Department of Boating and Waterways. These state wide guidelines were developed to cover the entire state of California and hence covering a very broad range of berthing scenarios and prevailing conditions. We believe that each harbor and the conditions of each vary widely and should be viewed individually. Dana Point Harbor is an extremely well protected and sheltered harbor offering some of the more benign conditions in our state.

Relocate guests dock facilities and provide new dinghy docks convenient to Day-Use Commercial uses

What is the goal that this tactic is trying to address? Increase business for the stores and restaurants? Increased convenience for the tenant boaters to the stores and restaurants? Reduced parking requirements for the slips? The Harbor Director needs to state the goal and then articulate how his chosen approaches met the goal. Community Alternative 4 would build out

additional dinghy docks throughout the harbor increasing water based mobility and minimizing the need for movement of vehicles. Guest Docks in Dana Point Harbor are often rented out for long periods of time, up to 90 days. To claim that parking is not needed for Guest Docks is inconsistent with how they are used.

Upgrade utility infrastructure to all areas of the Marinas

Community Alternative 4 will replace and modernize all electric, cable, water, sewer and pump out facilities. These items will be sized to meet expected demand for the next 50 years. Sorely needed pump outs in the East Basin will be accomplished by the addition of a pump out on the permanent docks in the East Anchorage.

Maintain a safe environment for the boating community, Harbor users, and merchants

Community Alternative 4 offers significant benefits over the Harbor Directors plan. Community Alternative 4 does not build out slips in front of Baby Beach which will maintain the same high safety standards that we have today. It also does not significantly encroach into the main channel improving the safety of recreational vessels as well as human powered and day use vessels as they navigate the inner channel.

Provide improvements in accordance with DBW standards, including placing boats in appropriately sized slips

Again we would ask the Harbor Director to separate out his implementation plan from goals. As we've stated earlier the Department of Boating and Waterways standards are guidelines developed to cover the entire state of California and wildly varying harbors and local conditions. Dana Point Harbor is one of the most protected and benign environments. Dana Point Harbor's safety record speaks for itself; it is an extremely safe harbor. We do not need to eliminate slips, reduce access and narrow channels to chase guidelines that are not mandatory or warranted in this particular case.

Update sports fishing dock.

The sports fishing docks have already been replaced once since they were constructed. This project should provide for their eventual replacement. However, first it must be determined if their current use is consistent with the Coastal Development Permits. These docks were originally built as sports and commercial fishing docks. The boater guest docks were then rebuilt under an Executive Director Waiver that stipulated that the docks would not be repurposed. It would appear that they were repurposed by moving the Commercial Fishing and displacing one whole dock of the recreational boating guest slips in the East Basin.

Conclusion

We believe that there is valid, feasible alternative to the proposed project, and that alternatives 2 and 3 are "Red Herrings" designed to distract attention from that fact. To comply with CEQA's requirements, feasible alternatives must be considered, and the County has constructed their



P-63-7

P-63-8

alternatives 2 and 3 for the specific purpose of failing to meet enough objectives to be feasible. It is a clever construction to take the plan elements and simply eliminate different parts in each of them. But it makes the entire Draft SEIR invalid under CEQA.

↑  
P-63-8

We also believe that Community Alternative 4, as outlined above:

1. Is a feasible alternative that would accomplish the objectives of the project.
2. It produces a substantial reduction in the significant environmental impacts of the project.
3. It can be shown that there are no overriding "economic, social, or other conditions" that the County can claim make the alternative truly infeasible.

P-63-9

These are the requirements we believe should apply, and that the County needs to produce a new Draft SEIR which will pass the CEQA test.

We also need to point out Section 21151(c) of the Resources Code:

(c) If a nonelected decision-making body of a local lead agency certifies an environmental impact report, approves a negative declaration or mitigated negative declaration, or determines that a project is not subject to this division, that certification, approval, or determination may be appealed to the agency's elected decision-making body, if any.

P-63-10

We would hope that OC Dana Point Harbor does not take it upon itself to certify this report. We would like to see public hearings before the Orange County Planning Commission and the Orange County Board of Supervisors on the adequacy of any Draft SEIR prior to a vote by the elected Supervisors.

SECTION TWO

CEQA is intended to be a public process encouraging full involvement of the community affected. It is the Lead Agency's responsibility to insure full compliance with the Act. We believe that the Lead Agency has fallen far below this standard.

- 1) **Timely Submission and Piecemeal Community Planning.** The Initial Study Document was issued on November 27, 2007 approximately four years ago with a commitment by the Harbor Director that it would be through the CEQA process by the end of the following year. However, the Harbor Director put the process on hold to benefit the landside plan to clear detriment of the waterside development. The Coastal Commission has now granted the Harbor Director's request for the land side development which has boxed in many elements of the waterside development.

The most egregious element of this is the refusal of the Harbor Director to build out larger slips for the boating community in the East Anchorage. Multiple times he has reported out that there is not adequate parking in that area for slips. This is only true because the Harbor Director has instead chosen to take land away from boaters in the trailer launch ramp, dry boat storage area and shipyard and force the boating community into a smaller foot print. This is in direct contradiction of Section 50224 of the California Coastal Act.

P-63-11

As the Local Coastal Program granted to the City of Dana Point through the work and planning of the Harbor Director allow this to occur it also does not mandate that it happen this way. For example, the Harbor Director fought for and won the right to take an acre away from marine services but he does not have to do that. As the Harbor Director has chosen to pursue a piecemeal form of Community Planning we believe the only viable way for a meaningful CEQA evaluation of this SEIR to occur is if items approved during the LCPA process are allowed to be adjusted to allow for a meaningful evaluation of viable alternatives.

Building out a significant number of larger slips in the East Anchorage is viable. Finding enough parking for these additional slips near the East Anchorage is also viable. The Harbor Director must consider a plan that seriously evaluates this alternative even if it reduces available land for the lower priority visitor serving amenities (stores and restaurants).

- 2) **Scoping Meeting -- poorly executed and out of date.** Had this 903 page document been issued in April 2008 as originally committed to by the Harbor Director, it is reasonable to believe that the public might have been able to deal with the sheer volume of material required to be reviewed. Instead the Harbor Director, despite formal requests, has only allowed 60 days to review what he and his teams have generated in four years. The Harbor Director had over 1400 days and the community was only able to get 60.

P-63-12

During the Scoping in December 2007, the Harbor Director treated the process as a political game and not a professional community planning activity. He encouraged

boaters to not speak during the meeting if another boater was making the same point. Yet he and his staff called around to supporters, boat brokers, restaurant and store owners, and consultants that work directly for him. He also asked East and West Basin Marina Operators Along with the General Manager of the Embarcadero to step to the podium to show support for the project. This is certainly not in the spirit of the Lead Agency's responsibilities.

P-63-12

3) CEQA law allows and encourages the developer/applicant to be meeting with interested parties during the drafting process. Boaters for Dana Point Harbor made it clear to the Harbor Director that we wish to be considered an interested party. Our desires to be recognized as such were acknowledge but we were never afforded the opportunity to meet with the Harbor Director or his staff on this topic. Why do we have such a massive undertaking met with unwillingness to have meaningful discussions with interested parties that are:

P-63-13

- a) clearly putting a lot of time and effort into this effort and
- b) trying to make it move forward as efficiently as possible?

4) Boater Focus Group – Not a healthy or acceptable public process. The Harbor Director carefully crafted the membership of this group such that at most meetings 50% of the participants were County Employees, Agents for the County or Consultants that work for the County. When the group challenged the appropriateness of all of these folks voting on the various options it was pointed out that they were all boaters too.

The Harbor Director stated that the information discussed at the meetings were to remain within the meetings and only with the participants. The Harbor Director subsequently claimed that it was the participants that requested this. However, this was never brought up at a meeting and discussed. We find this kind of rules particularly difficult when you are representing 1000's of boaters. Unless you have all of the boaters in the meeting it would seem that not allowing them to understand what is going on and obtaining their opinions to be the opposite of open and transparent. At one meeting a reporter for the Log newspaper tried to join but was not allowed to enter the room by a County Official. The reporter never tried to attend again.

P-63-14

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The Harbor Director used this process to drive the LCPA and his proposal to eliminate up to three hundred slips. We feel the process needs to be re-started with proper representation for the boating community and properly run public meetings.

- 5) Harbor Director is dissuading members of the community from getting involved, submitting comments and studying the proposal in detail. As the person that is in charge of the Lead Agency on this project the conversations he is having with people unhappy about the plan and the quotes in the press are totally inappropriate and call into question the validity of the entire process.

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"What ends up being built is usually different from what the document says," he added. ...

P-63-14

**Conclusion**

We believe that accuracy, openness, transparency, fairness and professional execution of an EIR is vital as it forms the foundation for the project. In this case there are so many problems with the way the OC Dana Point Harbor (Harbor Department) performed as Lead Agency that we believe that the County Board of Supervisors should consider assigning a different Lead Agency.

P-63-15

As we have articulated in Section One of this document there is at least one meaningful Alternative. We believe it would meet all of the project objectives while reducing the environmental impact. We hope that this alternative is given a fair and professional evaluation.

P-63-16

P-64

Fax to: Dana Point Harbor Office  
 Fax #: 949-923-3792  
 Fax from: David and Audrey Zinke  
 Fax #: 626-332-1690  
 Date: November 21, 4:15 pm  
 Pages: 2  
 Memo: To Whom It May Concern,

We just received notice that today at 5 pm is the deadline to express our concerns about the proposed changes and updates to the Dana Point Marina. I am faxing this to you at 4:15 pm, to make the deadline.

P-64-1

First, we would like to go on record as saying that we are gravely concerned about the proposed lack of parking for boaters included in this proposal. As you know, parking is always at a premium in the boater lots on most weekends, let alone holidays. We see many of the local shop owners and restaurant employees using this lot, which further impacts the availability of spaces. PLEASE do not reduce parking for boaters, thus making it less attractive to keep our boat in your marina. We are dead-set against this change.

P-64-2

Secondly, we are concerned that boaters are financing the majority of the costs of this project, and yet the replacement of the slips and docks will be the last item finished. Thus, if the funds run out, possibly the replacing of the docks and slips will never be done. If the boaters are financing most of the project, then the replacement of the docks and slips needs to be done first.

P-64-3

Thirdly, we are against encroaching on the channel, which is already too narrow and dangerous with all the personal craft in the water. It is only a matter of time before someone on a paddle board is run over by a boat, because they fan out across the entire channel, along with canoes and kayaks. It has become very difficult to safely take our boat in and out of the harbor anymore, and we post someone out in front just to watch out for these people. There has to be a plan for a "lane" for these personal watercraft, before someone is killed, and making the channel more narrow will only exacerbate the problem.

P-64-4

Fourth, we are against eliminating the 3 foot overhang, which will force many boaters into more expensive slips.

P-64-5



P-64

Zinke, Page 2

Fifth, please do NOT strip the shipyard of any waterslide slips or land. They are already losing business to Newport because they are too small, and if you reduce what little they have they may ending up going out of business altogether.

P-64-6

We are also concerned when we hear rumors of harbor directors or county officials intimidating members of the public from speaking in opposition to this plan, or telling people that if they do not sign the Dana Point Harbor Now petitions they will not obtain their remodel. These strong-arm tactics should never be allowed in a diplomatic society, and only through honest and open discussion can progress be made that will benefit everyone. Special concern should be given to the boaters, without whom none of this would be possible.

P-64-7

Thank you for considering our concerns. We love keeping our boat in Dana Point Harbor, and waited 15 years for our slip. We would be hate to see "our" harbor become less friendly to boaters like us.

Sincerely,

David and Audrey Zinke  
Slip L-48 (East)

832 Easthills Drive  
West Covina, CA 91791  
626-966-7722

Regarding SEIR Dana Point Harbor,

As a boat owner with slip, a volunteer, and a member of a yacht club here in Dana Point I wish to express my opinions and fears over the revitalization of our harbor.

P-65-1

Foremost I want to clearly remind those making choices on this matter to remember this is a SAFE HARBOR first and a joy to the public is a marvelous result.

I will refer to the study by the Corps of Engineers and the model testing which occurred from June 1964 through February 1965 with regard to the Harbor Wave Action and Wave Dynamics Sections of the Hydraulics Division of the Waterways Experiment Station of the Army Corp of Engineers.

Suffice to say that extensive tests proved that Dana Point Harbor would be a stable and safe harbor. The entrance to the harbor was placed with regard to the safest entry during storms. Note this is not entry to eat at a restaurant. This is not entry to rent a kayak. This is not entry to buy at a gift shop. I implore you to understand that Dana Point Harbor with its unique consideration of SMALL CRAFT is the only safe place for a boater to enter during a Southern California Storm.

P-65-2

Entering at Oceanside is horrific during storms and high seas, as is Newport Beach Harbor. We at Dana Point must protect the intended use of this SAFE HARBOR. Dana Point Harbor is a small harbor. Cruising boaters rely upon it as they travel south.

Obviously the harbor can meet greater needs than for boats but please realize that once a change is made the effects will last forever. It is a harbor first!

With regard to birds: I read the report with interest as I note the number of birds at night and watch them feed. We are lucky to have the "non native" birds year round here in Dana Point.

P-65-3

With regard to noise: adding more slips near baby beach will surely have an effect on the noise heard by the residents on the cliff: When the county allowed teens to dance at the youth facility the residents were upset with the added noise. Currently activity at that end of the harbor diminishes after sunset. Baby Beach vacates with the setting sun.

P-65-4

I am against changing the slip configuration. It would result in more gates in the harbor... We have three gates on each side of the harbor on the West Side... when they close it is heard all over the dock can you imagine twice maybe three times the number of gates? Up against the headlands the sound reverberates.

P-65-5

The thought of narrowing the channel is terrifying to me. I own a "vintage vessel" (I am in process of having it declared a historical vessel). If the channel is narrowed I will not be able to turn into my slip. You see, my 1934 wooden vessel, design # 28 a

P-65-6

one of a kind vessel (page 50 of "The Best of the Best" Olin Stephens designs) has an offset prop. I need every bit of channel to turn this boat!

I believe that Dana Point is proud of its Ocean Institute, tall Ships and Maritime Education. I thought we with unique wooden boats would be supported. The narrowing of the channel would affect me greatly.

R S Kellogg, who commissioned my boat in New York, spoke in Congress during Roosevelt's office. He wrote the Bill to form our National Forests. They became our National Parks. He was keenly involved in conservation. Surely my boat deserves to get into her slip as much as a new plastic boat.

Again with regard to narrowing the Channel, our Christmas parade could not continue. It was suggested by our Harbor Leaders that every boat would hire a professional captain. Now I could not suggest that being a professional captain would secure the safety of our boat parade.....

In reading the original LUP/IP I noted that there were indeed specified areas of public use for our Harbor. I do believe that these uses cannot be removed.

Sea Scouts have been a huge part of this harbor since its inception. We are extremely lucky to have such a large Ship. The youth graduating from this program have gone on to be impressive citizens. I think that it is unique that many have chosen to follow the motto of "where we go one - we go all". Many have chosen "helping professions". The program insists upon volunteer hours. Please note these are high school age students. To do anything which would deter this program would be a travesty!

Moving the slips for the Scouts would mean that their vessels would not have a place. Our Sea Scout vessels are too long to fit into the sized slip configuration intended for them in your new plan. How is that allowable?

I am still appalled that parking was removed without a vote and given to kayak racks and small vessels. The sad part was that this was done for increased revenue- this storage was empty most of the time. I do have pictures with dates if I need to present them. I thought that any changes to a harbor that removed/decreased public access would require a permit or at least passage by the Coastal Commission.

I realize that there are many points to my letter and I do hope you have time to consider them.

In closing:

I fear the increased pollution that more boats with larger engines will produce.

I fear the end of a small harbor, as it becomes another tourist trap.



P-65-6

P-65-7

P-65-8

P-65-9

P-65-10

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I fear that conservation will not be a priority.  
I fear that our harbor will lose its beauty to increase revenue to replace badly managed funds.  
I fear that boaters unfamiliar with our harbor will not be able to maneuver as they seek safety.

What is next? Remove the fog horn as it does not pulse in the beat of a disco band?  
How sad to write in favor of safety, of the intended use of a harbor and for the rights of "boats" and "Baby Beach".

April Salem and family  
Jennifer Salem, Chelsea Salem, Michelle Salem and Alyssa Salem (all voting adults)



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P-65-10

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I wanted to inform you that I have signed this petition to express my disagreement to the Harbor's proposed development in front-of and adjacent to Baby Beach.

I am part of a new program here at CHOC, in affiliation with Miracles for Kids, where each summer, our patients participate in a "Stand up Paddle Camp" at Baby Beach. Our patients have beat cancer and able to spend a day at the beach to celebrate their health and life by engaging in beach activities with other cancer survivors. This is a great location due to the flat water, small crowds and being close to the Ocean Institute, allows the patient's to further their education on oceanography. It concerns me that the plan will bring powerboats closer to the designated area for our recreational activities. With this expansion, it will make it difficult to continue the program since this is the ideal and safest place in Orange County.

P-66-1

P-66-2

I encourage you to reverse your decision to privatize the docks.

Sincerely,  
Kristin M. Hawking, MSW  
Pediatric Oncology Social Worker







November 21, 2011

VIA EMAIL AND U.S. MAIL

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Re: Comments to the Draft Subsequent Environmental Impact Report

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report (SEIR or Report) for the Dana Point Harbor Revitalization Project (Project). We write today on behalf of the Save Baby Beach Coalition to comment on the proposed development in the vicinity of Baby Beach, pursuant to the California Environmental Quality Act (CEQA).

**INTRODUCTION**

Save Baby Beach Coalition (Coalition) is a broad citizens group that opposes the planned development adjacent to Baby Beach, OC Sailing and Events Center (OCSEC), and the waters surrounding that area (including parts of the West Basin, Educational Basin, and Planning Area 8 as described in the SEIR). Our coalition represents the general public that uses the area of Baby Beach, including locals and visitors from afar. At present the Coalition includes concerned citizens and partner organizations that total in the thousands and together wish to voice opposition over the plans to make substantial and impactful changes to key areas in Dana Point Harbor. These changes include privatizing docks that are now used for public services; impacting the environment within the Educational Basin (or Basin) and the children's swimming area; relocating sailboats and powerboats even closer to the only designated area for bathers and other recreational activities in the harbor; and installing a septic waste pump-out station yards away from a children's play area and beach. All of these and many others shall be noted in this letter in response to the SEIR's proposed design that curtails public access, impacts the environment, and diminishes the enjoyment of the recreational area at Baby Beach and the Basin.

While members of our group will provide individual feedback through their comment letters or through the Save Baby Beach petition, the Coalition will provide its individual comment via this letter to summarize the collective issues and concerns with the proposed design. These issues and comments that follow were identified and researched through many working groups, webinars, emails, phone calls and face to face meetings over the last 60 days.

P-68-1

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

We are convinced that much of the concerns and deficiencies in the Draft SEIR could have been avoided had broader public participation been practiced - as recommended by the CEQA process. We conclude from the current controversy that the focus groups and meetings that the County claimed were used in the preparation of the SEIR, did not include a representative cross section of the public (i.e. users of the Basin and Baby Beach) or the input provided did not represent or serve in the best interest of the public - unless the input, concerns, and feedback provided at these meetings were summarily dismissed.

P-68-1

**A. DEVELOPMENT PROPOSED AT BABY BEACH IS IN CONFLICT WITH THE CALIFORNIA COASTAL ACT**

The draft SEIR involves development activities in the coastal zone and appears that the proposed development at the Basin is inconsistent with the policies and regulations as set forth by the California Coastal Act (the Coastal Act). We cite the following inconsistencies with sections of the Coastal Act:

Section 30116 requires protection of sensitive coastal resources areas that are of vital sensitivity, include areas of significant recreational value, are highly scenic, and provide recreational opportunities for low and moderate income persons. Further, the California Coastal Commission's handbook on recreational beaches throughout California identifies Baby Beach as a small stillwater swimming beach in Dana Point Harbor. Yet the proposed development and changes, however, do not protect but instead diminish the resource and are inconsistent with the Coastal Act.

Section 30210 requires access consistent with improved recreational opportunities for all people and protects the public's right to access these natural resource areas. Yet the proposed development at the Basin will reduce recreational opportunities and limit public access to the Basin's resources.

P-68-2

Section 30211 mandates protection of the public's right to access the sea and prohibits interference with such access. Yet implementing the proposed dock, that will be positioned 15-20 feet from the water's edge at low tide, will restrict the public's access to the open Basin by over 20%.

Section 30212 requires that new development shall not block or impede public access due to a seaward encroachment by a structure. Yet the proposed docks will all result in seaward encroachment of swimmers and human powered watercraft.

Section 30212.5 requires that public facilities are appropriately distributed to prevent overcrowding or overused by the public. Yet the proposed development will force the public to overuse other parts of the beach and increase the density of that area.

Section 30220 requires protection of water-oriented activities and clear water-oriented recreational activities. Yet the proposed development severely impacts all water-oriented activities at Baby Beach.

Section 30221 requires protection of waterfront land for public recreational uses. Yet the proposed design restricts recreation, reduces the ability for the health-conscious public to use the Basin as before, and forces the public to seek other alternatives.

P-68-2

Section 30233 requires that any project that may impact sediments and nutrients be evaluated fully to ensure that the proposed alternative is the least environmentally damaging. Yet the proposed alternative is likely to change and diminish water flow patterns leading to environmental harm and decreased water quality within the Basin.

P-68-3

Section 30240 requires protection of environmentally sensitive habitats against any significant disruption. Yet expanding the docks into the Basin will substantially degrade the Basin's habitat. This includes increased shadowing of eelgrass, grounding of moored boats on the shoal at low tide, and increasing the frequency of dredging in the area.

P-68-4

Section 30250 requires protection of visitor-serving facilities. Yet due to the limited area on the sandy beach, the development does exactly the opposite, in fact requiring the public to be relocated to other areas due to access, safety, and facility overcrowding.

P-68-5

Section 30251 requires protection of scenic and visual qualities of coastal areas considered as a resource of public importance. Yet the proposed design will impact the highly scenic area of Baby Beach and substantially reduces scenic value and views of the ocean and other natural features within the Basin.

P-68-6

Section 30252 requires protection of public access including providing adequate parking or overload of nearby coastal recreational areas. Yet increasing demand and decreased parking options resulting from the conversion of a portion of OCSEC to private slips will reduce public parking to the area. Further, transportation for a distant parking area is not viable when kayaks, standup paddleboards, outrigger canoes, and other recreational watercraft are involved as the transport would not feasibly accommodate these vessels.

P-68-7

In summary, the goals of the Coastal Act are to preserve, expand, and broaden public access along the coast; maximize recreation opportunities consistent with conservation, and protect and restore scenic and visual qualities that may be affected by development. We conclude from the proposed design at the Basin that many of these policies have not been met and recommend improved public involvement in finding a better alternative that a) aligns with the Coastal Act, and b) meets the environmental, public access, and recreational interests of the community.

**B. THE SEIR IMPROPERLY PIECEMEALS THE PROJECT AND FAILS TO PROVIDE ADEQUATE CUMULATIVE IMPACT ANALYSIS**

The original FEIR #591 states that the Project will be broken up into separate components or phases. Phase One, the basis of the original FEIR of 2006, is essentially for the landside development and provides environmental analysis of the proposed revitalization. Phase Two was programmed to cover the remaining landside and waterside development and related revitalization.

P-68-8

We are concerned that the Project has been subdivided into separate phases and argue that separating the Project into phases and generating separate and discrete impact reports that do not tie together to show cumulative effect violates the CEQA prohibition against improper segmentation or piecemealing of environmental review for a project. The use of separate and independent processes to determine the environmental impact across the entire Harbor Revitalization Project - especially where the two sides (water and land) are so closely aligned - is inconsistent with the reality of that the Project is significantly interconnected and we believe each subsequent report should be measured against the whole rather than separately. A few obvious examples include cumulative impacts of parking, traffic, capacity, visual, public access, safety, and habitat.

Moreover, we believe in its present form the SEIR is extremely difficult to evaluate the cumulative environmental impact across the Project. In sections where the SEIR addresses cumulative impact, the impact was generally the specific waterside construction and typically answered by a mechanical "cut-and-paste" fashion claiming the potential cumulative effect is limited, less than significant, and requires little to no mitigation - claims that contradict the list of impacts that are highlighted in this reports and voiced by the community as a whole.

This is exactly why CEQA prohibits concealing the environmental consequences of a project by separately focusing on isolated parts and overlooking the cumulative effect of the whole action. Another impediment was not having the FEIR available online or at any of the local public libraries listed in the SEIR Public Notice announcement. Reviewers had to go to Dana Point Planning Department to find a copy of the FEIR. When comparing the two side-by-side (FEIR and SEIR) we believe the County neither demonstrated the cumulative Project level environmental impact nor properly addressed the cumulative impact within the phase. It is our opinion that an improper piecemeal approach has been used; and that the Reports are disjointed and (perhaps by design) difficult to assess the environmental impact of the entire Project. We believe there is a lack of substantive and project-level cumulative analysis within the SEIR in its present form. We therefore conclude that the Project is in violation of CEQA Guidelines section 15161, which requires examination of impacts across all phases.

**C. THE CEQA REQUIRED PROCESS AND ACTIONS TAKEN BY THE LEAD AGENCY IS FLAWED AND DISCOURAGES PUBLIC COMMENT**

The initial time period provided for Public Comment was only 45 days and due to the complexity of the report and negative effect the Project would have on public access and the environment, we requested an extension owed to unusual circumstances as provided by Section 15105(a) of the CEQA regulations. We believed the request for extending the review period to January 1, 2012 was fair and reasonable and would help ensure and further encourage the right of the public to review the Project material. Especially when reviewers had their review tasks made more difficult by having to download and traverse across 23 separate SEIR PDF documents (totally over 900 pages) while trying to compare these sections against the original FEIR (which was not made unavailable online or at the public libraries). Despite various requests for a longer Public Comment period owing to the circumstances, the County responded with a 15 day extension, setting the deadline to November 21, 2011.

P-68-8

P-68-9

We are also concerned that in contrast to CEQA policies, the County acted to discourage public comment. We were informed by a number of citizens and key stakeholders, including high-profile lessees of the harbor, boaters and other impacted persons and organizations, that prior to and after the SEIR was released for public comment, OC Dana Point Harbor personnel contacted them to claim that the Project design is conceptual and suggested that the development proposed at the Basin is likely not to be funded or developed and people need not be concerned. This type of message can and does reduce the motivation to comment on the SEIR.

The County's practices are inconsistent with the CEQA process of encouraging public feedback. On November 16, 2011, the *Voice of OC* news agency published the following:

*"Brad Gross, director of OC Dana Point Harbor, the agency that runs the marina, cautioned that officials are 'a long ways away' from finalizing the plans. Gross said the draft environmental impact report describes the 'ultimate extreme' of the project for the environmental review process. 'There will be ample opportunity' for public comment on the plans, he said. 'What ends up being built is usually different from what the document says,' he added."*

P-68-10

We believe the County is not working in good faith to encourage public comment through their statements claiming: *do not be concerned* and *what ends up getting built will be different than what is in the SEIR*. This last statement is especially egregious as building something different from what the EIR describes, is a violation of CEQA and illustrates a "bait and switch" approach to public disclosure. CEQA provides a system of checks and balances for assessing environmental impact and it seems inconsistent that the County would choose a design, go through great expense to analyze and document it in official documents, and yet already suggest that what will be built shall be different.

Whatever approaches the County considers appropriate and lawful, the Coalition is resolute in its support of the public's authority to provide comment (CEQA Guidelines Section 15044) on the Environmental Impact Report and that this right should be encouraged, alternatives should be consistent with what will be built, and that the public be involved throughout as required by CEQA.

**D. THE SEIR'S ANALYSIS IS INADEQUATE AND INCONSISTENT WITH THE HISTORICAL AND CURRENT USE OF BABY BEACH AND THE BASIN**

The SEIR does not include environmental and construction history of Dana Point Harbor – from the start of development in the 1960s to the enclosure of the harbor, to present day – vital information to better assess the Project's cumulative impact. We request the SEIR include the historical development and impacts of development of the Harbor and Educational Basin to better evaluate if the proposed development and current and future uses of the Basin will not be impacted as required by the Coastal Act. We recommend that the Report include the history of impacts and assess the pressures of further reducing open space and its true impact to the environment and public access within the Basin.

P-68-11

The report is inadequate in providing substantive impact to the public's opportunities for accessing water oriented recreational uses at Baby Beach and the Educational Basin. A "cut-and-paste" determination of "no impact" isn't credible. To credibly analyze the impact, we recommend a comprehensive public-use survey of Baby Beach and the Educational Basin to evaluate the appropriateness of the proposed alternative and the potential impacts.

P-68-12

Further, the Report claims that the proposed development will not change existing uses within or adjacent to the Project site. We dispute this assertion as it will divide the established uses, and significantly disrupt access and recreation through the physical construction of docks in the Educational Basin.

**E. THE SEIR'S PLAN AND ALTERNATIVES ARE NOT OPTIMAL AND A BETTER ALTERNATIVE SHOULD BE FOUND**

The SEIR's design process appears flawed, impactful and prejudicial given that the proposed solution is driven by the goal of increasing average boat slip sizes at the harbor rather than seeking the least environmentally impactful alternative. Consequently, the proposed design pushes the public docks to the Educational Basin, and in their wake, privatizes docks – currently used by OCSEC, Sea Scouts, local colleges, low-cost public services, and educational boating programs – seemingly to increase revenue and ensure sufficient reconfigured slips are offered to accommodate the demand.

The Report fails to adequately discuss the impact of each of the alternatives, and provides the reviewer no basis in determining the environmentally preferred alternative. While not a CEQA requirement, it is difficult for a reviewer to assess which alternative is less impactful unless comparative data is provided. Consequently, the alternative options proposed can not be properly evaluated for impact, compliance, or viability.

P-68-13

In contrast to the proposed list of alternatives, the Coalition believes a hybrid approach could be worked out that would be considerably less impactful on the Basin and Baby Beach. The Coalition would be in favor of collaborating in a working group environment, professionally facilitated with the intent to find workable solutions and common ground. We stand ready to work closely with the County to identify a more compliant alternative. For the County to approve the present SEIR without substantial changes to the proposed development for the Basin would be disappointing and unfortunate.

**F. THE SEIR FAILS TO DESCRIBE THE FULL AND LONG-TERM IMPACT OF CONSTRUCTION ON THE ENVIRONMENT OF THE BASIN**

The SEIR fails to properly describe the impact of construction to traffic and public access in the area of the Educational Basin and defers this analysis to the Construction Management Planning phase. While the SEIR claims that that surveys will be done before and after construction, to properly assess environmental impact, the Report should contain reasonable impact analysis rather than further piecemealing the analysis across the yet-to-be-defined timeline and milestone of the Project.

P-68-14

The Report fails to properly define the true impact during the construction period concerning pylon installation, noise, safety, parking, water pollution, public access and impact on habitat. Clearly, significant environmental impacts will occur and proper analysis must be done, including assessing how silting and dredging may impact water quality and movement during and after construction and how tidal flows and runoff will decrease water quality - resulting in increased beach closures, silting, and consequential dredging. All of which will negatively effect the environmental and public access of the area.

P-68-14

The Report fails to accurately report the present situation of the aquatic environment in the proposed development of the Basin. Recently, volunteers conducted an unofficial under-water survey of existing aquatic plants and concluded higher-than-reported habitat that contrasts with the analysis in the SEIR that claims the impact as minimal. In a "cut-and-paste" fashion, the Report claims that impact from the construction and development would not substantially impact the area and generally suggests that no mitigation will be needed.

P-68-15

Knowing that development will be phased over the next decade or more and that a long-drawn out development has substantial cumulative effect, it is recommended that the Report also contain a timeline of the development (across phases) to better assess the impact on the environment. This timeline and temporal impact analysis is important to assess a more accurate environmental impact over time and cumulative effect across the entire project and timing of the specific impact.

**G. THE SEIR FAILS TO DESCRIBE THE IMPACT TO PUBLIC ACCESS, RECREATIONAL AND EDUCATIONAL OPPORTUNITIES**

The SEIR fails to properly analyze current and future traffic congestion and parking issues as related to the partial privatization of the OCSEC docks, relocation of the outrigger and kayak storage facilities, and its impact to public access during the development of the proposed dock in the Basin.

The reviewers believe the methodology for assessing parking requirements for Baby Beach and the Educational Basin may be flawed in that it uses a per-square-foot formula, which isn't consistent with the multiple uses in the area, such as launching human-powered watercraft, families picnicking, or other beach activities. Our conclusion is that no credible parking analysis or method was used to determine parking demand as a means to encourage and ensure open and accessible public access.

P-68-16

Reducing access points to open water at Baby Beach will result in the restriction of access and usage of human-powered watercraft. Proposed docks will limit access to the water and lead to higher water-traffic density. A future consequence of this density could result in safety concerns and lead to a potential regulation restricting human powered watercraft within Dana Point Harbor and enforced by the Harbor Patrol.

P-68-17

The Report sites a vessel traffic study that was conducted in 2007, yet over the last 4 years substantial changes in traffic has occurred due to the growth and adoption of human powered watercraft as a percentage of total vessel traffic. The traffic study is outdated, lacks

P-68-18

key data in the analysis, and consequently does not provide credible evidence that the development will have no impact on recreation. The traffic study does not reflect the current state of traffic and a more accurate and current study must be included in the Report.

P-68-18

We also wish to site incremental changes being done by the OC Dana Point Harbor as they relate to the shifting location of Baby Beach swimming area. Users of Baby Beach have observed that buoys are being progressively moved westward. Questions arise as to the purpose of these moves and the potential impact to access of the Basin. Evidence of buoy movement over the last 8 years is available on Google Maps using Historical Views. This ongoing trend of moving the swimming area leads users to wonder why the Harbor is repositioning the swimming area and whether it has something to do with the pending new construction of the docks or planned changes in access, usage and vessel traffic.

P-68-19

#### **H. THE SEIR FAILS TO IDENTIFY BABY BEACH AND THE EDUCATIONAL BASIN AS AN IMPORTANT CULTURAL AND PUBLIC RESOURCES**

The SEIR fails to show the impact to public-use to ensure that the proposed development does not degrade natural and cultural resources or the public use experience. The impact to further encroachment of public access and recreation in favor of private slips in our opinion would degrade user experience as well as our cultural and public resource.

The Report identifies Baby Beach and the Basin as “insignificant cultural resources” and is not properly evaluated as such in the SEIR. The Coalition argues against this and believes – as provided by CEQA Section 5024.1 – that Baby Beach has all the characteristics of being historically significant and should be treated accordingly. Moreover, we seek to ensure the proposed development maximizes public access to this resource and provides this recreational resource in a fair and equal treatment, irrespective of culture or incomes; and that open access to Baby Beach and the Basin is maintained for all future generations.

P-68-20

#### **I. THE SEIR FAILS TO RECOGNIZE THE SENSITIVE HABITAT THAT EXISTS AT BABY BEACH AND EDUCATIONAL BASIN**

The SEIR fails to analyze the impact of the proposed dock configuration to biological life (eelgrass, fishes, invertebrates, etc). The Report should include analysis of the effects of dock shadowing, maintenance and repair, reduction of habitat, geological effects, air quality impacts, tidal action, tidal and runoff flow changes, habitat impact when moored boat keels hit the bottom, and future dredging of the Basin. We feel the Report should better assess the impact of the proposed construction and eventual operation on the Basin’s habitat. Yet, the Report claims the development will have minimal impact - we disagree with this assertion.

P-68-21

The Report fails to accurately document the present habitat that exists in the proposed area of construction at the Educational Basin. To a layperson, there clearly exists the potential of significant disruption of the sensitive habitat that exists within the Educational Basin. Eelgrass and other biological life are critical to improved water conditions and health of a habitat. We conclude that the impact and possible mitigation of valuable marine resources, such as eelgrass, is not properly and accurately addressed in the SEIR.

#### **SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*



The Report fails to provide how the proposed dock will impact future habitat and its compliance with Coastal Act and the Federal Endangered Species Act. The Report claims that the plan is to decrease nearly 33,000 square feet of dock systems claiming increased waterfowl, endangered species and seabird foraging habitat. However, this claim is inconsistent with the Project plans that show the channel narrowed and development at the Basin. We suggest providing a calculation of true habitat area instead of concluding that reducing square feet of docks increases habitat — especially when the average slip is proposed to be longer and wider.

P-68-22

The Report states that biological surveys of sensitive species were conducted in 2005, February 2007, and June 2010. We believe the timing and method was flawed in that they did not take into account the following: a) that habitat was negatively impacted by higher water pollution and preexisting anoxic conditions; and b) that substantial sand was recently deposited during a 2009 dredging operation in the area. Since the surveys were done when the habitat experienced or was experiencing a harsh environment, the analysis would incorrectly conclude that habitat would not be impacted because few sensitive species were observed.

P-68-23

We also noted that the surveys were not conducted at optimal growth period of aquatic plants (where growth is at their greatest) nor documented that the survey may have been impacted by pollution and dredging. We believe that these surveys improperly concluded that low number of plants and species was the norm and that construction would have minimal impact to habitat and biological species. We recommend that the analysis be revisited given that we observed increased habitat development and growth of protected species, including eelgrass, as observed by a young SCUBA diver and constituent of the Coalition.

The Report fails to provide analysis on how the proposed docks will impact wildlife (fish, invertebrates, water fowl, and other species) and compare the impact against the alternatives being considered. We recommend that the Report include more information on the effect of shadowing, dredging, and moored vessels will have on the Basin. Biodiversity and the ecological integrity of the Educational Basin is necessary and irreplaceable; and it's clear the Basin supports many species that are important to marine and land-based ecosystems (including to the public that fishes off the adjacent pier). We strongly recommend that care be taken to not devalue the biodiversity of the Basin in order to justify the development.

**J. THE SEIR FAILS TO ACCURATELY IDENTIFY THE SAFETY ISSUES THAT THE PROPOSED DEVELOPMENT MAY HAVE ON THE BASIN**

The SEIR does not adequately address the safety and traffic hazard issues of the proposed docks into the Basin and bringing vessels closer to people resulting in increased safety issues since vessels located in this area would be piloted by students.

The Report fails to adequately address the impact to public services and emergency response should there be accidents or fire along the area of the proposed dock. For example, if there is a fuel fire or battery explosion on a vessel that results in a serious injury, the design would make it difficult for fire, police and/or ambulance personnel to safely and promptly respond (by land or water) due to the dock's design.

P-68-24

In light of the recent tsunami and its considerable impact within the harbor, a new look at the hydrology safety issues specific to tsunami events needs to be conducted and included in the Report as well as its affect on the proposed dock. This concern along with extremes in tidal surges, earthquakes, storms, high winds, and extreme wave events should all be analyzed to better articulate the cumulative safety issues of the proposed dock design in the Basin.

P-68-25

**K. THE SEIR FAILS TO ACCURATELY ANALYZE THE IMPACT TO WATER QUALITY OF THE PROPOSED CONSTRUCTION**

The SEIR fails to analyze the impact if an accident or failure of the septic pump-out station planned to be installed within close proximity of Baby Beach. The Report does not provide safety and historical record of spillage and mitigation plans in case of an accidental failure or spill. Further, due to the proximity of the pump stations near Baby Beach, the Report does not appear to raise this as a viable concern nor mitigation even with the station's proximity to a public beach and potential impact of a spill to public health.

P-68-26

The Report does not adequately address how the proposed development will effect the Basin's water quality during active storm water discharge when taking into account the proposed dock and moored boats, the potential for erosion, sedimentation, increased pollutants, decreased water visibility, and impact to sensitive habitat. It appears rather obvious that when the docks are installed, Basin tidal and runoff flows will change and slow down, which will result in decreased water quality and increased health hazards.

P-68-27

**L. THE SEIR FAILS TO ACCURATELY ANALYZE THE VISUAL AND AESTHETICAL IMPACTS OF THE PROPOSED CONSTRUCTION**

The SEIR omits the visual impact of the proposed docks and associated moored boats. The Report provides no characterization of the true visual impact including graphics to determine the aesthetical impact to the proposed development once built. Recommend that revisions include before/after views of development in alternative angles and locations. Without the such illustrations, a reviewer would find it difficult to confirm that the project meets Coastal Act and CEQA guidelines for mitigating visual impact.

P-68-28

The Report fails to provide impact analysis of possible electrical or lighting provided at the proposed docks. We believe a variety of reasons, it would seem likely that the docks may include lights and electricity, yet the Report does not address possible visual and lighting impact to neighbors, habitat and safety.

We believe that it would have been appropriate during the Public Comment period that on-site markers or buoys of the proposed dock could have been installed to help the public better confirm the visual impact. It is recommended that the area be marked to ensure the public has appropriate visual tools to assess the total impact the development may have to the community prior to a pubic hearing. A physical staking of the proposed design, possibly to include moored boats as well as computer-generated representations (including viewshed analyses) would more accurately and faithfully demonstrate visual and aesthetic impacts.

P-68-29

**M. THE SEIR FAILS TO ADEQUATELY ASSESS THE PROJECT'S HEALTH, SOCIAL, AND ECONOMIC IMPACTS**

Human health implications of the need for active recreation are profound. Baby Beach provides people with a place to be active through swimming, paddling, kayaking, volleyball, paddle ball, and walks along the water. Most know regular physical activity is associated with enhanced health and reduced risk for all-cause mortality, including heart disease, diabetes, hypertension, and cancer. A recreational sport such as Standup Paddling has tremendous social and personal values and when combined with that industry's annual growth rate, it's easy to see that the demand for paddling and human-powered watercraft will continue to grow for many decades to come. Restricting public access to recreational uses of the Basin will have considerable health impacts to the population that depend on harbor for regular exercise.

P-68-30

The SEIR does not properly address the social implications of slip expansion and new dock construction designed to meet a requirement for higher-average boat sizes at the harbor, an expansion that will result in reducing public access for many users of the basin. Consequently, harbor recreational opportunities continue to flow in the direction of high-income individuals and lead to discriminatory access and land use.

The SEIR fails to provide appropriate economic reasoning and empirical analysis of the downside effect of the proposed development at Baby Beach and the Educational Basin. Recreational economic experts provide considerable evidence that there is measureable and quantifiable value to recreation. Consequently, a community can experience a greater economic loss when access to a recreational area is reduced. These losses are reflected in reductions of sales of goods and services felt by local businesses. This is further exacerbated when the reduction is from frequent and habitual visitors to the area, as would be the case with users of Baby Beach that use it regularly for recreation and exercise. As summarized in the Southern California Beach Valuation report, June 2006, beach use leads to broad beneficial economic benefits. On the other hand, when a beach is closed or access limited, the impact is considerable to the local businesses. Our belief is that the relationship of spending (direct and indirect) by the users of Baby Beach and the effect of limiting access to that area could would have a considerably negative economic consequence to the businesses located within the City of Dana Point and Dana Point Harbor. We recommend including appropriate economic analysis in the SEIR to properly show impact of the proposed development.

P-68-31

**SUMMARY**

In conclusion, we hope that OC Dana Point Harbor takes into consideration our comments, recognizes the importance of our concerns, and seeks to addresses these failures, inaccuracies, and incomplete information with the goal of reducing negative outcomes of the proposed development. Clearly, the public has taken great interest and will closely follow the County's response to all comments and recommendations. In its present form, the Project fails to comply with CEQA and the Coastal Act as the collective and cumulative impacts to the environment and public access - both direct and indirect - appears substantial.

P-68-32

Further, we are frustrated with how the Project has been broken up into discrete parts (phases) and believe the present alternative would result in considerable cumulative negative impacts; and because they are segregated, proper and project level analysis is lacking when comparing landside and waterside development. Cumulative impact is necessary and, at present, inadequate. The SEIR must provide for this analysis because at present the public and governmental decision makers are not able to fully realize the "big picture" environmental consequences of the proposed development. An important environmental lesson from past projects is that cumulative damage occurs incrementally after construction of all phases is complete. This is where accidents, failures, or environmental impacts are startling when finally viewed in its totality. Unfortunately, this cumulative analysis is more often performed postmortem and consequently too late.

P-68-32

We believe the Report neither adequately nor appropriately addressed the concerns at the Basin and look forward to discussing alternatives where the deficiencies outlined may be addressed. It is with confidence that the community will continue to address these issues, focused on public access and environmental concerns impacting the Basin during each opportunity for public involvement including working groups, additional public comments, the OC Planning Commission, Board of Supervisors and California Coastal Commission.

Save Baby Beach Coalition and its constituents stand united to preserve Baby Beach and the Educational Basin and related healthy amenities for future generations. We are willing and able to assist the Dana Point Harbor Revitalization Project in meeting the required standards as set forth by the Coastal Act and CEQA. Finally, we will be resolute in our mission to ensure public access is assured and that future projects mitigate or minimize historically impactful development at Dana Point Harbor.

Save Baby Beach!



Paul Sampedro  
Dana Point, California

CC:

Patricia C. Bates, Supervisor, 5<sup>th</sup> District, OC Board of Supervisors  
Kyle Butterwick, Director, Community Development, City of Dana Point

Attachments:

- A. Save Baby Beach Petition Signature Report
- B. Save Baby Beach Petition Comments Report

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

**ATTACHMENT A**

To: Brad Gross, Director, OC Dana Point Harbor  
Cc: Patricia Bates, Supervisor, 5th District County of Orange  
Subject: Save Baby Beach and minimize impact to public access and the environment

Dear Mr. Gross,

I have signed this petition to express my opposition to the Harbor's proposed development in front-of and adjacent to Baby Beach as shown in the Environmental Impact Report (EIR) provided for public comment. I understand and support the revitalization of the harbor, but not at the expense of one of the only safe, family-friendly recreation spots in the county.

OC Dana Point Harbor's proposed expansion will negatively impact the safe environment within the Educational Basin by severely limiting access to human-powered crafts that have launched from the Baby Beach for decades and forcing them to compete for space with the children's swimming area. The plan also will bring powerboats even closer to the only designated area for bathers and other recreational activities. Moreover, the potential risks of placing of a waste pump-out station yards from a children's play area. All of these will impact public access, the fragile biodiversity of the basin, and the recreational nature of area.

As part of the local community and visitors from far and wide that see the benefit of keeping Baby Beach and the Educational Facilities free of any development that blocks public access, I encourage you to do the right thing: reverse your decision to privatize the docks used by the community for education, maintain a safer distance of the pump-out stations from bathers, and eliminate the plans to expand docks in and around Baby Beach. The claims in the EIR concerning this development appear to be inconsistent and inadequate as written given the impact this development clearly would have to the public and environment.

Sincerely,

*Digitally Signed*

The petition and community signatures were gathered using the following site:  
[www.change.org/savebabybeach](http://www.change.org/savebabybeach)

As of 11/21/2011 3:00PM = 615 signatures

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

## Signatures

Name	Location	Date
Paul Sampedro	Dana Point, CA	11/02/2011
Renee Sampedro	Dana Point, CA	11/02/2011
Lukas Martinelli	Pleasant Hill, CA	11/02/2011
Carlee Trent	Springfield, OH	11/03/2011
Jaime Fernandez	Jacksonville, FL	11/03/2011
Jon Spinac	New York, NY	11/03/2011
Rob Rojas	Orange County, CA	11/03/2011
Ellaine Lurie-Janicki	West Haven, CT	11/03/2011
Manya Clark	San Clemente, CA	11/03/2011
Ketarah Shaffer	Laguna Hills, CA	11/03/2011
Stephanie Pratt	New York, AL	11/03/2011
Kathy Blue	San Clemente, CA	11/03/2011
Laurie Sudol	Clarkdale, AZ	11/03/2011
Eunjee Chong	Austin, TX	11/03/2011
JiYoung Chung	Korea	11/03/2011
Jody Connors	Laguna Niguel, CA	11/03/2011
Terri Leetch	Tulare, CA	11/03/2011
Ben Eligio	Yorba Linda, CA	11/03/2011
Julie Johnson	Moses Lake, WA	11/03/2011
Russel Greene	San Clemente, CA	11/03/2011
Aprille Harris	Laguna Niguel, CA	11/03/2011
Cyndie Kontoes	Capo Beach, CA	11/03/2011

P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Jean Palmer	Hopkinton, RI	11/03/2011
Billy Kho	Huntington Beach, CA	11/03/2011
Michele Mercer	Casa Grande, AZ	11/03/2011
Kristin Thomas	Laguna Beach, CA	11/03/2011
Valerie Rhodes	Laguna Niguel, CA	11/03/2011
Zofia K	Los Angeles, CA	11/03/2011
Margaret Bolin	Sheridan, WY	11/03/2011
John Jansen	San Clemente, CA	11/03/2011
Todd Metzger	San Clemente, CA	11/03/2011
Eric Harrington	San Clemente, CA	11/03/2011
kris del prado	Dana Point, CA	11/03/2011
Margaret Rigsby	Hazel Green, AL	11/03/2011
Pamylle Greinke	Peconic, NY	11/03/2011
Andrea Nemec	Osijek, Croatia	11/03/2011
Christian Rodriguez	Deerfield Beach, FL	11/03/2011
Paul Zacharias	Coronado, CA	11/03/2011
John Marks	Carlsbad, CA	11/03/2011
Deborah Sisley	Dana Point, CA	11/03/2011
Janine Conners	Dana Point, CA	11/03/2011
Yasiu Kruszynski	Chicago, IL	11/02/2011
John Miller	Portland, OR	11/02/2011
Julie Goldman	Chesterfield, MO	11/02/2011
Judith Abel	Basel, Switzerland	11/02/2011
Kristy Mitchell	Stephenville, TX	11/02/2011

P-68-34

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*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Julie McFarland	El Paso, TX	11/03/2011
Lena Rehberger	Grebenhain, Germany	11/03/2011
Josh Alfonso	Deerfield Beach, FL	11/03/2011
Nicole Weber	Pasadena, MD	11/03/2011
Cristi Sturgill	Mount Vernon, KY	11/03/2011
Paul Haider	Chicago, IL	11/03/2011
Mike Antone	Buckeye, AZ	11/03/2011
Lilo Prinz	Au/ZH, AL	11/03/2011
Jake wolfhart	Capitan, NM	11/03/2011
Simona Blazyte	Klaipeda, Lithuania	11/03/2011
Elisabeth Bechmann	St. Pölten, Austria	11/03/2011
Jackie Tryggeseth	Sauk City, WI	11/03/2011
Delliana Ofthesea	Manitou Springs, CO	11/03/2011
Ryan Bradley	Greenbelt, MD	11/03/2011
Deborah Shillam	Keighley, United Kingdom	11/03/2011
Melina Pellini	Dana Point, CA	11/04/2011
Theodore Spachidakis	Piraeus, Greece	11/04/2011
Cynthia Fletcher	Laguna Beach, CA	11/04/2011
Anne Galvan	Dana Point, CA	11/04/2011
Andie Johnson	Dana Point, CA	11/04/2011
Roland Denzel	Rancho Santa Margarita, CA	11/04/2011
Jill Vickery	Irvine, CA	11/04/2011
James Sponagle	Capistrano Beach, CA	11/04/2011
Jody Payne	Dana Point, CA	11/04/2011



P-68-34

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*A Citizen's Coalition for Public Access and Environmental Protection*



Name	Location	Date
Diane McCarthy	Mission Viejo, CA	11/04/2011
Janice Brittain	Dana Point, CA	11/04/2011
Patrick Dinon	Dana Point, CA	11/04/2011
Heather Heinz	Laguna Beach, CA	11/04/2011
Ginny Schirripa	Claremont, CA	11/04/2011
Bobbie Caraway	Dana Point, CA	11/04/2011
John Richard Young	Norristown, PA	11/04/2011
Tom Johnson	Dana Point, CA	11/04/2011
Scott Gold	Irvine, CA	11/04/2011
Christine Butnik	Dana Point, CA	11/04/2011
Peter Freeman	Laguna Beach, CA	11/04/2011
Tim Till	Huntington Beach, CA	11/04/2011
John Massey	San Clemente, CA, CA	11/04/2011
Mary Ellen Brown	Scottsdale, AZ	11/04/2011
Brenda Sabin	Laguna Beach, CA	11/04/2011
Michael Mauri	San Clemente, CA	11/04/2011
Gregory Eansor	Laguna Niguel, CA	11/04/2011
Jim Cody	San Clemente, CA	11/04/2011
Thomas Shahinian	San Clemente, CA	11/04/2011
John Goodman	Santa Barbara, CA	11/04/2011
Terri Plunkett	San Clemente, CA	11/04/2011
Matthew Lindauer	Orange, CA	11/04/2011
Nicole Heintz	San Clemente, CA	11/04/2011
Kim Fix	Laguna Niguel, CA	11/04/2011



P-68-34

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*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Barbara Holcomb	Huntington Beach, CA	11/04/2011
Jennifer Schirripa	Claremont, CA	11/04/2011
Heather Kaese	Mission Viejo, CA	11/04/2011
L Eleanor Finney	Laguna Niguel, AL	11/04/2011
Matt Till	San Clemente, CA	11/04/2011
Helena Cannady	Aliso Viejo, CA	11/04/2011
John Simonich	San Clemente, CA	11/04/2011
Vicki Boone	mission viejo, CA	11/04/2011
Tom Thomas	San Juan Capistrano, CA	11/04/2011
Noele Kerr	Dana Point, CA	11/04/2011
James M Nordlund	Fargo, ND	11/04/2011
Dean Kaese	Mission Viejo, CA	11/04/2011
Melissa Campbell	San Clemente, CA	11/04/2011
Brendan White	Capistrano Beach, CA	11/04/2011
Cindee Moskos	Trabuco Canyon, CA	11/04/2011
Kelly Bond	San Diego, CA	11/04/2011
Jason J Green	Spotsylvania, VA	11/04/2011
Steve Smithy	San Clemente, CA	11/05/2011
Clarence Yoshikane	Newport Beach, CA	11/05/2011
Nicole von Gierke	Laguna Niguel, CA	11/05/2011
Michael Clarke	Vancouver, Canada	11/05/2011
Vivian Willis	Aliso Viejo, CA	11/05/2011
Rob Hoopengartner	San Clemente, CA	11/05/2011
Julie Martinez	Laguna Niguel, CA	11/05/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Edward Laurson	Denver, CO	11/06/2011
Diana Ferreira	Paços de Ferreira, Portugal	11/06/2011
Emily Barker	Port Hueneme, CA	11/06/2011
Charla McNeff	Mission Viejo, CA	11/06/2011
James Fletcher	Laguna Beach, CA	11/06/2011
Vanessa Knox	San Clemente, CA	11/06/2011
Tony Sampedro	Emeryville, CA	11/06/2011
Carey Strombotne	Laguna Beach, CA	11/06/2011
Shirley Campbell	San Clemente, CA	11/06/2011
Steven Sachse	Dana Point, CA	11/06/2011
Journ Galvan	Dana Point, CA	11/06/2011
Jenny Dowdall	San Clemente, CA	11/06/2011
Dede Smith	Pasadena, CA	11/06/2011
Melanie Wygal	Dana Point, CA	11/06/2011
Jack Wygal	Dana Point, CA	11/06/2011
Sheri Jones	Laguna Hills, CA	11/06/2011
Poly Zweigle	Laguna Hills, CA	11/06/2011
Kristen Osterfeld	Trabuco Canyon, CA	11/06/2011
Brian Kummer	San Clemente, CA	11/06/2011
Chantal Buslot	Hasselt, Belgium	11/06/2011
Stefanie Lamar	San Clemente, CA	11/06/2011
Sandy Gilman	San Clemente, CA	11/06/2011
Michael Skelly	Dana Point, CA	11/06/2011
Karen Cornella	Laguna Niguel, CA	11/06/2011



P-68-34

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*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Taylor Smith	Santa Ana, CA	11/07/2011
Kathleen Wetzel	Laguna Niguel, CA	11/07/2011
Jacqueline Price	San Juan Capistrano, CA	11/07/2011
Kim Dwnison	Newport Beach, CA	11/07/2011
David Echelberger	San Clemente, CA	11/07/2011
Katie Fenelli	Aliso Viejo, CA	11/07/2011
Carol Ris	Laguna Niguel, CA	11/07/2011
Scott Crum	Laguna Niguel, CA	11/07/2011
Jill Wittenberg	COTO DE CAZA, CA	11/07/2011
Margie Fenelli	Laguna Hills, CA	11/07/2011
Ingrid Nilsen	Laguna Niguel, CA	11/07/2011
Wilfred Nilsen	Laguna Niguel, CA	11/07/2011
Leah Fetah	Laguna Niguel, CA	11/07/2011
Ben Leetch	Fresno, CA	11/07/2011
Pullyard Fontaine	Tampa, FL	11/07/2011
Chris Becker	Wilmington, DE	11/07/2011
Stephen Anderson	Huntington Beach, CA	11/07/2011
April Armijo	Aliso Viejo, CA	11/07/2011
Ruth Fassett	San Clemente, CA	11/07/2011
Amber Perez	Queen Creek, AZ	11/07/2011
Michael Steele	Morrice, MI	11/07/2011
Melinda Wells	Laguna Niguel, CA	11/07/2011
Treacy Halvorsen	Coto de Caza, CA	11/07/2011
Michael Fereday	Dana Point, CA	11/07/2011



P-68-34

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*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Irving Halvorsen	Huntington Beach, CA	11/08/2011
Mike Muir	Dana Point, CA	11/08/2011
Jenn Baker	San Clemente, CA	11/08/2011
John Clark	San Clemente, CA	11/08/2011
Lisa Klasky	Rancho Santa Margarita, CA	11/08/2011
Chuck MacGregor	Dana Point, CA	11/08/2011
Alleanna Clark	San Clemente, CA	11/08/2011
Paul newman	Rancho Santa Margarita, CA	11/09/2011
Lincoln Phipps	Los Angeles, CA	11/09/2011
Lisa Raneri	Dana Point, CA	11/09/2011
Bridget Pickett	Los Angeles, CA	11/09/2011
Angela Lopez	San Juan Capistrano, CA	11/09/2011
Nick Macedo	Mission Viejo, CA	11/10/2011
David Gibbs	San Clemente, CA	11/10/2011
Julie Harvey	San Clemente, CA	11/10/2011
Jeff Vasquez	San Juan Capistrano, CA	11/10/2011
Nick Scheel	San Clemente, CA	11/10/2011
Mike Macali	Lake Forest, CA	11/10/2011
Susan Cavallo	Smithtown, NY	11/10/2011
Barrett Tester	Silverado, CA	11/11/2011
Larry Vickery	Irvine, CA	11/11/2011
Michael Gaskins	Irvine, CA	11/11/2011
Tracie Mckray	Dana Point, CA	11/11/2011
Mary Ruppert	Laguna Niguel, CA	11/11/2011



P-68-34

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*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Maria F.	Verona, Italy	11/11/2011
Keri Norton	San Juan Capistrano, CA	11/12/2011
Dan Murphy	Dana Point, CA	11/12/2011
Rick Tonsing	Fair Oaks, CA	11/12/2011
Becky Lambert	Victoria, Canada	11/12/2011
Kane Johnson	Rancho Santa Margarita, CA	11/12/2011
Cynthia Barrier	Riverside, CA	11/12/2011
Ora Underwood	Johnson City, TN	11/12/2011
James Walker	Janesville, WI	11/13/2011
Jacqueline Wetzel	Laguna Niguel, CA	11/13/2011
Matthew Sussman	Laguna Niguel, CA	11/13/2011
Kohl Thorlakson	Laguna Niguel, CA	11/13/2011
Genny Burchfield	Redondo Beach, CA	11/13/2011
Jeffrey Johnson	San Clemente, CA	11/13/2011
Amanda Graham	Costa Mesa, CA	11/13/2011
Renee Cox	San Clemente, CA	11/13/2011
Dennis Schroeder	Pensacola, FL	11/13/2011
Jim McPhillips	Capistrano Beach, CA	11/13/2011
Terry Welker	Riverside, CA	11/13/2011
Chip Lavigne	Laguna Niguel, CA	11/13/2011
Derek Dillahunt	Laguna Niguel, CA	11/13/2011
Jennifer Jenkins	Mission Viejo, CA	11/13/2011
Evan Frolov	San Juan Capistrano, CA	11/13/2011
Noel Peake	Capistrano Beach, CA	11/13/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Andrew Hart	San Clemente, CA	11/13/2011
Amber Adams	Dushore, PA	11/13/2011
Andrew Garg-Meyer	San Juan Capistrano, CA	11/13/2011
Edward Gillest	Laguna Niguel, CA, CA	11/13/2011
Robert Hart	San Clemente, CA	11/13/2011
Kay Watt	San Clemente, CA	11/13/2011
Wally Emory	san clemenete, CA	11/14/2011
James Talay	Mission Viejo, CA	11/14/2011
Lane Daigle	Mission Viejo, CA	11/14/2011
Craig Christy	Irvine, CA	11/14/2011
Amy Fitzgerald	Dana Point, CA	11/14/2011
Danielle Vitelli	San Clemente, CA	11/14/2011
Shawna Williams	San Juan Capistrano, CA	11/14/2011
Steve Serafino	Dana Point, CA	11/14/2011
Alexandra Block	sjc, CA	11/14/2011
Fred Ogrim	Mooresville, NC	11/14/2011
Brooke Browne	Dana Point, CA	11/14/2011
Linda Ewing	San Clemente, CA	11/14/2011
Angela Ogrim	Mooresville, NC	11/14/2011
Christine Fisher	Dana Point, CA	11/15/2011
Michelle Page	San Clemente, CA	11/15/2011
Connor Rhodes	Laguna Niguel, CA	11/15/2011
Keaton Smith	Laguna Niguel, CA	11/15/2011
Keaton Moody	Dana Point, CA	11/15/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Donnie Dumain	Costa Mesa, CA	11/15/2011
Matthew Buggert	Dana Point, CA	11/15/2011
Michael Agricola	Las Vegas, NV	11/15/2011
Lora Agricola	Las Vegas, NV	11/15/2011
James Rosen	San Clemente, CA	11/15/2011
Wade Williford	La Jolla, CA	11/15/2011
James Heller	San Juan Capistrano, CA	11/15/2011
Brittany Adam	Lexington, KY	11/15/2011
Cortland Brailsford	Dana Point, CA	11/15/2011
April Fisher	Capistrano Beach, CA	11/15/2011
Michael Mickesh	el toro, CA	11/15/2011
Erin Emory	Capo beach, CA	11/15/2011
Kirsten Kane	Irvine, CA	11/15/2011
Lynn Ellis	Knoxville, TN	11/15/2011
Emily Sun	Laguna Niguel, CA	11/15/2011
Susan White	San Clemente, CA	11/15/2011
Barbara Ward	San Juan Capistrano, CA	11/15/2011
Gary Larson	Dana Point, CA	11/16/2011
Chad Dumain	Costa Mesa, CA	11/16/2011
Jon Monaco	San Clemente, CA	11/16/2011
Cameron Kee	San Clemente, CA	11/16/2011
Mark Heffner	Dana Point, CA	11/16/2011
Travis Tandy	Capistrano Beach, CA	11/16/2011
Alison Battit	Petaluma, CA	11/16/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*



Name	Location	Date
Brian Wheeler	San Juan Capistrano, CA	11/16/2011
Thai Chau	Menifee, CA	11/16/2011
Cheri Koelsche	San Clemente, CA	11/16/2011
Carter McCoy	Santa Cruz, CA	11/16/2011
Nora Barson	San Juan Capistrano, CA	11/16/2011
Miriam MacAllister	Half Moon Bay, CA	11/16/2011
Courtney Tanner	San Clemente, CA	11/16/2011
Yvonne Galvez	Mission Viejo, CA	11/16/2011
Brandon Rambo	San Clemente, CA	11/16/2011
Jerrold Buggert	Dana Point, CA	11/16/2011
Cynthia McKee	Laguna Beach, CA	11/16/2011
Mark Pighini	Laguna Niguel, CA	11/16/2011
Melissa Karl	Aliso Viejo, CA	11/16/2011
Christopher Bilcheck	Laguna Beach, CA	11/16/2011
Domenic Sarzotti	San Dimas, CA	11/16/2011
Lens Pranajaya	Capistrano Beach, CA	11/16/2011
Jesse Pascoe	Rancho Cucamonga, CA	11/16/2011
Randall Gonzalez	Claremont, CA	11/16/2011
Aaron Schwartz	Portland, OR	11/16/2011
Lisa Banks	San Clemente, CA	11/17/2011
Carolyn Pelkey	Capistrano Beach, CA	11/17/2011
Sandi Sheehy	Dana Point, CA	11/17/2011
Marcus Sheehy	Dana Point, CA	11/17/2011
Cody Quirarte	Dana Point, CA	11/17/2011

P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
John Stirling	San Clemente, CA	11/17/2011
Caren Thompson	Dana Point, CA	11/17/2011
Rosemary Brown	DANA POINT, CA	11/17/2011
Eric Groos	San Juan Cap, CA	11/17/2011
Chuck Patterson	Dana Point, CA	11/17/2011
Dennie Hahn	San Juan Capistrano, CA	11/17/2011
Erin Mundy	Laguna Niguel, CA	11/17/2011
Cindy Cunha	Lake Forest, CA	11/17/2011
Mike Nelson	San Clemente, CA	11/17/2011
Carmela Arstill	Carlsbad, CA	11/17/2011
A Raish	Lake Forest, CA	11/17/2011
Deb Johnston	Huntington Beach, CA	11/17/2011
Sylvia G Ramirez	Carlsbad, CA	11/17/2011
Brad Rambo	San Clemente, CA	11/17/2011
Tracee Stanley	Topanga, CA	11/17/2011
Bruce Brunson	Henderson, NV	11/17/2011
Patrick Guillermo	North Las Vegas, NV	11/17/2011
Pat Boyle	Mission Viejo, CA	11/17/2011
Mickey Munoz	Capistrano Beach, CA	11/17/2011
Rod Giacomini	San Clemente, CA	11/17/2011
Bob Gauthier	Dana Point, CA	11/17/2011
Clay Miller	Dana Point, CA	11/17/2011
Paula Laskelle	San Clemente, CA	11/17/2011
Anne Prestridge	San Clemente, CA	11/17/2011

P-68-34

Name	Location	Date
Bill Prestridge	San Clemente, CA	11/17/2011
Barbara Wehan	Dana Point, CA	11/17/2011
Trinity Miller	Dana Point, CA	11/17/2011
Elizabeth Palmer	San Clemente, CA	11/17/2011
Brian Haag	Laguna Niguel, CA	11/17/2011
Cindy Muir	Dana Point, CA	11/17/2011
Diane Schmitt	San Clemente, CA	11/17/2011
Brian Smith	San Clemente, CA	11/17/2011
Jenny Dowdall	San Clemente, CA	11/17/2011
Brandi Baksic	San Clemente, CA	11/17/2011
Drew Mouacdie	Laguna Niguel, CA	11/17/2011
Cindy Mouacdie	Laguna Niguel, CA	11/17/2011
Mark Stavron	Capo Bch, CA	11/17/2011
Andrew Mencinsky	Carlsbad, CA	11/17/2011
Rhoda Johnston	Killcare Heights, AU	11/17/2011
David Kitchens	Henderson, NV	11/17/2011
Kim DeFries	Laguna Niguel, CA	11/17/2011
Richard Lee	Long Branch, NJ	11/18/2011
Alex Johnston	Henderson, NV	11/18/2011
Becki Kolander	San Juan Capistrano, CA	11/18/2011
Madeleine and Bob Spear	Mission Viejo, CA	11/18/2011
Nicholas Flores	Boulder, CO	11/18/2011
Evan Macphee	San Juan Capistrano, CA	11/18/2011
Mike Eisert	Dana Point, CA	11/18/2011

P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Stephen Hill	San Clemente, CA	11/18/2011
Molly Sun	Brunswick, ME	11/18/2011
Erica Vinson	Denver, CO	11/18/2011
Patsy Gibbs	Biloxi, MS	11/18/2011
Olivia Hassinger	San Juan Capistrano, CA	11/18/2011
Jacqueline Brassard	Tustin, CA	11/18/2011
Sandra Luhrsen	Pearland, TX	11/19/2011
William Balog	Saucier, MS	11/19/2011
Mary Jane Johnson	San Clemente, CA	11/19/2011
Carolann Mashouf	Laguna Niguel, CA	11/19/2011
Ray Sharp	Dana Point, CA	11/19/2011
Jackie Brown	San Clemente, CA	11/19/2011
Sheral Sly	Laguna Niguel, CA	11/19/2011
Darren Mallabon	Dana Point, CA	11/19/2011
Kate Mallabon	Dana Point, CA	11/19/2011
Dennis Curran	San Clemente, CA	11/19/2011
Tracy Van Wie	San Clemente, CA	11/19/2011
Melanie Hirth	Laguna Niguel, CA	11/19/2011
Luis Nevarez	Laguna Niguel, CA	11/19/2011
Denise Kacura	San Clemente, CA	11/19/2011
Susan Compton	Dana Point, CA	11/19/2011
Paul Galvez	Mission Viejo, CA	11/19/2011
William Kindel	San Clemente, CA	11/19/2011
Lori Davis	San Clemente, CA	11/19/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Clete Dadian	Henderson, NV	11/19/2011
Jennifer Holcomb	Dana Point, CA	11/19/2011
Maggie Gibson	San Juan Capistrano, CA	11/19/2011
Clare Whitcher	San Clemente, CA	11/19/2011
Steven Foster	Capistrano Beach, CA	11/19/2011
Robert Rumph	San Clemente, CA	11/19/2011
Rick Lake	Mission Viejo, CA	11/19/2011
Jennifer Peat	Mission Viejo, CA	11/19/2011
Deborah Galvez	San Gabriel, CA	11/19/2011
Scott Sanchez	Dana Point, CA	11/19/2011
Shannon Harshman	Dana Point, CA	11/19/2011
Amber Blanchette	Laguna Niguel, CA	11/19/2011
Patti Diener	Dana Point, CA	11/19/2011
Frances Gerry	Fullerton, CA	11/19/2011
Sandy Hatch	San Clemente, CA	11/19/2011
Denny Michael	Dana Point, CA	11/19/2011
David Fitzgibbons	Costa Mesa, CA	11/19/2011
Dana Galasso	San Clemente, CA	11/19/2011
Sylvia Hilliard	Rowland Heights, CA	11/19/2011
Reina Harry	Dana Point, CA	11/19/2011
Jennifer Humboldt	San Juan Capistrano, CA	11/19/2011
Martiza Beck	Dana Point, CA	11/19/2011
James Beck	Dana Point, CA	11/19/2011
Jason Muir	Dana Point, CA	11/19/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Tove Sieger	San Clemente, CA	11/19/2011
J. Spady	Dana Point, CA	11/19/2011
Zoltan Seewald	Santa Ana, CA	11/19/2011
Lynda Regan	San Juan Capistrano, CA	11/19/2011
Cheryl Regan	San Juan Capistrano, CA	11/19/2011
Mary Fowler	Cathedral, CA	11/19/2011
Sherry Bauer	San Clemente, CA	11/20/2011
Debbie Rodriguez	Huntington Beach, CA	11/20/2011
Bob Conors	Yucca Valley, CA	11/20/2011
Jill Stafford	San Juan Capistrano, CA	11/20/2011
Erich Krueck	Dana Point, CA	11/20/2011
Leeann Colloty	Grand Junction, CO	11/20/2011
Nancy Lynn	Dana Point, CA	11/20/2011
Georgia Candoli	San Clemente, CA	11/20/2011
Katherine George	Colorado Springs, CO	11/20/2011
Kathryn Arons	San Clemente, CA	11/20/2011
Tracy Drifill	Galesburg, IL	11/20/2011
Lis DuBois	San Jose, CA	11/20/2011
Jack Garland	Capistrano Beach, CA	11/20/2011
Sara Schroer	Laguna Niguel, CA	11/20/2011
Tyler Huff	San Diego, CA	11/20/2011
Jan Garland	Capistrano Beach, CA	11/20/2011
Bryn DuBois	Dana Point, CA	11/20/2011
Karl Ring	San Juan Capistrano, CA	11/20/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Louay Toma	Laguna Niguel, CA	11/20/2011
Karen Boudreaux	Freeport, FL	11/20/2011
Tom Stephenson	Escondido, CA	11/20/2011
Helen Eligio	Yorba Linda, CA	11/20/2011
Candy Apple	Woodland Hills, CA	11/20/2011
Geannette devre	Dana Point, CA	11/20/2011
Mike Roberts	Costa Mesa, CA	11/20/2011
Christina Kreg	Dana Point, CA	11/20/2011
Kate Bredthauer	Dana Point, CA	11/20/2011
Micah Kreg	Dana Point, CA	11/20/2011
Mandy McDonnell	Newport Beach, CA	11/20/2011
Suzie Graf	San Clemente, CA	11/20/2011
David Boehne	Dana Point, CA	11/20/2011
Tess Graf	San Clemente, CA	11/20/2011
Bruce Carlisle	San Clemente, CA	11/20/2011
Max Graf	San Clemente, CA	11/20/2011
Lisa Rosen	San Juan Capistrano, CA	11/20/2011
Erik Nordskog	Woodland Hills, CA	11/20/2011
Lisa Neff	San Clemente, CA	11/20/2011
Johnston Niemela	Mission Viejo, CA	11/20/2011
Carolyn Banh	Benicia, CA	11/20/2011
Dan Hackett	Aliso Viejo, CA	11/20/2011
Amanda McKay	Dana Point, CA	11/20/2011
Russell Thompson	Mission Viejo, CA	11/20/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Michael Rauber	Coronado, CA	11/20/2011
Julie Roach	Maitland, FL	11/20/2011
Haley Asturias	Ladera Ranch, CA	11/20/2011
Gerald Moysa	San Juan Capistrano, CA	11/20/2011
Rafal Dobrowolski	San Diego, CA	11/20/2011
Judy Mendoza	Phoenix, AZ	11/20/2011
Ricky Simon	Dana Point, CA	11/20/2011
Betsy Fiel	san jose, CA	11/20/2011
Michael Copping	Clearwater, FL	11/20/2011
John Meffert	Avalon, CA	11/20/2011
Joanne Koppel	Rancho Cordova, CA	11/20/2011
Jamie Louie	San Clemente, CA	11/20/2011
Jackson Roach	Maitland, FL	11/20/2011
David Lester	San Clemente, CA	11/20/2011
Dave Wetzel	Laguna Niguel, CA	11/20/2011
Steve Hops	San Clemente, CA	11/20/2011
Jennifer Miller	Orange, CA	11/20/2011
Stacie Tanner	Mammoth Lakes, CA	11/20/2011
Heidi Flynn	San Clemente, CA	11/20/2011
Julie Mackie	Mission Viejo, CA	11/20/2011
Sherry Popovich	San Clemente, CA	11/20/2011
Dale Melden	Modesto, CA	11/20/2011
Ray Call	Mission Viejo, CA	11/20/2011
Deborah Rooth	Lake Forest, CA	11/20/2011



P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*



Name	Location	Date
Patty Cozza-Leigh	Fort Lauderdale, FL	11/20/2011
Dick DeBoer	Murrieta, CA	11/20/2011
Larry Vickery	Irvine, CA	11/20/2011
Heidi Slagle	Valencia, CA	11/20/2011
Juliette Clark	San Clemente, CA	11/20/2011
Martin Carbone	Mission Viejo, CA	11/20/2011
Natalie Hodapp	Mankato, MN	11/20/2011
Debra pflieger	Murrieta, CA	11/20/2011
Chris Brackett	South Lake Tahoe, CA	11/20/2011
Nolvia Sabanegh	Huntington Beach, CA	11/20/2011
Brianna Call	Seattle, WA	11/20/2011
Kimberly Whalen	La Selva Beach, CA	11/20/2011
Heath Hamilton	Azusa, CA	11/20/2011
Amy Graves	Haleiwa, HI	11/20/2011
Steven Skinner	Trabuco Canyon, CA	11/20/2011
Paulo Cruz	Aliso Viejo, CA	11/20/2011
Kathleen Malone	San Clemente, CA	11/20/2011
Genaro Mejia	Santa Ana, CA	11/20/2011
Jodi Pickering	Capistrano Beach, CA	11/20/2011
Shannon Bryant	San Diego, CA	11/21/2011
Kathleen Clark	Stratford, CT	11/21/2011
Darian Hildreth	Key West, FL	11/21/2011
Kim Hildreth	Key West, FL	11/21/2011
Andrew Whalen	Berkeley, CA	11/21/2011

P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date Signed
Sandra Cruz	San Diego, CA	11/21/2011
Dan Odonnell	Irvine, CA	11/21/2011
Meyer Schwartz	San Clemente, CA	11/21/2011
Joyce D'Epagnier	San Juan Capistrano, CA	11/21/2011
Danielle Schwartz	San Clemente, CA	11/21/2011
Scott Mourhess	Indio, CA	11/21/2011
Dave Stombaugh	Laguna Beach, CA	11/21/2011
Scott Williams	San Clemente, CA	11/21/2011
Cynthia Rigoni	Houston, TX	11/21/2011
Joshua Stearns	Los Angeles, CA	11/21/2011
Donna Danielson	Dana Point, CA	11/21/2011
Glenn Norwood	Santa Ana, CA	11/21/2011
Heather Carlisle	Dana Point, CA	11/21/2011
Stacy Colombo	San Clemente, CA	11/21/2011
Tom Swanecamp	Dana Point, CA	11/21/2011
Saundra Cerutti	Rancho Santa Margarita, CA	11/21/2011
Jacob Barret	San Diego, CA	11/21/2011
John DeMarco	Honolulu, HI	11/21/2011
Frank Perna Jr	Malibu, CA	11/21/2011
Tom Garlock	Irvine, CA	11/21/2011
Shauna Murray	San Juan Capistrano, CA	11/21/2011
Amy Wehner	San Clemente, CA	11/21/2011
Dave Heath	San Clemente, CA	11/21/2011
Skip Leonard	Dana Point, CA	11/21/2011

P-68-34

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

Name	Location	Date
Mark Carey	Dana Point, CA	11/21/2011
David Howard	Laguna Beach, CA	11/21/2011
John Yamasaki	Laguna Niguel, CA	11/21/2011
Brent Flaharty	Rancho Santa Margarita, CA	11/21/2011
Stephanie Olson	Aliso Viejo, CA	11/21/2011
Cheryl Hopper	San Clemente, CA	11/21/2011
Stephen Shumaker	Escondido, CA	11/21/2011
Christina Kretschmer	Santa Monica, CA	11/21/2011
Christine Collett	Aliso Viejo, CA	11/21/2011
Steve Harmon	San Clemente, CA	11/21/2011
Raquel Cortez	Aliso Viejo, CA	11/21/2011
Jenny Rose	Mission Viejo, CA	11/21/2011
Allison Garcia	Laguna Niguel, CA	11/21/2011
Bree Young	Sierra Vista, CA	11/21/2011
Paula Wilhelm	Laguna Beach, CA	11/21/2011
Joseph Koslik	Corona, CA	11/21/2011
Tim Telles	Laguna Niguel, CA	11/21/2011
Dag Wilkinson	Dana Point, CA	11/21/2011
David Lumian	Venice, CA	11/21/2011
Ken Gerdau	Newport Beach, CA	11/21/2011
Briana Sepeda	Fullerton, CA	11/21/2011
Danielle Jake	Phoenix, AZ	11/21/2011
Brian Olsen	Orange, CA	11/21/2011
		11/21/2011

P-68-34


(This report is not current due to time needed to create report)

**SAVE BABY BEACH**

*A Citizen's Coalition for Public Access and Environmental Protection*

**ATTACHMENT B**

**Petition  
Additional Comments**



P-68-35

Name	Location	Comment
R J	Moses Lake, WA	This is such a unique and beautiful spot. My sister and our friends live right up the street and use this beach to SUP, and walk daily! I have been there many times. It is a rare spot in this developed coastline.
Russel Greene	San Clemente, CA	The county needs to get out of the harbor business and get into the people business.
Cyndie Kontoes	Capo Beach, CA	Baby Beach in Dana Point is a unique gathering place of paddlers, mothers and families who enjoy the Educational Facilities along with the beach that has easy access for the many watermen and women that are Handicapped and now have the ability to enter the ocean at Baby Beach and enjoy exercise for physical and mental development with-out this Beach they would have no place to enter the ocean as safe, as BabyBeach.
Billy Kho	Huntington Beach, CA	I am for the preservation of Baby Beach because I want to keep the safe access that me and my kids have enjoyed for future generations. Dana Point does not need more docks!
Valerie Rhodes	Laguna Niguel, CA	I support maintaining the public access which currently exists at Baby Beach for the 100's of youth who use the educational and youth facilities which currently exist. I am also concerned about the dangerous conditions which will result by adding more traffic to the already crowded beach with the proposed docks.
Eric Harrington	San Clemente, CA	Concerned about the ecological impact of the increased number of boats in the harbor.
Anne Galvan	Dana Point, CA	Many years involved in children's sailing, outrigger canoe paddling, SUP, kayaking, swimming at Baby Beach. Very concerned about safety for kids.
Jill Vickery	Irvine, CA	A beautiful family spot to enjoy Dana Point. This area is what brings us to Dana Point at least two times a week. With that, we are now visiting the shops in the area much more frequently and spending our money in Dana Point instead of Newport.
James Sponagle	Capistrano Beach, CA	I use this area to paddle my canoes. The proposed docks will block access for hundreds of paddle craft as well as the sailing classes. The safety factor is huge as well.
Diane McCarthy	Mission Viejo, CA	This area needs to remain as is, reserved for non-motorized water craft for use by the public.
Heather Heinz	Laguna Beach, CA	This is a great place for kids and launching of paddle boats.
Bobbie Caraway	Dana Point, CA	We love this little beach. Our whole family paddles out from this spot. The kids have gone to camps here the last 10 years. It would be ashamed to let docks be built in this serene part of the harbor.
Scott Gold	Irvine, CA	I learned to standup paddle at baby beach. It's an excellent area for all water sports...not just motorized watercraft. The majority of that harbor is already dedicated to motorized watercraft...adding more docks will choke access to non-motorized watercraft and clutter the already overcrowded harbor. Dana Point harbor should maintain access for all.
Petar Freeman	Laguna Beach, CA	I believe we need to maintain the existing public access area for the Dana Point Harbor and that the area should not be converted to private, semi-private or fee-based uses. In connection with my use of the area, I have frequently volunteered to maintain the public access area, which I do not see from the typical fee-based user such as boat slip renters.
Tim Till	Huntington Beach, CA	very few areas left available for non-motorized launches
Barbara Holcomb	Huntington Beach, CA	This is one of my favorite places to bring my daughter to play. We walk to the Ocean Institute, play on the beach, and I have started paddling from here after meeting so many other parents on the beach. I'd hate to lose these experiences and such a special place.
L. Eleanor Finney	Laguna Niguel, AL	This is one of the highly used and highly prized family and educational and educational areas for our surrounding community and others from afar. My grandchildren, from Northern Calif., took paddle sailing lessons there last Summer and I observe all the other activities this area provides. It is really very important to preserve it.
Helena Cannady	Aliso Viejo, CA	I want to ensure we have a local, sheltered & controlled area in which children can learn water sports; one such as the Dana Point Basin adjacent to Baby Beach & Westwind Sailing.
John Simonich	San Clemente, CA	My son in-law and daughter SUP and my wife and I go watch them at times. It seems like a great place for little kids and big kids to enjoy.
clarence yoshikane	newport beach, CA	Safe place for children to play at the beach & stand up paddle
Michael Clarke	Vancouver,	As an avid stand up paddler, who paddles I believe we need to open up the access for all, instead of closing it for the few. Watersports are a great way for families, kids and everyone to stay fit, embrace the oceans and connect with mother earth.

SAVE BABY BEACH

A Citizen's Coalition for Public Access and Environmental Protection

Name	Location	Comment
Vivian Willis	Aliso Viejo, CA	Saving the beach for my kids.
Charita McVieff	Mission Viejo, CA	Think of the citizenry and not the almighty dollar.
James Fletcher	Laguna Beach, CA	My daughter is a Sea Scout and teaches at Westwind. We see the hundreds of people who use Baby Beach and the surrounding facilities daily. Expansion of docks into the burning basin will restrict the publics' use and enjoyment of the area.
Journ Galvan	Dana Point, CA	I am currently on the Dana Outrigger Canoe Paddling team and used to work at Westwind sailing right next to baby beach. I have lived in Dana Point my whole life and I use baby beach alot and would hate to see it get destroyed.
Sandy Gilman	San Clemente, CA	So much education exists in this area it would be a shame to limit access.
Karen Cornella	Laguna Niguel, CA	My children have grow up at the harbor, learned to sail in this basin, attended their favorite (Westwind Sailing) camps for the past 12 years, and now participate as Mariner Sea Scouts. It would be a shame to deprive the community of this outstanding facility when there are already so few safe and wholesome places for kids and teens to gather!
Kathleen Wetzel	laguna Niguel, CA	I want to keep this peaceful area available for all who use it now. Changing it will drive out so many who use it now. That is not an improvement. They need to listen to those who use this area.
Jacqueline Price	San Juan Capistrano, CA	We take friends who are visiting from out of state (but sometimes staying in nearby towns) down to Baby Beach because it is a comfortable place for them to try kayaking and stand up paddling. As a result they end up spending money in Dana Point which they would not do otherwise. If Baby Beach is no longer safe for our novice friends we will have to take them and their dollars elsewhere.
Ingrid Nilsen	Laguna Niguel, CA	We use the public beach very often for kayaking. It will be a sad day if they should take this wonderful beach away from the people.
Leah Fetah	Laguna Niguel, CA	We need to preserve the use of this area of the marina for the safe and easily accessible use of Sea Scouts, kayakers, paddle boarders and our area's youth! My family and I have been using this area for 30 years!
Michael Fereday	Dana Point, CA	I am signing this petition to keep the existing Baby Beach public access beaches and waterways as they are currently, free from encroaching development by the proposed new docks.
Mike Muir	Dana Point, CA	I'm for preserving the little bit of beach we have left. The proposed docks will take away more of our safe water zone. This is the only safe and calm water area to learn and launch personal water craft between Oceanside and Newport Beach.
John Clark	San Clemente, CA	I am concerned about the environmental impact of parking boats in the basin area so close to a major swimming and recreational area. In addition, this plan limits access to the only flat water launch area for non-motorized water craft between Newport and Oceanside, CA.
Lisa Klasky	Rancho Santa Margarita, CA	We are concerned about the safety concerns that the new plan will present to young children at Baby Beach.
Paul Newman	Rancho Santa Margarita, CA	It's already a great little beach that is used by the public for those of us who don't have/can't afford a boat. No "improvements" are needed nor desired.
Lincoln Phipps	Los Angeles, CA	Supported by MacGillivray Freeman Films and One World One Ocean
Lisa Raneri	Dana Point, CA	It's a perfect little beach for young children to play safe from strong waves. My toddler splashes and runs joyfully in the shallow water. It's also such a great place for parents of young children to meet and gather. Baby Beach is a unique asset to the community of Dana Point.
Jeff Vasquez	San Juan Capistrano, CA	The number of people who use Baby Beach easily out number motorized boaters. This development will have a detrimental impact on all non-motorized uses of the harbor. Untapped revenue opportunities exist supporting these news uses. Forward thinking managers would serve the public interest better by not developing additional motorized boating uses and encouraging non motorized uses.
Jacqueline Wetzel	Laguna Niguel, CA	This proposed plan would eliminate most of the dock facilities available to Mariners and Westwind, programs that are very important to the community. It also would decrease the amount of space in the harbor available for small boat sailing, paddle boarding, and kayaking. Crowded waters is already a problem, and creating this dock would just amplify these issues.
Renee Cox	San Clemente, CA	We stand up paddle and sail from Baby Beach all the time. My son is in Sea Scouts - we can't lose any of Baby Beach!

Name	Location	Comment
Chip Lavigne	Laguna Niguel, CA	We need to maintain public access to this highly used paddle launch spot. Allowing a fee based use to control this area will ruin the sense of community and tradition that has been created. People come from all over Orange County to use this launch bringing revenue to businesses in the area. There needs to be a balance of use and this proposal represents the tipping point. I believe in the youth docks, money should be going to them not slip retail
Andrew Hart	San Clemente, CA	I am a kayaker and Stand Up Paddleboarder and I launch from Baby Beach regularly as there's few other places nearby that we are allowed to launch from.
Edward Gillett	Laguna Niguel, CA, CA	Please preserve Baby Beach. More power boats at a paddling beach does not make sense. This is the only beach with calm water for family paddling.
Wally Emory	San Clemente, CA	I'm signing because I believe that we need to keep baby beach open for the continuing, future, recreational enjoyment of the people who live and visit here. As well as preventing any further development that is going to put more debris and pollution into our harbor, and our environment.
Amy Fitzgerald	Dana Point, CA	to have a safe place for kids to play on the beach, Do not put boat near the beach.
Donnie Dumain	Costa Mesa, CA	Are you kidding me? This proposal is ridiculous. The ENTIRE rest of the harbor is developed. ...this place provides hundreds, possibly thousands (have you seen the 4th of July gatherings there?) of people a great location to simply enjoy. I would hate to see my primary childhood hangout spot ruined. Can we at least keep one little beach for the public? Don't we have enough docks? Are people not getting enough money in South Orange County? I am solidly against the development of Baby Beach.
Michael Agricola	Las Vegas, NV	To save a premier spot for children and watermen and women to enjoy the baby beach environs.
James Rosen	San Clemente, CA	I am a frequent (near daily) user of Baby Beach for launching my Kayak and SUP. In addition, my family is a regular user of Baby Beach, and we enjoy the relative tranquility it provides.
Waide Williford	La Jolla, CA	Safe public access to the ocean for non-motorized craft is needed for all
Kirsten Kane	Irvine, CA	I'm from Dana Point and would hate to see one of the awesome beaches I grew up on go away
Chad Dumain	Costa Mesa, CA	This is the only Harbor that the kids can play from larger waves. Also if there is more boats in the harbor it would be dangerous for the children because of more pollution and unsafe boat driving.
Alison Battit	pefaluma, CA	This area has a huge positive impact on my life. It is a beautiful, safe place for children to grow, learn and come of age. It would be a ridiculous decision to erase that from the future of Dana Point Harbor. It needs to be available to the public as well as the Scouts and programs.
Carler McCoy	Santa Cruz, CA	I lived in the Dana Point area for several years and know we need this resource preserved. Please do not allow our public resources to be privatized.
Brandon Rambo	San Clemente, CA	This is a perfect place for recreational beach users. Not everyone has access to a boat or dock in the harbor and this allows people without that access to enjoy it as well. This would put a huge impact on the community
Cynthia McKe	Laguna Beach, CA	I'm a supporter of the Ocean Institute and other marine education programs.
Domenic Sarzotti	San Dimas, CA	I spend every weekend during the summer paddle boarding with my family at baby beach. The thought of this area being changed makes me sick. It would be worst thing the city of dana point could do for the community.
Chuck Patterson	Dana Point, CA	I live in Dana Point and use Baby beach and the Dana Point harbor to paddle outrigger, SUP and train almost every day. We need it and use it more then 95% of all the boat owners in the harbor.
Cindy Cunha	Lake Forest, CA	My children use this area for learning to sail and SUP. I hope that they will be able to continue to do so. Please keep this area safe for our children.
Mike Nelson	San Clemente, CA	Please don't commercialize a nice, people friendly area at the DP harbor.
A Raish	Lake Forest, CA	public access should not be reduced or comprised for private docks
Bruce Brunson	Henderson, NV	Baby beach is one of the main reasons we vacation in Cali. If this spot goes away so do we. Would find another place to spend my tourism money.
Patrick Guillermo	North Las Vegas, NV	Love the ocean, protect the 'Ainal
Brian Smith	San Clemente, CA	environment, recreation access, community !!!

SAVE BABY BEACH  
 A Citizen's Coalition for Public Access and Environmental Protection

Name	Location	Comment
Jenny Dowdall	San Clemente, CA	Community, community, community .. Let us enjoy the environment. Don't take it away from the people!
Kim Defries	Laguna Niguel, CA	Baby Beach is rad and deserves to be preserved!
Becki Kolarider	San Juan Capistrano, CA	This is an important landmark and free area for everyone to enjoy. We need this beach to share with our families and friends.
Stephen Hill	San Clemente, CA	As an adult advisor for the Mariners Sea Scout group for many years this area is invaluable to the nurturing and guidance of your young adults. Please leave the youth center / docks and Baby Beach just the way it is.
Jacqueline Brassard	Tustin, CA	To preserve the former youth and group facility and public access and use of west basin docks, maintain the facilities for two nationally-recognized highly successful and impactful nonprofit youth-oriented organizations (Dana Point Sea Scouts and West Wind sailing) that introduce and educate more youth to the safe use California waterways than anywhere else in California. To preserve the original intent and safe use of the facility design.
Dennis Curran	San Clemente, CA	Baby Beach is already being used a lot and paddle sports are going off. The beach is the best paddle launch & access in So Cal.
Denise Kacura	San Clemente, CA	My whole family enjoys time together on the water paddling and relaxing after with friends on the beautiful park area that is conducive to socializing and interacting with other people with similar interests. It is the only place available in our area that brings the entire community together socially while providing a non-motorized launch spot at the same time.
William Kindel	San Clemente, CA	As a 10 year plus DP slip holder and a paddler who frequently launches from Baby Beach I am horrified by the proposed changes. Baby Beach is a treasure and needs to be preserved and improved, not diminished.
Lori Davis	San Clemente, CA	This plan impacts too drastically the general public's ability to use Baby Beach.
Maggie Gibson	San Juan Capistrano, CA	The kids in the Dana Point area need more facilities for healthy outdoor recreation, not less.
Steven Foster	capistrano beach, CA	Don't pave paradise and put in a parking lot... More boats... more pollution...higher risk of environmental and human damage... This area is called "Baby Beach " for a reason, it's a family oriented area, additional boats and the pollution that comes with them will make it unsafe for anyone and everyone enjoying the water.
Scott Sanchez	Dana Point, CA	The changes to the harbor will create serious congestion and safety issues in both the water at Baby Beach along with creating parking issues for those of us who use Baby Beach weekly. This will additionally affect the merchants at Baby Beach as access becomes limited, less visitors equals less revenue.
Mary Fowler	Cathedral, CA	I grew up going to Baby Beach and so did most of my friends. I would love to take my grandchildren there someday!
Jill Stafford	San Juan Capistrano, CA	This is one place where community is really a community, launching the DOCC canoes or going out on the SUP we wain into friends and make it a wonderful day, this is a place that we can always go to, and have a sense of community, please no ore new development, no more coocks, there are more than plenty!
Erich Krueck	Dana Point, CA	My family and I use the beach on a daily basis. It is the only place in Southern O.C. for my grand kids to play in a safe environment without boat traffic. We also paddle board from this beach and desperately want to keep this space.
Leeann Collopy	Grand Jct, CO	It's spend MANY great vacations hanging at Baby Beach. SUP, canoeing, walking, running and playing w/ the kids
Georgia Candoli	San Clemente, CA	What are you thinking ? Is it all about docking fees for boat owners? We need baby beach as a safe place for children and families.
Katherine George	Colo Springs, CO	This is important to a dear friend of mine who enjoys this quiet place.
Jack Garland	Capistrano Beach, CA	Baby Beach is a very valuable recreational resource in the south county area. It is unique and like no other. The proposed boat docks will limit the amount of beach access to and from the water for human powered craft. The total of individual people uses during the year is in the thousands of uses where the people benefitting with the boat docks will be a few dozen of people. The proposed plan eliminates 25% of the paddle out area from the beach. During the summer this area is overcrowded as it is and safety would be greatly compromised if these docks are built. Jack Garland- Architect
Bruce Carlisle	San Clemente, CA	I grew up in Dana Point and would hate to lose a great space where kids can learn to love the beach.
Carolyn Banfi	Benicia, CA	I have very fond memories of this beach as a child.
Amanda McKay	Dana Point, CA	Baby beach is part of my every day routine with my kids and we love to paddle board out of there. No way can this happen!
Joanne Koppel	Rancho Cordova, CA	I grew up in Dana Point and this beach is iconic for little children

SAVE BABY BEACH

A Citizen's Coalition for Public Access and Environmental Protection



Name	Location	Comment
Dave Wetzel	Laguna Niguel, CA	Giving people a safe, peaceful area to do non-motorized sports is good for our Community.
Sherry Popovich	San Clemente, CA	Love this beach, please don't change anything!
Dale melden	Modesto, CA	Baby beach is a mecca for people of all ages to enjoy the ocean and paddle sports in a safe and fun family environment. ANY of the proposed construction would DESTROY this amazing place of positivity and peace for everyone in the future.
Patty Cozza-Leigh	Fort Lauderdale, FL	I have seen what "docks" can do to an environment. ....there must be another location for these docks that will not impact the environment and eco system.
Larry Vickery	Irvine, CA	This small, family-friendly beach area is the only one in the harbor area that can be used for young children to swim and for launching small, non-motorized crafts. It should be preserved for many to enjoy and should not be blocked or reduced in size to accommodate a additional docks and private boats for a select few.
Debra pflesger	Murrieta, CA	I have been coming here since the harbor was built. This beach needs to stay as is! There is already mass amounts of development and docks etc all around this spot already...
Heath Hamilton	Azusa, CA	This is the kind of spot that is perfect for the less adventurous among us. I have taken my kids and my brother out and taught them to SUP from Baby Beach. It's also great fun to watch all of the kids there learning to sail and enjoy the water.
Kathleen Clark	Stratford, CT	My son, his wife, and 3 daughters use Baby Beach for SUP surfing, outrigger boating, and sailing. When I visit from Connecticut, I enjoy watching my children engage in their water sports. I see no need for more docks to add to the pollution and traffic already present in the Baby Beach resort area of Southern California.
Meyer Schwartz	San Clemente, CA	My family comes together at Baby Beach. It's a place that kids and grandparents can enjoy themselves. It's a place to teach kids about ocean safety. My twin daughters are 4 and the learning and playing has just begun. This is a place that should be around forever no question asked. It's sad to think it could a be gone.
Cynthia Rigoni	Houston, TX	My friend walks her dog in the area there daily, don't change it!
Glenn Norwood	Santa Ana, CA	I love this beach. Been coming down here for 35 years. Bringing my kids down as baby's and even now to kayak and stand up paddle. No other harbor like it. I had a boat in the harbor ( Dana West F dock for 12 years) . They don't need more slips. Only about 25 % of the boat now are actually used. Walk down a dock and ask someone how many slip renters they actually see. Save the beach!!
Tom Swanecamp	Dana Point, CA	The Doc's will greatly effect the success of the Miracles For Kids - Choc Hospital Stand Up Paddle Clinics in 2012 and years to come.
Tom Garlock	Irvine, CA	We don't more development/commerical location on the coast stopping people access to the beach.
Skip Leonard	Dana Point, CA	Parking is already a problem for this area. The additional slips will further exacerbate the problem.
Stephen Shumaker	Escondido, CA	I grew up sailing dinghies and swimming at Dana Point Harbor. There is much less area available for these activities now. Don't reduce this access further. We need to keep areas available for kids and families to swim, launch small boats, kayaks, etc. off the beach.
Bree Young	Sierra Vista, AZ	This beach has been apart of my family for decades. No matter where we all travel, we all come together at baby beach.
Joseph Koslik	Corona, CA	I support saving baby beach because I love this place and it would be sad to see it gone
Dag Wilkinson	Dana Point, CA	I paddle here and so do the CHOC kids of Miracles for Kids.

SAVE BABY BEACH  
A Citizen's Coalition for Public Access and Environmental Protection

I am a boater who leases a slip in the Dana Point Harbor and I would like to submit my comments on the SEIR. While I do not officially represent anyone else in the Marina, numerous discussions with other boaters and friends in the Marina convince me that what I write here is representative of what many others believe.

P-69-1

I'll address 3 topics in my comments:

- Parking for boaters, especially during Holidays or High Use Periods;
- Slip costs (eliminating the 3 foot overhang)
- Business vs. Boaters

1. Parking for Boaters, especially during Holidays or High Use Periods

Finding a parking spot near my boat is already difficult on Holidays and when there are special events in the Harbor area. July 4 is the worst, with parking being unavailable in my area DAYS in advance of the 4<sup>th</sup>, but other times are also problems. In some years this has resulted in extreme frustration in trying to get gear, family, friends, and myself to the boat. Other years, I have simply just stayed away, despite preferring being at my boat. It seems very unfair to me that the boaters who pay rent every month cannot find parking on the days people most want to be at the harbor. Reducing the number of parking spots by 40% will surely make a serious problem much worse.

P-69-2

2. Slip costs (eliminating the 3 foot overhang)

Slip costs at Dana Point are already high. Eliminating the 3 foot overhang will force many boaters into larger and more expensive slips. I believe eliminating the 3 foot overhang will also affect small boat owners more compared to larger boat owners. Walking the slips where the smaller boats are kept, one sees almost every boat under 30 feet at a slip where it is using the 3 foot overhang to qualify being in that slip. The number of larger boats extending past the slip and using the 3 foot overhang is a much smaller percentage.

P-69-3

3. Business vs. Boaters

It really should not be Business against Boaters. I enjoy the businesses at the Marina – I go to the restaurants quite a bit and shop at the stores, too. There should be a balance between the interests of the Business and the interests of the Boaters. But the SEIR definitely tips – no landslides – the interest of the Businesses over those of the Boaters.

P-69-4

Lori J. Van Hove

Slip = Island Side D-22

562.889.1501

Alleanna Clark  
502 Avenida Ossa  
San Clemente, CA 92672

P-70

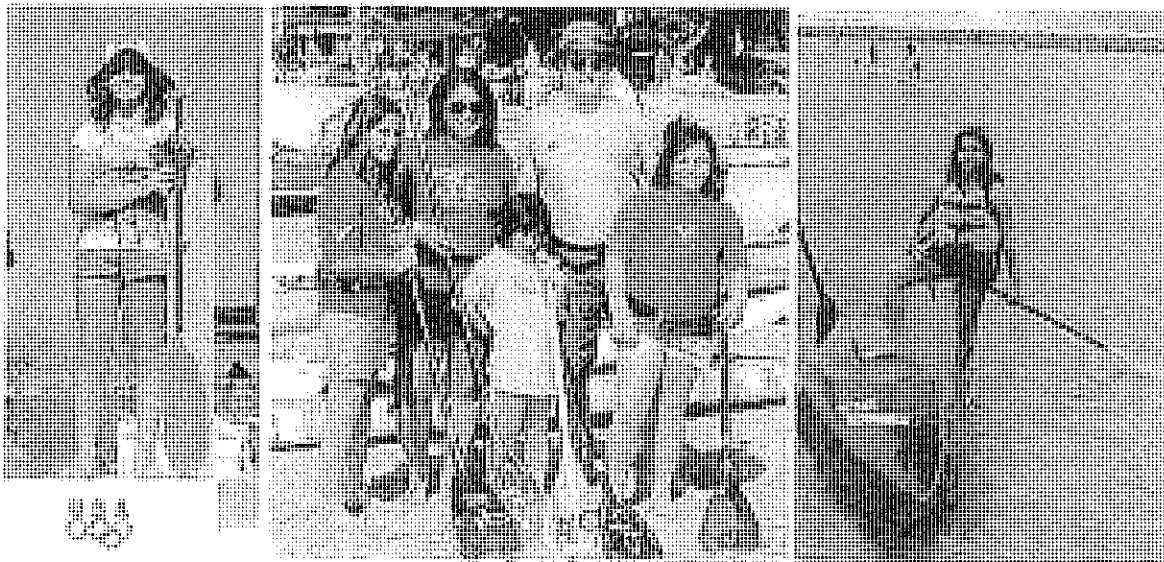
Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Hello. My name is Alleanna Clark and I am 12 years old. I am concerned about the docks being put in baby beach. Ever since I was six years old I have been going to baby beach with my family because there were no waves and I could play in the water with my sisters. As we got older we started stand up paddling and our favorite place is baby beach. I remember getting ready to go and my sisters getting excited but we were told that we couldn't even go in the water because of the quality. The water quality is much better now but we don't know what will happen if the docks are put in. I am also a member of the Dana Outrigger Canoe Club and we launch where docks are going to be put. If the docks are there than we will have to launch into boat traffic with young kids as young as 7 years old. I hope you take my letter into consideration.

P-70-1

Sincerely,  
Alleanna Clark



John Clark  
502 Avenida Ossa  
San Clemente, CA 92672

P-71

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I have reviewed the Draft Subsequent Environmental Report for the Dana Point Marina Improvement Project dated September 20<sup>th</sup>. The plan to add boat docks in the vicinity of Baby Beach concerns me for several reasons that I would like to address in this letter including:

- Reducing the safe access to the harbor for recreational activities
- Increased pollution of the safe swimming area for families and young children
- Limiting the amount of parking for public access to the hand launch area
- The increased number of boats located in the basin area may impact the biological life in the harbor

When our family relocated from the east coast to Southern California in June of 2000, we chose to live in the Dana Point Harbor area due to the resources provided by the Dana Point harbor and Baby Beach.

P-71-1

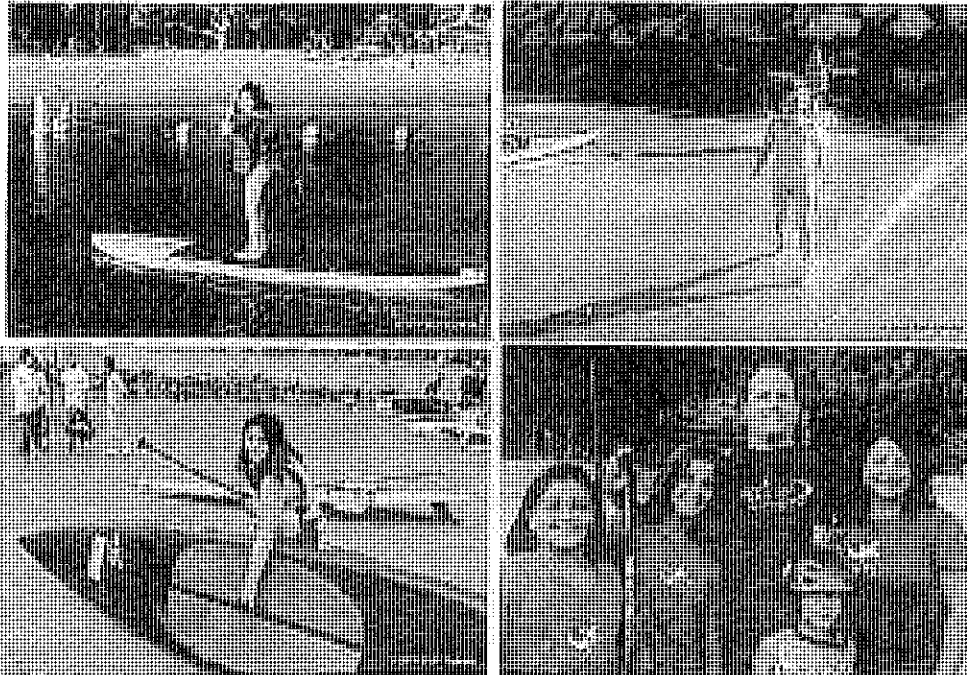
P-71-2

P-71-3

P-71-4

P-71-5

P-71-6



Over the past eleven years, Baby Beach has provided our family the opportunity to participate in non-motorized water activities with safe access. The activities include swimming, standup paddling, sailing, and outrigger paddling. Currently, hundreds of people each day year round park and launch their hand launch boards and vessels at the Baby Beach Launch. In the summer, the beach area is shared with hundreds of parents and children that come to Baby Beach for the safe swimming and proximity to launch their watercraft. Have any studies been done to determine the number of users of Baby Beach and where these people will be displaced to when the docks are moved in front of the launch area?

P-71-6

The proposed dock plan will put motorized boats in close proximity to swimmers and paddlers that have made the Baby Beach area an ideal destination for local residents and thousands of annual tourists. What alternative recreational access locations are going to be available to meet the demand?

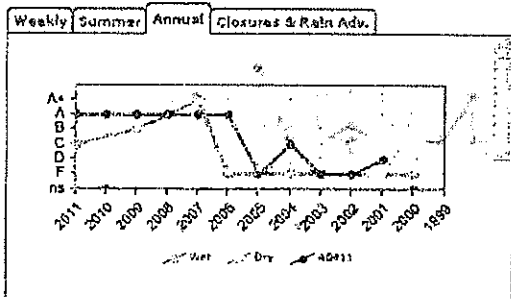
The development plan for adding boat docks does not address the need for parking for the additional boats and the demand for access to the harbor by non-motorized vessels. Have there been any studies on the number of spaces needed?

P-71-7

The proposed boat docks will have an impact on the biological life in the harbor including the eelgrass beds. Just a few weeks ago our family of five went out for an evening Stand Up Paddle to explore the bioluminescent algae that was present in the Baby Beach area. There is a great deal of healthy vegetation and biological growth in the harbor by Baby Beach. The overall condition of the water has just improved in the past five years to an acceptable level after many years of being polluted. Let's not go back in time and pollute this beach. How will the proposed changes impact the water condition at Baby Beach? Will it be safe for young children and the elderly visitors to the beach?

P-71-8

**Dana Point Harbor, Baby Beach- East End**



Thank you for taking the time to review our concerns about the Draft Subsequent Environmental Report. We look forward to the conversation about alternative plans to meet the needs of the harbor and community interests.

P-71-9

Sincerely,  
  
John Clark

To Whom It May Concern;

Regarding the SIER relating to the Dana Point Harbor Marina Improvement Project, I'd like to make the following comments and suggestions-

The entire process appears to have been a sham operation orchestrated at the outset to force upon the Southern California boating public a plan to reduce the number of smaller, more affordable slips (contrary to the CCC's mandate), to allow a grandiose revisioning of the landside operations that creates a sprawling shopping center at the considerable cost of boater's resources. Pushing through this 'new vision' resulted in a presentation of only a handful of waterside reconfigurations to the boaters that ranged from completely outrageous to the completely unsatisfactory, for them to "choose" from- again, none of the designs came close to the goal poised by the CCC, that being a reduction of a minimum of slips.

P-72-1

That being said, I propose the following:

- Re-lay out the proposed slips exactly the way they are now with the relatively minor exception of providing ADA compliance.
- Do not encroach on the channel.
- Do not build out in front of Baby Beach.
- Do not reorient the West basin slips.
- Do not eliminate any 50' slips.
- Do not eliminate the traditional 3' overhang allowance.
- Do not strip the Shipyard of any waterside slips or land.
- No loss of boater parking, and boaters should have preferred parking for dockside lots.

P-72-2

Replacement of the slips should begin immediately, as they fail - do not force boaters to wait until the expanded stores and restaurants have consumed all of the money and time.

All project work should be performed between the hours of 7am-7pm, to mitigate as much as possible the disturbance to the residents/slip occupants/neighboring homes.

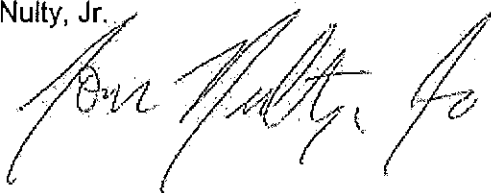
I would also like to bring up again that there are areas of inconsistency with the base line numbers, the FEIR, the LUP, IP City and County ordinances, Tidelands Trust, and Tidelands Trust Doctrine.... and what appears to be a complete lack of transparency with regards to fiscal accountability of dedicated harbor funds.

P-72-3

And I would also point out the insertion of new language in LUP/IP without any local meetings.

Thank you for your concern in this matter,

Tom Nulty, Jr.



11-21-11P04:54 RCVD

Shirley Zanton  
30352 Golf Club Drive  
San Juan Capistrano, CA 92675  
949-489-1290

November 21, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for the opportunity to review the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express my concerns over the proposed plan to construct docks in the West Basin in front of Baby Beach.

I am a resident of San Juan Capistrano and have been coming to Baby Beach for almost 20 years. My four children and I enjoyed the beach when they were young – we spent many afternoons building sand castles in the quiet water. As they got older, they learned to sail in the calm and safety of the Baby Beach harbor. The children participated extensively in the programs provided at the OC Sailing & Events Center by Westwind Sailing and Sea Scouts. (In fact, my very first sailing experience was when my second son took me out for a Mothers Day sailing event hosted by Westwind. I was extremely proud of the skills he had learned and the confidence he had in those skills.) Now that we are empty nesters, my husband and I bought kayaks, specifically to launch and use from Baby Beach. Being a novice kayaker, I find the quiet of the Baby Beach area to be a perfect setting to paddle around in without worrying about extensive boat traffic. I believe that the open access and family friendly atmosphere at Baby Beach, and the protected shoal area, make it a place where the local community comes and enjoys a day at the beach. (And, of course, what would be a day at the beach without a stop afterward to get ice cream or fried fish (my children’s favorite), or even pizza, from one the local businesses in the Harbor area.)

P-73-1

In addition to many other concerns, the current proposal will increase the number of motorized vessels in the Educational Basin near Baby Beach, and as a result, increase safety concerns for sailors and kayakers alike. The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose, and the proposed configuration also affects the launching and docking for students in the boating programs at OCSEC. In addition, the plan impedes upon the public access hand craft launch at Baby Beach, which reduces public access to the water.

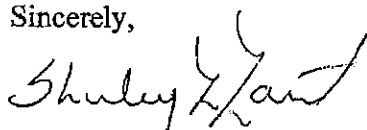
P-73-2

P-73-3

I hope that Dana Point Harbor takes into considerations these issues and recognizes the importance of Baby Beach to the local community. In addition, I hope that it explores other options that will not have such a negative impact on the Harbor’s resources. Thank you.

P-73-4

Sincerely,



Shirley L. Zanton

11-22-11 10:44 RCVD

William J. Kindel  
1614 Via Sage  
San Clemente, CA, 92673  
phone 949-492-8843 fax 949-492-6839 cell 949-370-9161  
email: billkindel@gmail.com

Nov. 21, 2001

Mr. Brad Gross, Director  
Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA, 92629

Re: Dana Point SEIR

Dear Mr. Gross,

With regard to the proposed changes to Dana Point Harbor and the current SEIR I would like to direct your attention to the November 2007 "Boat Traffic Study". In the four years since the study there has been an explosion in human powered watercraft, especially Stand Up Paddleboards or "SUP's". Also, kayaks, outrigger canoes, rowboats and traditional paddleboards are enjoying increased use. Most of these watercraft are launched from "Baby Beach". There is every indication that these sports will continue to boom.

P-74-1

Therefore the 2007 "Boat Traffic Study" is irrelevant and needs revision.

To be specific you should be concerned about the following:

P-74-2

1. Narrowing of the main channel. The proposed "revitalization" will combine larger boats with a narrower channel: bad idea!

2. The encroachment into the existing "Baby Beach" area is the opposite of what the plan should be doing. Instead the "Baby Beach" area should be enhanced to better accommodate the various types of human powered watercraft.

P-74-3

3. Water quality at "Baby Beach" has long been a concern. Adding an adjacent pump-out station is wrong headed and a potential liability for the County.

P-74-4

4. There is scarcely a word in the 2007 "Boat Traffic Study" concerning human powered watercraft. With regard to safety and the future use of the harbor for the greater number of people a new study is needed which puts the safety of those who are actually in the water first.

P-74-5

So please consider me as opposed to the current SEIR.

My memory of Dana Point goes back many years. I am probably one of the few still around who surfed at "Killer Dana" and for many years I have had a boat in the harbor. I wish to thank you for your consideration of my letter.

P-74-6

Sincere regards,

*Bill*  
William Kindel



11/21/2011

To whom it may concern,

I am a lifelong surfer, boater and slip renter in Dana Point harbor since 1976. When the harbor was first conceived one of the justifications for walling off the beautiful natural point and coves from the waves was that it would allow more people access to the sea. The harbor was partially funded with federal money and was dedicated as a "small boat" harbor.

P-75-1

Fast forward to the present: The County's revitalization project is now proposing to eliminating a large number of "small boat slips" in the harbor, is also includes converting to portion of the existing Orange County Sailing and Events Center to "private-for-fee" boat slips, and on the "baby beach" side build out docks that will physically take up 20% of the "baby beach" cove.

P-75-2

Baby Beach is probably the most consistently used area by the most number of people in the harbor. Its an area that people can park close to and access the water. Baby Beach is safe for beginners and an ideal launch area for experts in all paddle sports, especially SUP paddling which is the fastest growing water sport in the world. Yes, the proposed docks may only take up a portion of the cove, but the way the wind blows, a boater leaving or returning to the docks will take up more than 50% of the cove maneuvering space. I also believe this will make parking available to the public even more limited because of the space needed for the boat slip renters.

P-75-3

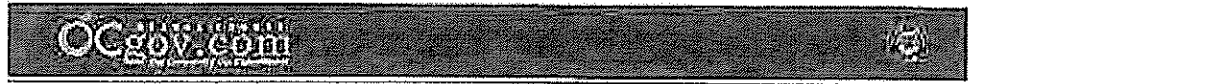
P-75-4

As I said, one of the original justifications for building harbor in the first place was to give more people access to the water. Seems like a very bad idea to violate and shrink the most popular access to the water for the most number of people!

P-75-5

Sincerely

  
Mickey & Peggy Munoz



Tasks EFM Customers Setup FAQ Help Welcome, Paul Lawrence LOGOUT

- EFM
- EFM Cases
- New Request
- Quick Tally

**Case — Send An Email**  
[Case Listing Home](#) | [Case Details](#)

**Case #27598**

Customer Name: JONES, TOM      Status: New  
 Customer Type: external customer      Email: wordjockey62@yahoo.com  
 Phone: 949-276-7695  
 Topic: Department Feedback>OC Dana Point Harbor

---

Request: I STRONGLY OPPOSE THE PROPOSED PLAN TO BUILD DOCKS FOR LARGE WATER CRAFT RIGHT NEXT TO BABY BEACH IN DANA POINT HARBOR. THIS BEACH IS A JEWEL IN THE HARBOR WHICH IS OFTEN AND THOROUGHLY ENJOYED BY MY DAUGHTER, HER HUSBAND AND MY TODDLER GRANDSONS - AS WELL AS COUNTLESS FAMILIES ON A YEAR-AROUND BASIS. THANK YOU FOR YOUR CONSIDERATION, TOM JONES

P-76-1

**Compose Email**

To	CC	BCC	Do Not Email	Name	Role	Additional Info/REC'd
<input type="checkbox"/>				JONES, TOM	external customer	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lawrence, Paul	Secondary Owner	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Smith, Lisa	Primary Owner	

Add Collaborators

Subject:

Message: Check Spelling & Preview

Mr. Jones,

Thank you for your comments; they will be included with other SEIR comments and will be responded to appropriately as part of the SEIR process.

Paul Lawrence  
 OC Dana Point Harbor Operations  
 (949) 923 2286

include signature  
 include original request

Spanish

Attachment Name	Filename
Attachment #1:	
Title:	<input type="text"/>
Description:	<input type="text"/>
File to attach:	<input type="text"/> <input type="button" value="Browse..."/>
<input type="button" value="Add Another Attachment"/>	

**Update Case Status**

New Status: New

Brad-

When I heard that we could write to you to express our concerns re: Baby Beach, this card seemed to say it all. Although I haven't paddled in quite some time, you can see I hang onto memorabilia from it.

I still continue to SUP from Baby Beach and can't fathom having the 'put in' and 'take out' at BB changed. I love it just the way it is.

Please don't change Baby Beach. May many a ARTIST be able to paint PTCS just like this one for years to come!

Stacie Towner 949-742-

Mele Kalikimaka

3030

Mele Kalikimaka

P.S. I am surrendering this card in the name of Baby Beach!

BEST WISHES FOR HAPPY HOLIDAYS

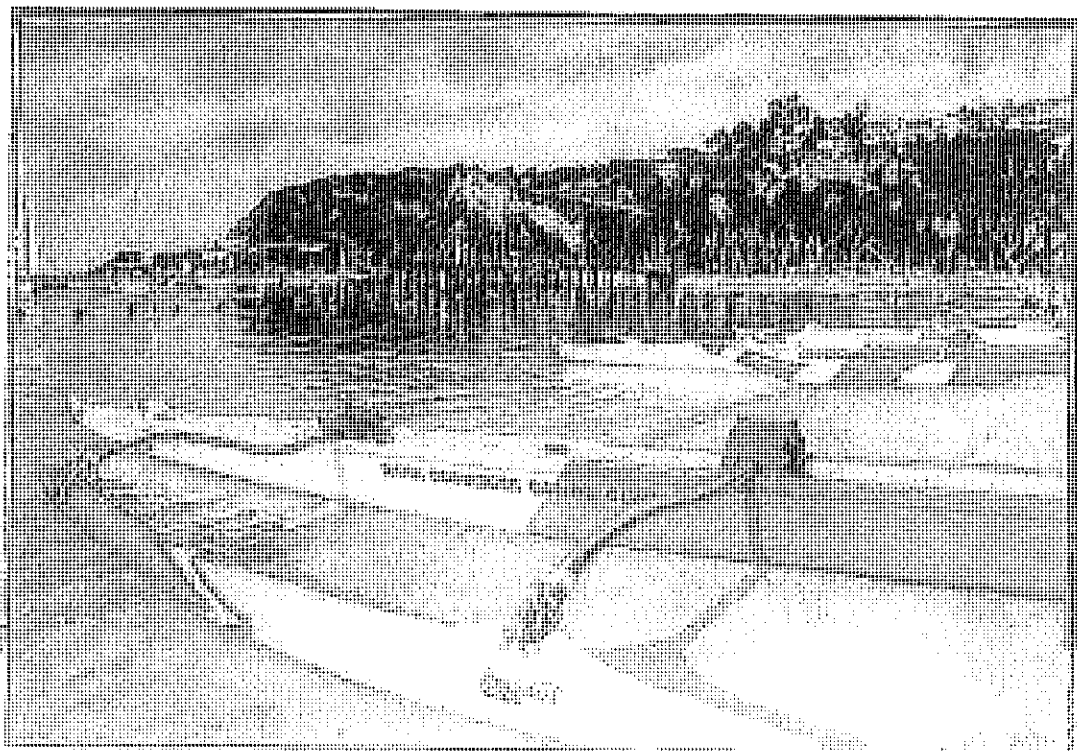
AND A FABULOUS NEW YEAR!

DAN AND CAROLYN PELKEY

"Canoes at Baby Beach" - Original Watercolor by Carolyn Pelkey  
Best of Show - San Clemente Art Association Winter Judged Show  
www.carolynpelkeyart.com giclee prints available

P-77-1

11-28-14 09:15 AM



P-77-1



P-78

SUPLOVE

7501 Slater Ave, Unit A  
Huntington Beach, CA 92646

T 1 855 SUPLOVE  
info@suplove.com

[www.suplove.com](http://www.suplove.com)

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

I am writing this letter to express my opposition to the Harbor's proposed development in front-of and adjacent to Baby Beach as shown in the Environmental Impact Report (EIR) provided for public comment. I understand and support the revitalization of the harbor, but not at the expense of one of the only safe, family-friendly recreation spots in the county.

As the owner of Suplove Stand Up Paddle Boards I can speak of the importance of Baby Beach to the Stand Up Paddle Community. Baby Beach is the meeting place for many of our sports participants, both professional and recreational. The safe waters of the harbor prove to be many people's first exposure to the sport, due to the clam waters, access to boards and wealth of experienced paddlers found everyday at Baby Beach.

P-78-1

The location is a go to point for visitors to Claifornia who wish to be invovled in the SoCal Stand Up Paddle Community. I can name at least ten families who have vactioned specifically in Dana Point over the Summer 2011 in order to be close to Baby Beach for Paddle based activites and safe waterways for their children to play in. As you would be aware, Dana Point hosts a large number of Stand Up Paddle specific stores, the access provided by Baby Beach has contributed substantially to the growth and suces of these local businesses. Our business is located in Huntington Beach and we often take our paddlers to Baby Beach becuase of the safe environment it provides.

OC Dana Point Harbor's proposed expansion will negatively impact the safe environment within the Educational Basin by severely limiting access to human-powered crafts that have launched from the Baby Beach for decades and forcing them to compete for space with the children's swimming area. The plan also will bring powerboats even closer to the only designated area for bathers and other recreational activities. Moreover, the potential risks of placing of a waste pump-out station yards from a children's play area. All of these will impact public access, the fragile biodiversity of the basin, and the recreational nature of area.

P-78-2

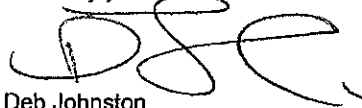
P-78-3

In addition, I am mother to a 6 year old and a 2 year old who both love trips to the safe waters of Baby Beach. It is the perfect location to learn watersafety and participate in a variety of watersports.

As part of the local community and visitors from far and wide that see the benefit of keeping Baby Beach and the Educational Facilities free of any development that blocks public access, I encourage you to do the right thing: reverse your decision to privatize the docks used by the community for education, maintain a safer distance of the pump-out stations from bathers, and eliminate the plans to expand docks in and around Baby Beach. The claims in the EIR concerning this development appear to be inconsistent and inadequate as written given the impact this development clearly would have to the public and environment.

P-78-4

Sincerely yours,



Deb Johnston

11-22-11P01:45 RCVD

P-78 page 1 of 1

*OC Dana Point Harbor Office*

*We are boaters in the West Dana Point Harbor and have been very pleased with all the facilities there. We do not understand why there needs to be such large expensive changes to our Harbor. Seems like there is enough to do to just maintain what we have now. We have a 27" sailboat and have heard that you are planning to build out many more larger slips and possibly make us rent a larger slip. We feel that is unfair and unnecessary to make such changes.*

P-79-1

*It's one of the nicest harbors on the West Coast, let's leave it that way. We pay more than others for our slips now.*

*Thank you for your consideration of our opinion and thoughts,*

*Ed and Elaine Rauterkus*

*B36 West Marina*

21 November, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Dear Mr. Gross,

Thank you for your review of this letter and of the Draft Subsequent Environmental Impact Report for the Dana Point Harbor Marina Improvement Project dated September 20<sup>th</sup>, 2011. I am writing to express my concerns over and oppose the proposed plan to construct docks in the West Basin in front of Baby Beach.

I grew up in the city of Dana Point in Monarch Beach. I have fond recollections of my younger years growing up in the area, most specifically in the Dana Point harbor. My friends, that I have known for over twenty five years and still keep in contact with, have a bond that stems from growing up in the harbor and the use of Baby Beach. When we were young, our families made use of the harbor basin and Baby Beach with the old public fishing pier because we liked the safety that the beach provided with no waves and the proximity of the parking to the beach. It is family oriented, which is the charm of the current harbor. As we grew older, we all took sailing lessons at the county docks from which we gained invaluable life lessons and made memories that we share with our families to this day. I only visit from time to time as I'm an active duty Marine Corps Officer stationed out of the state, but when I make it back to visit family and friends we often take visits and walks around the county docks. I'm always ecstatic to see young sailors and families at the beach, which bring back my own memories of the use of the docks. I hope to settle down back in the Dana Point area and bring my children to Baby Beach and teach them how to sail. I can only write this letter...and hope, pray, and wish that it reaches those involved in this destructive plan. The proposed changes and destruction of what has served our community so well in the past would be a travesty to say the least. Below are some of my and my friends concerns:

P-80-1

- The proposed dock configuration will increase the number of motorized vessels in the Educational Basin near Baby Beach.
- The proposed dock configuration encroaches into the Educational Basin reducing the shoal area by at least 20%.
- The plan impedes upon the public access hand craft launch at Baby Beach which reduces public access to the water.
- The proposed dock configuration privatizes docks at OCSEC which are specifically earmarked for public access educational purpose.
- The proposed dock configuration impedes the flow of boat traffic entering and exiting the inside west channel between OCSEC and DP Yacht Club.
- The project proposes new docks to be built in shallow water that will cause the boats to bottom out at low tide.
- The plan proposes docks to be built in a sensitive marine environment. The docks will disrupt the Eel Grass and fragile marine ecosystem in the basin.
- The proposed dock configuration affects the launching and docking for students in the boating programs at OCSEC.
- The proposed project will increase motor vehicle traffic and limit parking near Baby Beach.
- The project proposes that motor boats will be docked in front of Baby Beach which will increase pollution near the bathers.
- The project proposes that a boat pump out station will be located close to Baby Beach which potentially increases pollution in the area.
- A large dock with big boats in front of Baby Beach will change the character of the area and will be aesthetically undesirable.
- The new dock in front of Baby Beach will be used for motor boats which create safety concerns for non-motorboat users launching at Baby Beach.

P-80-2

P-80-3

P-80-4

P-80-5

P-80-6

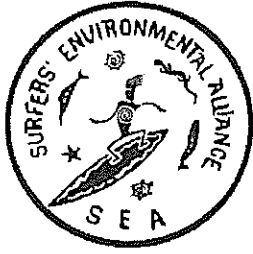
P-80-7

I hope that Dana Point Harbor takes into considerations these issues, recognizes the importance of the traditional family values that stem from the Dana Point Harbor county docks and Baby Beach areas, and analyzes other options that will not have such a negative impact on the Harbor's resources. Development of the harbor will only deteriorate the value that Dana Point Harbor currently possesses. I will follow this process closely and continue to work with the community to expand awareness of this project. Finally, I will be one of many who will work to preserve Baby Beach, the Educational facilities and ensure the project improves public access while minimizing any further impact to the fragile environment at Dana Point Harbor.

P-80-8

Sincerely,

Ryan and Lauren Harrington  
3724 Surry Road  
Virginia Beach, VA 23455  
858-663-9804



*THE LEADING EDGE OF COASTAL ACTIVISM*

December 11, 2011

Brad Gross, Director  
OC Dana Point Harbor  
24650 Dana Point Harbor Drive  
Dana Point, CA 92629

Re: Extension Request for Harbor Marina Improvement Project.

Dear Mr. Gross,

We appreciate your follow up to allow SEA the opportunity to comment on the Harbor Improvement Project. SEA has analyzed the proposal, surveyed the site in question and spoken to numerous users of the proposed development area.

We oppose any new development or building of docks adjacent or near the area known as Baby Beach. There is no doubt that public access and use of the site will be diminished on every level. Building boat slips in the area in question will cause potential dangerous interactions between motorized watercraft and other non-motorized craft such as kayaks and paddle boarders.

Baby Beach is a great resource for thousands of local and visiting beach goers and is one of the only safe protected beaches that is not open to large open swells. To allow a small number of boaters to use the area over thousands of others does not make practical sense. SEA would encourage a development plan that does not include any slips near the Baby Beach section of the Harbor.

Very truly yours;

Andrew Mencinsky  
Surfers' Environmental Alliance (SEA)  
{HYPERLINK "http://www.seasurfer.org/"}

**Surfer' Environmental Alliance #943213682**  
**3320 Piragua Street Carlsbad, CA 92009 • 732.804.4096**

P-81-1



**ATTACHMENT B**  
**LATE COMMENT LETTERS**

**M E M O R A N D U M**

**DATE:** January 25, 2012  
**TO:** Brad Gross  
**FROM:** Ashley Davis, LSA Associates, Inc.  
**SUBJECT:** Late Comment Letters – Dana Point Harbor Marina Improvement Project Draft SEIR

The following comment letters responding to the Dana Point Harbor Marina Improvement Project Draft SEIR were received after the close of the public review period. However, in order to ensure that all correspondence is included in the administrative record, they are listed here. The comments contained in the following nine letters repeat the same concerns stated in the comment letters contained in this Response to Comments document. A brief statement of response or a reference to the location of applicable responses is included in the table below.

No new issue areas were raised in the late comment letters, and all comments are considered to have been adequately addressed in the body of the Response to Comments document.

Commenter	Summary of Comments	Reference for Response
Nicholas Atkins	<ul style="list-style-type: none"> <li>• Enjoys beach with no waves, does not want the beach made smaller</li> <li>• Beach is good for businesses</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• Comment addresses financial, economic and policy issues that are outside of the scope of CEQA</li> </ul>
Shane Avera	<ul style="list-style-type: none"> <li>• Supports closure or clean up of beach</li> <li>• States that beach is dirty, full of diseases and stingrays</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• See Responses L-1-4 and P-21-3. Biological Resources, including marine species, were thoroughly addressed in Section 4.7 of the Draft SEIR.</li> </ul>
Karen Gibbs	<ul style="list-style-type: none"> <li>• Does not want or see need for more docks in Harbor</li> <li>• Proposed docks would decrease beach/water space</li> <li>• States that people are attached to the Beach</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR. In addition, the proposed project results a net loss of 116 slips harbor-wide</li> <li>• See Common Responses 1, 2 and 3</li> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR.</li> </ul>
Daniel Munoz	<ul style="list-style-type: none"> <li>• Enjoys Baby Beach and does not want it reduced; also states that the Harbor cannot be expanded and still retain the relaxing atmosphere</li> <li>• States that Baby Beach attracts tourists because there are no waves, and it is a good place for tanning and hosting parties</li> <li>• States that project will result in a loss of 20 percent of Baby Beach</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• See Common Response 3</li> </ul>
Harrison Rightmire	<ul style="list-style-type: none"> <li>• Does not want Baby Beach closed to add more slips in the Harbor</li> <li>• States that project is intended to create additional slip income with additional slips</li> <li>• Asks where money for project would come from</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• The proposed project results a net loss of 116 slips harbor-wide, not an increase in slips</li> <li>• Comment addresses financial, economic and policy issues that are outside of the scope of CEQA</li> </ul>

	<ul style="list-style-type: none"> <li>• Suggests there would be protests</li> <li>• Suggests alternatives for money sources, including rentals and a snack bar</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• Comment addresses financial, economic and policy issues that are outside of the scope of CEQA</li> </ul>
Sheyan Sheikholeslami	<ul style="list-style-type: none"> <li>• Does not want Baby Beach moved and more docks/boats added in Harbor</li> <li>• Concerned about congestion</li> <li>• Concerned about the pumpout station</li> <li>• States that Baby Beach is special and should not be reduced or moved</li> <li>• States that the project would move the beach 50' to the west and reduce it by one-fifth</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR. The proposed project results a net loss of 116 slips harbor-wide, not an increase in slips</li> <li>• See Common Response 1</li> <li>• See Common Response 2</li> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR.</li> <li>• See Common Response 3</li> </ul>
Thomas Tonini	<ul style="list-style-type: none"> <li>• Describes personal experiences at Baby Beach</li> <li>• Comment lists waterborne viruses found in Southern California waters</li> <li>• Concerned that sewage spills cause beach closures and states that Baby Beach is polluted</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR</li> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR.</li> <li>• See Responses L-1-4 and P-21-3.</li> </ul>
Tommy Tandle	<ul style="list-style-type: none"> <li>• Does not want Baby Beach dug up and replaced with slips</li> <li>• Concerns regarding the cost for the proposed project</li> <li>• States there is no need for more slips and digging up the beach will impact users causing them to sell their boards and kayaks</li> <li>• Concerned that adding boats will increase pollution, impact or kill wildlife</li> </ul>	<ul style="list-style-type: none"> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR.</li> <li>• Comment addresses financial, economic and policy issues that are outside of the scope of CEQA</li> <li>• Personal opinion; does not raise any specific environmental issues under CEQA or their treatment in the Draft SEIR. The proposed project results a net loss of 116 slips harbor-wide, not an increase in slips</li> <li>• See Common Response 2, and Response P-21-3. Biological Resources, including marine species, were thoroughly addressed in Section 4.7 of the Draft SEIR.</li> </ul>
Tyler Wise	<ul style="list-style-type: none"> <li>• Concerned that dock expansion near Baby Beach will result in overcrowding, collisions, and health risks</li> <li>• Additional motor boats would take up more of the</li> </ul>	<ul style="list-style-type: none"> <li>• See Common Responses 1 and 2</li> <li>• See Common Response 3</li> </ul>

	<p>reduced Harbor area</p> <ul style="list-style-type: none"><li>• States increased risk of fuel and bilge spills is a threat to public health</li></ul>	<ul style="list-style-type: none"><li>• See Common Response 2 and Response P-21-3. Water Quality impacts thoroughly addressed in Section 4.3 of the Draft SEIR</li></ul>
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Dear, Mayor Schoeffel

cc: Brad Gross

RECEIVED

I have lived in Dana Point for my entire life and I believe that change is necessary at times and also unnecessary at others. However, I consider the changes that are being debated, made to baby beach are irrelevant and unneeded. I'd like to show you some of the backing behind this statement that may further help your knowledge of what the issue is all about.

One main point about the beach is that it has been around since the late 1960's and people from all around love to visit it. As one of the many people who find enjoyment in kayaking, Baby beach is the ideal spot for launching them as well as paddle boards. As you can see it is a quite high priority to have this beach stay the way it is instead of shrinking it as the plan being debated entails.

Some of the other uses of Baby beach include family outings, and picnics. With the changes being made the size of the beach will be brought down to very small percentage of what it is. People also bring their small children to this beach for a very specific reason, the lack of larger waves. Unlike most beaches Baby Beach is one of the very few that are toddler and "Baby", appropriate. If the beach undergoes the changes planned, the future generations of children will never experience playing in the water at this wonderful beach for those of a young age.

All in all, Baby beach is and extremely useful place for not just me but for all the citizens of Dana point and the surrounding cities. It is both good for families and for business such as the aquarium, the many restaurants and stores around the harbor and at the heart of it all is Baby beach. So, as you can see the beach must stay the same for the good of our citizens and the future generations.

With All Respects,

Nicholas Atkins

DISTRIBUTION: 1/19/12

L. ANDERSON

L. BARTLETT

B. BROUGH

S. SCHOEFFEL

S. WEINBERG

D. CHOTKEVYS

M. KILLEBREW

33172 Trinidad Dr. Dana Point, Ca  
December 12, 2011

Brad Gross  
24650 Dana Point Harbor Dr.  
Dana Point, Ca 92629

Dear Brad Gross:

Hello, my name is Shane Avera, and I am here to talk about the Baby Beach problem. I agree that Baby Beach should be taken away for multiple reasons. Those reasons are that the beach is dirty and full with diseases and can cause injury from the stingrays.

Baby beach has been there ever since I was born. It was fun when I was four or five. Now that I look back on it, that was disgusting. That could have brought disease to me, and my parents would have had to pay a lot of money to cure me. Also, no parents want to have to pay extra money that they don't have because a beach gave a diseases to their child.

I have never talked to anyone that enjoys being stung by a stingray. Baby Beach is filled with stingrays. It's not only a threat to kids, it's also a threat to adults. The adults don't want to have to take their kid to the ER for trying to have a good time. When you go to baby beach, you will see dozens of them everywhere, but the most deadly ones are the ones you cannot see. It is not only a threat, it's is a life concerning problem.

After all of the dangers I listed, that's only a tiny percent of them. That is why they need to shut down or clean up Baby Beach. The cause of injuries from stingrays, and the diseases you can catch is why Baby Beach needs to be shut down or cleaned. Lastly, parents can take their kids to multiple beaches in the wonderful city of Dana Point and not get these life-threatening conditions.

Sincerely,

Shane Avera

24681 Priscilla Drive  
Dana Point, California 92629

December 12, 2011 .

Brad Gross  
24650 Dana Point Harbor Drive  
Dana Point, California 92629

Dear Mr. Gross,

Speaking for lots of people in the community, we feel that it would be best for everyone if the docks in the harbor were not expanded. There are many others who would agree with this statement. For example, there is an effort called "Save Baby Beach" started by a group of people who live by this beach and visit it. The official person who started this group is a man named Paul Sampedro. He started the group shortly after the report about the marina plan came out. There are many reasons why the "Dana Point Marina Plan" is not a good idea: (1) There will be less open water for swimming, paddling, and boating; (2) there is no need for more dock space; and (3) people are very attached to the beach.

First, the space issue. If the dock is expanded, there will be less space at the beach and in the water. Many people who visit Baby Beach every day go swimming, kayaking, boating, and paddling in the area. If docks are built into the Baby Beach area, there will be less room for the people at the beach. This will cause more collisions, capsizings, and even injuries. This problem is actually putting people and children at risk.

Next the question is do they really need the extra docks? Some officials might answer this question yes, but they are not thinking it through. The marina runs quite smoothly the way it is, and does not need this extra dock space. The county is establishing this addition to become the new aquatic programming center. The marina is perfectly functional without it. Therefore, this operation is both a waste of time and money.

Finally, the issue at hand. People are very emotionally attached to this beach. Many of the people that live in the area when swimming in the ocean for their first time at Baby Beach. There is a special area for young children to go swimming surrounded by the buoys that bats and kayaks cannot pass. If the dock is extended, this area will be removed. This is a very important place



to many people and this is one of the main reasons people are infuriated with this plan.

In conclusion, this plan should not be carried through. For the sake of the present and future users of Baby Beach, this part of the harbor should not be changed so it can only be used by the wealthy. Because of people's attachment to the beach, the lack of a need for the new docks, and less space in the open water, no docks should be built in this area. Thank you for your time and consideration of this important matter.

Sincerely,

A handwritten signature in cursive script that reads "Karen Gibbs". The letters are fluid and connected, with a prominent loop at the end of the last name.

Karen Gibbs

cc: Brad Gross

Baby Beach  
CEIVED

31522 Los Rios St.  
San Juan Capistrano  
California 92675  
United States

2012 JAN 13 A 11:34

CITY OF DANA POINT

33282 Golden Lantern,  
Dana Point, CA 92629

Dear Mr. Mayor Schoeffl,

Hello, I am a local citizen of California who is concerned about a certain issue. I live here in San Juan Capistrano, but I visit Dana Point very commonly. I come often to Dana Point to just relax and have some fun with friends. I am very fond of an area in the Dana Point Harbor which is called Baby Beach. It's very peaceful there. Although I am aware that Baby Beach is at risk of being drastically reduced because of Dana Point Harbor's plans. And I, am very much against this.

As I mentioned, I am very fond of Baby Beach. It is a very peaceful and relaxing area where anybody can go. But lately, I have heard news that it is in danger of being reduced due to Dana Point Harbor's Plans. I do know that they are expanding the harbor for many reasons. Such as: expanding it so boaters have more room, and to expand center docks into an area where docks do not currently exist. And they still want to maintain it as a popular area for boaters, residents, and tourists alike. However, these two pieces of info contradict each other in a few ways, as it will soon become evident.

All the info mentioned above, are statements from the Projects Draft Subsequent Environmental Impact Report. But think about it, is it really possible that they can expand the harbor while still maintaining the "Chilling" atmosphere? I don't think so. I think it is quite obvious what I want, I want the expansion of the Dana Point Harbor to stop! It is perfectly fine the way it is right now. I forgot to mention, that Baby Beach is quite a popular tourist attraction itself. There is no waves which makes it peaceful and perfect for children. It's also a great place to get a tan and to host a party. If they go on with the expansion of the harbor, Dana Point will lose a handful of tourists. These are basically some of the main reasons why Baby Beach is a great place to go to and why it shouldn't be closed down.

According to articles I have read, if they go on with the Harbor's expansion plans, about 20 percent of Baby Beach will be gone. Now tell me, is that keeping the family atmosphere? I think not. I want the people in charge of the Harbor's expansion and think to themselves, "Is it really worth it? What is the downside of this?" I'm asking those people and personally you Mr. Schoeffl, to please reconsider, it would benefit us all if you did.

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D. CHOTKEVYS  
M. KILLEBREW

In general, there are thousands of reasons why Baby Beach is a great tourist attraction and why it shouldn't be reduced. Like I said, I am very concerned about this, "plan" and I am completely against it. I hope I gave you some new insight on this current situation.

Sincerely,

*Daniel Murray*



27321 Calle De La Rosa, CA 92675

12-12-11

Mr. Brad ~~\_\_\_\_\_~~<sup>Gross</sup> (Dana Point Mayor)

Dana Point Harbor Dr. Dana Point, CA 92629

Dear Dana Point Mayor:

For everyone, they do not like it when something beautiful is moved to a different place. That is exactly what is going to happen to Baby Beach if we do not do something about it. This is because Dana Point wants to make more room for docks so they can put more boats. I am concerned that Baby Beach will be moved into a place that is dangerous for families, the values of this beach, and how small it is going to become.

The first thing I am concerned about Baby Beach is that it will be moved into a place that is dangerous for families to enjoy in. One thing that will affect the families who came to this beach to enjoy is that when they are swimming. Since people will swim in this beach, a kayak or other things will probably bump into them. The most important thing that would affect the people is the environment of the beach, due to the septic water pump-out station. You can fix this if you can move it in a place that does not have any safety precautions. Even though there will be safety hazards for people, the value of Baby Beach is valuable to different people.

The second thing I am concerned about is that they are going to put more ports on valuable place. This beach is a special beach because of its 40-year-old marina. This beach goes back all the way to the 60's; it was a famous construction site that is going to be destroyed. This is one of Southern California's most frequent surf breaks. What you can do is preserve the beach and do another nearby beach that is not used that often. I am concerned about what is going to happen to the value of the place after it is moved, however I am also concerned about what will be the size of the beach.

The last thing I am concerned about how small Baby Beach is going to be after they put new docks. They are going to make the beach move fifty feet away to west. After they put all of the new docks, this would get rid of one-fifth of the beachfront. At the end, they would have a limited amount of space to enjoy the beach. You can fix this by not constructing on Baby Beach; instead, you can put it on the other side of the harbor.

I am concerned because of all of these things because of the safety of the families, the value of the beach, and how small it is going to become small for it to use. The new place of the beach would be a bad place for family members who live nearby this beach spend quality time with each other. It is also because of the Beach's age. The size will be smaller when there are more docks. I just want to make sure that you do not put any more docks on Baby Beach.

Sincerely,

  
Shayan Sheikholeslami

31961 Paseo de Tania

San Juan Capistrano

12/12/11

Brad Gross

24650 Dana Point Harbor Dr.

Dana Point, CA 92629

Dear Mr. Gross,

It has come to my attention that Baby Beach in the Dana Point Harbor has come to a level of concern for health and safety. I myself own two kayaks and use them often. I, as most kayakers do, use Baby Beach as a launch ramp. It is of great use for this purpose as well as paddle boarding, but dangerous for swimming.

Not only is Baby Beach used as a launch area for kayakers and paddle boarders, many people use this beach to teach their children to swim in the ocean. There are few waves and zero current, which makes this a safe place to learn, however this poses a certain risk for those who do. Some viruses that have been found in the waters of southern California are vibrio illness, Cholera, *E. coli* Infection, *M. marinum* infection, Dysentery, Legionellosis, Leptospirosis, Otitis Externa, Salmonellosis, Botulism, and Campylobacteriosis.

In the last 23 years 508 sewage spills in Orange County have resulted in beach closer. That is 11% of all of the sewage spills. Baby Beach is usually one of the first to be closed. Last year was the largest 1-year increase in 10 years.

Dana Point Harbor is a polluted strip of water due to the number of boats and people. Precautions must be taken to ensure the safety of our next generation.

Sincerely,

Thomas Tonini

11-12-11 11:08 AM

32481 Via Los Santos,  
San Juan Capistrano, California, 92674

Brad Gross

December 15, 2011

2460, Dana Point Harbor  
Dana Point, California 92629

Dear Brad Gross,

Hello, I am a 13 year old boy student at Marco Forester Middle School in San Juan Capistrano, California. I am righting this letter in concern of the baby beach in the Dana Point Harbor. There has been much controversy over this subject and, being as I grew up going to the harbor and fishing with my father very much as a young child, I understand many things about the harbor and I wanted to give you some reasons why you shouldn't dig out the baby beach.

My first reason is that well, it will cost a lot of money. It will cost about as much money as it did to remove the sand bar right next to it. Sure, you could say that there needs to be more room for boat slot space in the harbor, but the space is not needed at all. With the economy in ruin, many people are selling and abandoning their boats, leaving plenty of left over space. With the cost of the slips, gas prices, and owning boats themselves, people are stuck with the idea of getting rid of them.

My second argument is that many children go to play in the baby beach and many adults go there to ride their kayaks, paddle-boards, and dinghies. Digging out the baby beach will cause many people to stop doing what they love to do. Without a place to ride and launch these said devices will cause many people to give up their hobbies and sell their boards, kayaks, etc. Also even though the water is filthy dirty, it gives small children a little beach to play at and be safe while doing so.

Finally, my last and most important argument is that the adding of boats to that area will furthermore pollute the water and have devastating impacts on the wildlife and the naturalness of the baby beach. Adding more boat slips



also, will be more of a crowd in the area. The added gasoline to the area will kill much of the wildlife in the area. That is my final point.

The previous paragraphs have stated my arguments with getting rid of baby beach for space. As stated before, digging out the baby beach will have many negative impacts on both the environment and the people who go there. I hope you have read this through and thought about it a lot. Please be careful when making your decision, and good luck.

From,

Tommy Tandle

31261 Paseo Montevideo  
San Juan Capistrano, CA 92675

December 15, 2011

Brad Gross  
24650 Dana Point Harbor Dr.  
Dana Point, CA 92629

Dear Mr. Gross,

On September 21<sup>st</sup> the plans to expand and reconstruct Dana Point Harbor were released. The part of the plan, to extend the western side of the harbor, would take up much of Baby Beach. Others, as well as myself, fear that this extension will affect Baby Beach in too many negative ways, such as overcrowding, dangerous collisions and health risks.

The extension of the harbor to the west of OC Sailing and Events Center takes up 110 feet of swimming and launching zone. The remaining area outside the new harbor would be full of swimmers, paddle boards, and kayaks. With young children swimming and playing on the beach, and people trying to launch their boats, there would be a dangerous problem because of over crowding on the beach.

Out further in the harbor, there are risks of sailing accidents. Because the harbor is a popular spot for novice sailors, who already must learn how to avoid paddle boards and kayaks, adding the extension of the harbor increases the difficulty of navigating. The motor boats, which will be housed in the extension, will take up more of the already reduced harbor space. The small amount of sailing area makes it very dangerous to be in the shallow waters of the harbor.

The extra boats pose a risk to children and to the people's health. The expansion would increase the risk of fuel and bilge leakage. Also, if the new dock is used as a pump-out dock, as suggested in the plan, any spillage of "black" water would further pollute the harbor, and it would become a threat to public health.

In conclusion, the expansion of the harbor, west of OC Sailing and Events Center, would have many negative effects to Baby Beach. The over crowding and pollution pose many dangers to the public. Therefore, the plan to expand the harbor should be reconsidered, before Baby Beach becomes a dangerous area we all have to avoid.

Sincerely,



Tyler Wise