

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
LAND USE		
Divide an Established Community: 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
Conflict with Land Use Plan, Policy, or Regulation: 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
Conflict with HCP or NCCP: 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
Cumulative Land Use Impacts: 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
GEOLOGY AND SOILS		
Rupture of a Known Earthquake Fault: 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.	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,	Less Than Significant

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	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>Soil Erosion: 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>Liquefaction and Lateral Spreading: 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. 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).	Significant and Unavoidable

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<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>Septic Tanks: 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>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>
<p>Cumulative Geology and Soils Impacts: 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>	<p>No mitigation is required.</p>	<p>Less Than Significant</p>

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HYDROLOGY AND WATER QUALITY		
<p>Degrade Water Quality: 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>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).</p> <p>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.</p> <p>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</p>	<p>Less Than Significant</p>

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	<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>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.</p> <p>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</p>	

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	<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>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:</p> <ul style="list-style-type: none"> • Discuss regional water quality and/or watershed programs (if available for the project); 	

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	<ul style="list-style-type: none"> • 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). 	
<p>Groundwater Supplies: 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>Degrade Groundwater Quality: 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>Alter Drainage Pattern: 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>

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Levee or Dam Failure: 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
Seiche and tsunami or mudflow: 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
Cumulative Hydrology and Water Quality Impacts: 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
TRANSPORTATION AND CIRCULATION		
Marina Vehicle Trip Generation: 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
Boater Vessel Traffic - Harborwide: 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
Boater Vessel Traffic - Embarcadero/Dry Boat Storage Docks, Marine Services Docks, Sport Fishing Docks: The redesign of these areas would allow operations to continue to operate under similar conditions as	No mitigation is required.	Less Than Significant

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<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>Boater Vessel Traffic - Temporary Dock: 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>Boater Vessel Traffic – Construction: 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>

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<p>Boater Vessel Traffic - East and West Basins: 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>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 Provisions [SP] No. 3).</p>	<p>Less Than Significant</p>
<p>Construction Traffic. 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>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).</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>

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<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>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.</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>	

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<p>Operational Long-Term Parking: 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>Cumulative Transportation and Circulation Impacts: 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>
AIR QUALITY		
<p>Fugitive Dust: 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>

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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 [PM₁₀] and particulate matter less than 2.5 microns in diameter [PM_{2.5}]) 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>Odors: 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>Stationary and Mobile Sources: 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>CO Hotspots: 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>Localized Significance of Construction Emissions: The calculated emissions rates for the project construction activities will be below the localized significance thresholds (LSTs) for nitrogen oxides (NO_x), CO, PM₁₀, and PM_{2.5} 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>Consistency with the AQMP: 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>Equipment Exhaust and Related Construction Activities: 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_x 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_x 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>Cumulative Air Quality Impacts: 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 PM₁₀ and O₃ (because NO_x and ROC are precursors to O₃). 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
NOISE		
<p>Long-Term Noise Impacts: 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>Short-Term Construction Noise Impacts: 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. (L_{max}) 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>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.</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"> 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). <p>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</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>Short-Term Construction Vibration Impacts: 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>Cumulative Noise Impacts: 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
BIOLOGY		
<p>Impacts to any species identified as a candidate, sensitive, or special status species:</p> <p>Sea Turtles. 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>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:</p> <ul style="list-style-type: none"> • 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 	<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>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. 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"> • 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. <p>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:</p> <ul style="list-style-type: none"> • 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 	

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"> 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. 	
<p>Impacts to any riparian habitat or other sensitive natural community:</p> <p>Soft- and Hard-Bottom Associated Benthic Communities/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. 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 & 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>Impacts to federally protected wetlands through direct removal, filling, hydrological interruption, or other means:</p> <p>Water Turbidity Construction Impacts. 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>Oil And Fuel Discharges. 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>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:</p> <ul style="list-style-type: none"> • 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. 	<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>Water Turbidity Long-Term Operational Impacts. 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>	<p>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:</p> <ul style="list-style-type: none"> • 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. • 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; 	

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"> A list of other local pump-out locations shall be made available to boaters. 	
<p>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:</p> <p>Eelgrass (<i>Zostera Marina</i>). 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>Surfgrass (<i>Phyllospadix spp.</i>). 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>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 <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>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:</p> <ul style="list-style-type: none"> • 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 	
<p>Conflict with any local policies or ordinances protecting biological resources:</p> <p>Invasive Algae (<i>Caulerpa taxifolia</i> or <i>Undaria pinnatifolia</i>). <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>Fisheries Management Plan (FMP) Species: 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>Conflict with an adopted habitat conservation plans:</p> <p>Marine Protected Areas: 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>Marine Mammals: 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>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:</p> <ul style="list-style-type: none"> • 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. 	

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>Cumulative 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.</p>	<p>No feasible mitigation measures are available.</p>	<p>Significant and Unavoidable</p>
AESTHETICS		
<p>Degradation of the Existing Scenic Vistas, Visual Character, or Quality of the Site and its Surroundings: 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>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:</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>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).</p>	
<p>Damage to Scenic Resources, including Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway: 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>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 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>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</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>Cumulative Aesthetics Impacts: 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
RECREATION		
<p>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 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>Harborwide Recreational Facilities: 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>Cumulative Recreation 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. 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.		
HAZARDS AND HAZARDOUS MATERIALS		
<p>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. 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>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).</p>	Less Than Significant
<p>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.</p>	No mitigation is required.	Less Than Significant
<p>Cumulative Hazards and Hazardous Materials Impacts: 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>		
GREENHOUSE GASES		
<p>Climate Change/GHG Emissions: 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 (CO₂).</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>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:</p> <p>Energy Efficiency Measures.</p> <ul style="list-style-type: none"> • 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. <p>Solid Waste Measures.</p> <ul style="list-style-type: none"> • 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). 	<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>Cumulative Greenhouse Gases: 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>