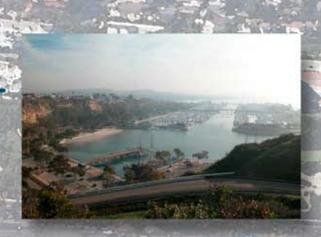
FINAL

**JANUARY 31, 2006** 



# Dana Point Harbor Revitalization Project Program EIR No. 591 Volume 1 SCH No. 2003101142



**Lead Agency:** 

County of Orange

Dana Point Harbor Department

Prepared by:

**RBF Consulting** 



# FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT No. 591 SCH# 2003101142

# Dana Point Harbor Revitalization Project



#### **Lead Agency:**

#### **County of Orange**

Dana Point Harbor Department 24650 Dana Point Harbor Drive Dana Point, CA 92629 **Contact**: Mr. George Caravalho, Director (949) 923-3798

#### **Consultant:**

#### **RBF CONSULTING**

14725 Alton Parkway
Irvine, CA 92618

Contact: Mr. Edward Torres, Program Manager
(949) 855-3659

January 31, 2006

10-102529



# **TABLE OF CONTENTS**

| 1.0 | EXE  | CUTIVE SUMMARY   | <u>Page</u>   |
|-----|--|--|---|
|     | 1.1<br>1.2<br>1.3<br>1.4<br>1.5  | Purpose of the EIR  Project Summary  Project Impacts  Cumulative Impacts Analysis  Alternatives Analysis  Areas of Controversy and Issues to be Resolved   | 1-1<br>1-12<br>1-16<br>1-17   |
| 2.0 | INTR   | ODUCTION AND PURPOSE   |   |
|     | 2.1<br>2.2<br>2.3<br>2.4<br>2.5  | Purpose of the EIR   | 2-1<br>2-4<br>2-6   |
| 3.0 | PRO  | JECT DESCRIPTION   |   |
|     | 3.1<br>3.2<br>3.3<br>3.4<br>3.5<br>3.6   | Project Location   | 3-3<br>3-7<br>3-19<br>3-36  |
| 4.0 | ENVI   | RONMENTAL ANALYSIS   |   |
| 5.0 | 4.0<br>4.1<br>4.2<br>4.3<br>4.4<br>4.5<br>4.6<br>4.7<br>4.8<br>4.9<br>4.10<br>4.11<br>4.12 | Impact Analysis and Mitigation Land Use and Relevant Planning Aesthetics, Visual, and Glare Geology, Soils, and Seismicity Drainage and Water Quality Traffic and Parking Air Quality Biological Resources Public Health and Safety Noise Public Services and Utilities Cultural Resources Recreation  G-TERM IMPLICATIONS OF THE PROPOSED PROJECT | 4.1-1<br>4.2-1<br>4.3-1<br>4.5-1<br>4.6-1<br>4.7-1<br>4.9-1<br>4.10-1 |
|     | 5.1  | Significant Irreversible Environmental Changes   | 5-1   |
|     | 5.2<br>5.3   | Significant Unavoidable Adverse Impacts  | 5-1   |

i



# **TABLE OF CONTENTS [continued]**

|      |        |  | Page |
|------|--------|--|------|
|      | 5.4    | Growth-Inducing Impacts                          | 5-3  |
|      | 5.5    | Project Impacts                                  |      |
| 6.0  | ALTE   | RNATIVES TO THE PROPOSED PROJECT                 |      |
|      | 6.1    | Alternatives Rejected from Further Consideration | 6-2  |
|      | 6.2    | No Project and No Development Alternative        |      |
|      | 6.3    | Reduced Density Alternative                      |      |
|      | 6.4    | Commercial Core Only Alternative                 | 6-12 |
|      | 6.5    | Infrastructure Only Alternative                  | 6-13 |
|      | 6.6    | Alternative Site Alternative                     |      |
|      | 6.7    | Environmentally Superior Alternative             |      |
| 7.0  | EFFE   | CTS FOUND NOT TO BE SIGNIFICANT                  | 7-1  |
|      | 7.1    | Agricultural Resources                           | 7-1  |
|      | 7.2    | Air Quality                                      |      |
|      | 7.3    | Biological Resources                             |      |
|      | 7.4    | Geology and Soils                                |      |
|      | 7.5    | Hazards and Hazardous Materials                  | 7-3  |
|      | 7.6    | Drainage and Water Quality                       | 7-3  |
|      | 7.7    | Land Use and Planning                            |      |
|      | 7.8    | Mineral Resources                                | 7-5  |
|      | 7.9    | Noise  | 7-5  |
|      | 7.10   | Population and Housing                           | 7-6  |
|      | 7.11   | Transportation and Traffic                       |      |
| 8.0  | ORG    | ANIZATIONS AND PERSONS CONSULTED                 | 8-1  |
| 9.0  | BIBL   | IOGRAPHY   | 9-1  |
|      |        |  | Ο.   |
| APPI | ENDICE | S (Provided under separate cover – 3 volumes)    |      |
|      | A.     | Notice of Preparation/NOP Comments               |      |
|      | B.     | Terrestrial Biological Resources                 |      |
|      | C.     | Marine Biological Resources                      |      |
|      | D.     | Air Quality Data                                 |      |
|      | E.     | Noise Data                                       |      |
|      | F.     | Water Quality Management Plan                    |      |
|      | G.     | Geotechnical Study                               |      |
|      | Н.     | Utility/Service Correspondence                   |      |
|      | I.     | Preliminary Hazardous Material Assessment        |      |
|      | J.     | Traffic and Parking Study                        |      |
|      | K.     | Cultural Resources Report                        |      |
|      | L.     | Relevant Planning Consistency                    |      |



# **LIST OF EXHIBITS**

|        |  | <u>Page</u> |
|--------|--|-------------|
| 1      | Existing Conditions                            | 1-3         |
| 2      | Planning Area Overview                         | 1-5         |
| 3      | Dana Point Harbor Revitalization Proposed Plan | 1-7         |
| 3-1    | Regional Vicinity Map                          | 3-4         |
| 3-2    | Site Vicinity Map                              | 3-5         |
| 3-3    | Surrounding Land Uses                          | 3-9         |
| 3-4    | Planning Area Overview                         | 3-11        |
| 3-5    | Existing Conditions                            | 3-13        |
| 3-6    | Dana Point Harbor Revitalization Proposed Plan | 3-21        |
| 3-7    | Off-Site Parking Locations                     | 3-32        |
| 4.2-1  | Key Map  | 4.2-3       |
| 4.2-2a | Existing On-Site Photos                        | 4.2-4       |
| 4.2-2b | Existing On-Site Photos                        | 4.2-5       |
| 4.2-2c | Existing On-Site Photos                        | 4.2-6       |
| 4.2-2d | Existing On-Site Photos                        | 4.2-7       |
| 4.2-3  | Existing SCWD and Selva Photographs            | 4.2-13      |
| 4.2-4  | Surrounding Area Photographs                   | 4.2-14      |
| 4.2-5  | Landscape District Map                         | 4.2-22      |
| 4.2-6  | Conceptual Festival Plaza Design               | 4.2-25      |
| 4.2-7a | Viewshed 1 – Existing Conditions               | 4.2-27      |
| 4.2-7b | Viewshed 1 – Proposed Conditions               | 4.2-29      |
| 4.2-8a | Viewshed 2 – Existing Conditions               | 4.2-33      |
| 4.2-8b | Viewshed 2 – Proposed Conditions               | 4.2-35      |



# **LIST OF EXHIBITS [continued]**

|         |  | <u>Page</u> |
|---------|--|-------------|
| 4.2-9a  | Viewshed 3 – Existing Conditions                 | 4.2-37      |
| 4.2-9b  | Viewshed 3 – Proposed Conditions                 | 4.2-39      |
| 4.2-10a | Viewshed 4 – Existing Conditions                 | 4.2-41      |
| 4.2-10b | Viewshed 4 – Proposed Conditions                 | 4.2-43      |
| 4.2-11a | Viewshed 5 – Existing Conditions                 | 4.2-45      |
| 4.2-11b | Viewshed 5 – Proposed Conditions                 | 4.2-47      |
| 4.2-12a | Viewshed 6 – Existing Conditions                 | 4.2-49      |
| 4.2-12b | Viewshed 6 – Proposed Conditions                 | 4.2-51      |
| 4.2-13a | Viewshed 7 – Existing Conditions                 | 4.2-55      |
| 4.2-13b | Viewshed 7 – Proposed Conditions                 | 4.2-57      |
| 4.2-14a | Viewshed 8 – Existing Conditions                 | 4.2-59      |
| 4.2-14b | Viewshed 8 – Proposed Conditions                 | 4.2-61      |
| 4.2-15a | Viewshed 9 – Existing Conditions                 | 4.2-63      |
| 4.2-15b | Viewshed 9 – Proposed Conditions                 | 4.2-65      |
| 4.2-16a | Viewshed 10 – Existing Conditions                | 4.2-67      |
| 4.2-16b | Viewshed 10 – Proposed Conditions                | 4.2-69      |
| 4.2-17a | Viewshed 11 – Existing Conditions                | 4.2-71      |
| 4.2-17b | Viewshed 11 – Proposed Conditions                | 4.2-73      |
| 4.2-18  | Proposed Lighting Diagram                        | 4.2-76      |
| 4.3-1   | Regional Fault Map                               | 4.3-6       |
| 4.3-2   | Seismic Hazard Zones, USGS Dana Point Quadrangle | 4.3-8       |
| 4.4-1   | Dana Point Coastal Streams Watershed             | 4.4-2       |
| 4.4-2   | Existing Drainage                                | 4.4-5       |
| 4.4-3   | Commercial Core Drainage Key Map                 | 4.4-23      |



# **LIST OF EXHIBITS [continued]**

|        |   | <u>Page</u> |
|--------|---|-------------|
| 4.4-3a | Project Condition Drainage Detail   | 4.4-25      |
| 4.4-3b | Project Condition Drainage Detail   | 4.4-26      |
| 4.4-3c | Project Condition Drainage Detail   | 4.4-27      |
| 4.4-3d | Project Condition Drainage Detail   | 4.4-28      |
| 4.4-4  | Commercial Core Water Quality BMP Locations   | 4.4-33      |
| 4.4-5  | FEMA Flood Hazard Map   | 4.4-39      |
| 4.5-1  | Existing Weekday AM/PM Peak-Hour Intersection Volumes   | 4.5-2       |
| 4.5-2  | Existing Weekend Noon/PM Peak-Hour Intersection Volumes   | 4.5-3       |
| 4.5-3  | Existing Parking Spaces Required/Provided   | 4.5-7       |
| 4.5-4  | Study Intersection Locations  | 4.5-13      |
| 4.5-5  | Forecast Project Inbound/Outbound Trip Percent Distribution   | 4.5-17      |
| 4.5-6  | Forecast Harborwide Project-Generated Weekday AM/PM Peak-Hour Trip Assignment                         | 4.5-18      |
| 4.5-7  | Forecast Harborwide Project-Generated Weekend Noon/PM Peak-Hour Trip Assignment                       | 4.5-19      |
| 4.5-8  | Forecast Year 2030 Without Project Weekday AM/PM Peak-Hour Intersection Volumes                       | 4.5-22      |
| 4.5-9  | Forecast Year 2030 Without Project Weekend Noon/PM Peak-Hour Intersection Volumes                     | 4.5-23      |
| 4.5-10 | Forecast Year 2030 Weekday Plus Commercial Core Project AM/PM Peak-Hour Intersection Volumes          | 4.5-28      |
| 4.5-11 | Forecast Year 2030 Weekend Plus Commercial Core Project Noon/PM Peak-Hour Intersection Volumes        | 4.5-29      |
| 4.5-12 | Forecast Year 2030 Weekday Plus Harborwide Buildout Conditions AM/PM Peak-Hour Intersection Volumes   | 4.5-38      |
| 4.5-13 | Forecast Year 2030 Weekend Plus Harborwide Buildout Conditions Noon/PM Peak-Hour Intersection Volumes | 4.5-39      |
| 4.5-14 | Forecast Year 2012 Without Commercial Core Weekday  |             |

4.9-2

4.10-1



#### AM/PM Peak-Hour Intersection Volumes.......4.5-47 LIST OF EXHIBITS [continued] Page 4.5-15 Forecast Year 2012 Without Commercial Core Weekend Noon/PM Peak-Hour Intersection Volumes......4.5-48 Forecast Year 2012 With Commercial Core Weekday 4.5-16 AM/PM Peak-Hour Intersection Volumes......4.5-51 Forecast Year 2012 With Commercial Core Weekend 4.5-17 4.5-18 Proposed Parking Spaces Required and Provided ......4.5-59 California Air Basins .......4.6-2 4.6-1 4.7-1 Map of Native Trees and Sensitive Bird Areas......4.7-3 Orange County Central/Coastal NCCP Map ......4.7-29 4.7-2 EDR Overview Map.......4.8-5 4.8-1 4.9-1 Noise Monitoring Locations ......4.9-2

Sewer Line Alternatives......4.10-12



# **LIST OF TABLES**

|        |   | <u>Page</u> |
|--------|---|-------------|
| 3-1    | Existing and Proposed Land Use Summary                                | 3-23        |
| 3-2    | Surface Boat Storage and Car Parking Summary                          | 3-24        |
| 3-3    | Boat Slip and Dock Summary  | 3-25        |
| 3-4    | Permits, Approvals, and Agencies Involved                             | 3-38        |
| 4.2-1  | Lighting Zone and Characteristics                                     | 4.2-77      |
| 4.2-2  | Maximum Wattage and Required Shielding                                | 4.2-78      |
| 4.3-1  | Summary of Active Nearby Faults                                       | 4.3-5       |
| 4.4-1  | Existing Storm Drain Facilities                                       | 4.4-4       |
| 4.4-2  | Water Pollutants Generated By Land Use Type                           | 4.4-8       |
| 4.4-3  | 303(D) Impairments of Downstream Water Bodies                         | 4.4-9       |
| 4.4-4  | Dana Point Harbor Bacteria Testing                                    | 4.4-10      |
| 4.4-5  | Summary of Studies at Baby Beach                                      | 4.4-10      |
| 4.4-6  | Beneficial Water Uses in the San Diego Basin                          | 4.4-16      |
| 4.4-7  | San Diego Basin Plan Narrative Standards                              | 4.4-17      |
| 4.4-8  | Project Subdrainage Characteristics                                   | 4.4-21      |
| 4.4-9  | Hydrology Comparison (10-Year Storm) – Existing and Project Condition | ons4.4-22   |
| 4.4-10 | BMP Efficiency  | 4.4-31      |
| 4.4-11 | Anticipated and Potential Pollutants for Project                      | 4.4-32      |
| 4.4-12 | Treatment Control BMP Selection Matrix                                | 4.4-35      |
| 4.4-13 | Water Quality Treatment for the Harbor Drainage Area                  | 4.4-37      |
| 4.5-1  | Dana Point Harbor ITE Trip Rates                                      | 4.5-1       |
| 4.5-2  | Existing Trip Generation (Harborwide and Commercial Core)             | 4.5-4       |
| 4.5-3  | Existing Weekday Peak-Hour LOS  | 4.5-5       |



|        |  | <u>Page</u> |
|--------|--|-------------|
| 4.5-4  | Existing Weekend Peak-Hour LOS   | 4.5-6       |
| 4.5-5  | Existing Parking Requirements  | 4.5-8       |
| 4.5-6  | Volume-to-Capacity (V/C) Ratio and Level of Service (LOS)  | 4.5-12      |
| 4.5-7  | Harborwide Trip Generation   | 4.5-20      |
| 4.5-8  | Forecast Year 2030 Without Project Weekday Peak-Hour LOS   | 4.5-24      |
| 4.5-9  | Forecast Year 2030 Weekend Without Project Peak-Hour LOS   | 4.5-25      |
| 4.5-10 | Level of Service and Delay Ranges  | 4.5-26      |
| 4.5-11 | State Highway Forecast Buildout Year 2030 Without Project Weekday Conditions AM/PM Peak-Hour Intersection LOS        | 4.5-27      |
| 4.5-12 | State Highway Forecast Buildout Year 2030 Without Project Weekday Conditions Noon/PM Peak-Hour Intersection LOS      | 4.5-27      |
| 4.5-13 | Forecast Year 2030 Weekday Plus Commercial Core Project Peak-Hour LOS  | 4.5-30      |
| 4.5-14 | Mitigated Forecast Year 2030 Weekday Plus Commercial Core<br>Project Peak-Hour LOS                                   | 4.5-31      |
| 4.5-15 | Forecast Year 2030 Weekend Plus Commercial Core Project Peak-Hour LOS  | 4.5-32      |
| 4.5-16 | Mitigated Forecast Year 2030 Weekend Plus Commercial Core<br>Project Peak-Hour LOS                                   | 4.5-34      |
| 4.5-17 | State Highway Forecast Buildout Year 2030 With Commercial Core Weekday Conditions AM/PM Peak-Hour Intersection LOS   | 4.5-34      |
| 4.5-18 | State Highway Forecast Buildout Year 2030 With Commercial Core Weekend Conditions Noon/PM Peak-Hour Intersection LOS | 4.5-35      |
| 4.5-19 | Forecast Buildout Year 2030 With Commercial Core Project Weekday Conditions AM/PM Peak-Hour CMP Intersection LOS     | 4.5-36      |
| 4.5-20 | Forecast Buildout Year 2030 With Commercial Core Project Weekend Conditions Noon/PM Peak-Hour CMP Intersection LOS   | 4.5-36      |
| 4.5-21 | Forecast Year 2030 Weekday Plus Harborwide Buildout Conditions Peak-Hour LOS   | 4.5-40      |



|        |  | <u>Page</u> |
|--------|--|-------------|
| 4.5-22 | Forecast Year 2030 Weekend Plus Harborwide Buildout Conditions Peak-Hour LOS   | 4.5-41      |
| 4.5-23 | State Highway Forecast Buildout Year 2030 With Harborwide Buildout Weekday Conditions AM/PM Peak-Hour Intersection LOS                             | 4.5-42      |
| 4.5-24 | State Highway Forecast Buildout Year 2030 With Harborwide Buildout Weekend Conditions Noon/PM Peak-Hour Intersection LOS                           | 4.5-42      |
| 4.5-25 | Level of Service and Density Ranges for Basic Freeway Segments   | 4.5-43      |
| 4.5-26 | State Highway Forecast Buildout Year 2030 With Harborwide Project Conditions Peak-Hour Segment LOS   | 4.5-44      |
| 4.5-27 | Forecast Buildout Year 2030 With Harborwide Buildout Weekday Conditions AM/PM Peak-Hour CMP Intersection LOS                                       | 4.5-44      |
| 4.5-28 | Forecast Buildout Year 2030 With Harborwide Buildout Weekend Conditions Noon/PM Peak-Hour CMP Intersection LOS                                     | 4.5-45      |
| 4.5-29 | Forecast Year 2012 Without Commercial Core Weekday Peak-Hour LOS   | 4.5-46      |
| 4.5-30 | Forecast Year 2012 Without Commercial Core Weekend Peak-Hour LOS   | 4.5-49      |
| 4.5-31 | Forecast Year 2012 With Commercial Core Weekday Peak-Hour LOS  | 4.5-50      |
| 4.5-32 | Forecast Year 2012 Weekend Plus Commercial Core Project Peak-Hour LOS  | 4.5-54      |
| 4.5-33 | Mitigated Forecast Year 2012 Weekend Plus Commercial Core Project Peak-Hour LOS  | 4.5-55      |
| 4.5-34 | Forecast Buildout Year 2012 With Commercial Core Buildout Weekday Conditions AM/PM Peak-Hour CMP Intersection LOS                                  | 4.5-56      |
| 4.5-35 | Forecast Buildout Year 2012 With Commercial Core Buildout Weekend Conditions Noon/PM Peak-Hour CMP Intersection LOS                                | 4.5-56      |
| 4.5-36 | Forecast Year 2012 With Commercial Core Project Weekend<br>Conditions Puerto Place/Dana Point Harbor Drive Intersection<br>Signal Warrant Analysis | 4.5-57      |
| 4.5-37 | Dana Point Harbor Proposed Project Parking   | 4.5-60      |

FINAL • 01/06 ix Table of Contents



|        |  | <u>Page</u> |
|--------|--|-------------|
| 4.6-1  | National and California Ambient Air Quality Standards                                | 4.6-5       |
| 4.6-2  | South Coast Air Basin Ambient Air Quality Classifications                            | 4.6-7       |
| 4.6-3  | Local Air Quality Levels   | 4.6-9       |
| 4.6-4  | Sensitive Receptors Near or Within Project Site                                      | 4.6-12      |
| 4.6-5  | Existing Harborwide Operational Air Emissions  | 4.6-13      |
| 4.6-6  | Existing Commercial Core Operational Air Emissions                                   | 4.6-14      |
| 4.6-7  | SCAQMD Air Emissions Thresholds  | 4.6-16      |
| 4.6-8  | Federal and State Carbon Monoxide Standards  | 4.6-17      |
| 4.6-9  | Harborwide Construction Air Emissions  | 4.6-19      |
| 4.6-10 | Commercial Core Construction Air Emissions   | 4.6-22      |
| 4.6-11 | Harborwide Operational Air Emissions in 2030   | 4.6-24      |
| 4.6-12 | Future Year 2030 Level of Service (LOS)  | 4.6-26      |
| 4.6-13 | Year 2030 Harborwide Carbon Monoxide Concentration                                   | 4.6-27      |
| 4.6-14 | Year 2012 Commercial Core Operational Air Emissions                                  | 4.6-28      |
| 4.6-15 | Future Year 2012 Level of Service (LOS)  | 4.6-29      |
| 4.6-16 | Year 2012 Commercial Core Carbon Monoxide Concentrations                             | 4.6-30      |
| 4.6-17 | Cumulative Air Emission Totals – One-Mile Radius                                     | 4.6-32      |
| 4.7-1  | Sensitive Plant Species Potentially Occurring Within the Harbor or Off-Site Areas    | 4.7-5       |
| 4.7-2  | Sensitive Wildlife Species Potentially Occurring Within the Harbor or Off-Site Areas | 4.7-9       |
| 4.7-3  | Infaunal Species In Dana Point Harbor (1994)   | 4.7-21      |
| 4.7-4  | Infaunal Species In Dana Point Harbor (1998)   | 4.7-22      |
| 4.9-1  | Ambient Noise Measurements   | 4.9-3       |
| 4.9-2a | Existing and Existing Plus Project's Harborwide Component (Weekdays)                 | 4.9-4       |



|         |   | <u>Page</u> |
|---------|---|-------------|
| 4.9-2b  | Existing and Existing Plus Project's Harborwide Component (Weekends)                            | 4.9-6       |
| 4.9-3a  | Modeled Noise Levels: Existing and Existing Plus Project's Commercial Core Component (Weekdays) | 4.9-8       |
| 4.9-3b  | Modeled Noise Levels: Existing and Existing Plus Project's Commercial Core Component (Weekends) | 4.9-10      |
| 4.9-4a  | Land Use Compatibility Noise Guidelines – California  | 4.9-13      |
| 4.9-4b  | Land Use Compatibility Noise Standards – County   | 4.9-14      |
| 4.9-5   | Sensitive Receptors   | 4.9-18      |
| 4.9-6   | Estimated Construction Noise in the Project Area  | 4.9-21      |
| 4.9-7a  | Measured Pile-Driving Noise Levels  | 4.9-22      |
| 4.9-7b  | Effects of Vibration on People and Buildings  | 4.9-22      |
| 4.9-8a  | Modeled Noise Levels: 2030 and 2030 Plus Project's Harborwide Component (Weekdays)              | 4.9-26      |
| 4.9-8b  | Modeled Noise Levels: 2030 and 2030 Plus Project's Harborwide Component (Weekends)              | 4.9-28      |
| 4.9-9a  | Modeled Noise Levels: 2012 and 2012 Plus Project's Commercial Core Component (Weekdays)         | 4.9-31      |
| 4.9-9b  | Modeled Noise Levels: 2012 and 2012 Plus Project's Commercial Core Component (Weekends)         | 4.9-34      |
| 4.9-10a | Modeled Noise Levels: 2030 and 2030 Plus Project's Commercial Core Component (Weekdays)         | 4.9-36      |
| 4.9-10b | Modeled Noise Levels: 2030 and 2030 Plus Project's Commercial Core Component (Weekends)         | 4.9-39      |
| 4.11-1  | Archaeological Sites Recorded Within ½ Mile of the Project Area                                 | 4.11-3      |

FINAL • 01/06 xi Table of Contents



#### **ACRONYMS AND SHORT FORMS**

ACBM asbestos-containing building material

ACM asbestos-containing material
ACOE U.S. Army Corps of Engineers
ADA Americans with Disabilities Act

ADT average daily trips

AQMP Air Quality Management Plan

ASTM American Society for Testing and Materials

Basin South Coast Air Basin

Basin Plan Water Quality Control Plan for the Basin

BFE base flood elevation

BMPs Best Management Practices
BOD Biological Oxygen Demand

°C degrees centigrade

CAAQS California Ambient Air Quality Standards
CADD Computer-aided design and drafting
Cal EPA California Environmental Protection Agency

California Ocean Plan Water Quality Control Plan for Ocean Waters of California Cal-OSHA California Occupational Safety and Health Administration

Caltrans California Department of Transportation

CARB California Air Resources Board

CBI Clean Beaches Initiative CCAA California Clean Air Act

CCC California Coastal Commission CCR California Code of Regulations

CDFG California Department of Fish and Game CDMG California Division of Mines and Geology

CDS continuous deflective separation
CEQA California Environmental Quality Act
CESA California Endangered Species Act

CFC cholorflurocarbon
CFS cubic feet per second
City City of Dana Point

CMP Congestion Management Program
CNEL Community Noise Equivalent Level
CNPS California Native Plant Society

CO carbon monoxide CO<sub>2</sub> carbon dioxide County County of Orange

CRHR California Register of Historical Resources

CWA Clean Water Act
CWC California Water Code
CZ (California) Coastal Zone

DAMP Drainage Area Management Plan

dB decibel

dBA A-weighted decibel

DBW Department of Boating and Waterways



#### **ACRONYMS AND SHORT FORMS [continued]**

DO Dissolved Oxygen

DTSC Department of Toxic Substances

EIR Environmental Impact Report EMS Emergency Medical Services

EPA U.S. Environmental Protection Agency

ESA environmentally sensitive area
ESCP Erosion and Sediment Control Plan

°F degrees Fahrenheit FCAA Federal Clean Air Act

FEMA Federal Emergency Management Agency

FESA Federal Endangered Species Act
FHWA Federal Highway Administration
FIRM Flood Insurance Rate Map
FIS Flood Insurance Study
FR Federal Register

General Permit (NPDES) General Permit for Storm Water Discharges

Associated with Construction Activity

GMP Growth Management Plan

gpd gallon(s) per day gpm gallon(s) per minute gsf gross square feet

H&SC (California) Health and Safety Code

HAP hazardous air pollutant

HC hydrocarbon
HHW Higher High Water
HLS Higher Low Water
HRA Health Risk Assessment

HUD (U.S. Department of) Housing and Urban Development

I Interstate

IAC Implementation Actions Program ICU intersection capacity utilization

IS Initial Study

ITE Institute of Transportation Engineers

kV kilovolt KW kilowatt

KWh Kilowatt Hours

I liter(s) lb pound

 $\begin{array}{lll} \mathsf{L}_{\mathsf{dn}} & \mathsf{Day\text{-Night Noise Level}} \\ \mathsf{L}_{\mathsf{eq}} & \mathsf{Equivalent Sound Level} \\ \mathsf{LHW} & \mathsf{Lower High Water} \end{array}$ 

LIP Local Implementation Plan



#### **ACRONYMS AND SHORT FORMS [continued]**

LLW Lower Low Water LOS Level of Service

Mcf/d Million cubic feet per day mg/l milligram(s) per liter Mgd Million gallons per day MLLW Mean Lower Low Water MM Management Measure

M<sub>max</sub> Maximum moment magnitude MOU Memorandum of Understanding

MPH miles per hour

MUTCD Manual of Uniform Traffic Control Devices

MWh Megawatt hours

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission

NB Northbound

NEPA National Environmental Policy Act
NFIA National Flood Insurance Administration

ng/l Nanograms per liter

NMFS National Marine Fisheries Service

NO2Nitrogen dioxideNOINotice of IntentNOPNotice of PreparationNOxOxides of nitrogen

NPDES National Pollutant Discharge Elimination System

NPS nonpoint source

NPS Program Nonpoint Source Control Program
NRHP National Register of Historic Places

O&M operation and maintenance

 $O_3$  Ozone

OCTA Orange County Transportation Authority

OEHHA (California) Office of Environmental Health Hazard

Assessment

PA Planning Area

Pb lead

PC Planned Community
PCBs Polychlorinated biphenyls
PGA Peak ground acceleration
PH Hydrogen ion concentration

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 Program Plan Plan for California's Nonpoint Source Pollution Control

Program

ppm parts per million ppt parts per thousand PST Pacific Standard Time



#### ACRONYMS AND SHORT FORMS [continued]

RCP reinforced concrete pipe

RCPG Regional Comprehensive Plan and Guide RCRA Resource Conservation and Recovery Act

RH relative humidity

RMP Regional Mobility Program; Runoff Management Plan

ROC Reactive organic compounds

ROG Reactive organic gas

RTIP Regional Transportation Improvement Program

RTP Regional Transportation Plan

RWQCB Regional Water Quality Control Board

SCAB South Coast Air Basin

SCAG Southern California Association of Governments
SCAQMD South Coast Air Quality Management District
SCAQMP South Coast Air Quality Management Plan
SCCIC South Central Coastal Information Center

SCP Source Control Program

SDRWQCB San Diego Regional Quality Control Board

s.f. Square feet

SIP State Implementation Plan SLC State Lands Commission

SO<sub>2</sub> Sulfur dioxide SO<sub>X</sub> Sulfur oxide

SR (California) State Route SRAs Source/receptor areas

SUSMP Standard Urban Stormwater Mitigation Plan SWPPP Storm Water Pollution Prevention Plan SWRCB State Water Resources Control Board

TAC toxic air contaminant

T-BACT best available control technology for toxics

TDM transportation demand measure

USCG U.S. Coast Guard

USFWS U.S. Fish and Wildlife Service

V/C Volume-to-capacity

VOC Volatile organic compound

Watershed Dana Point Coastal Streams Watershed

WDRs Waste discharge requirements
WQCP Water Quality Control Plan
WQMP Water Quality Management Plan