Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail:
P.O. Box 3044
Sacramento, CA 95812-3044

Street Address:
1400 Tenth St., Rm 113
Sacramento, CA 95814

☒ County Clerk
County of: Orange
Address: P.O. Box 238
12 Civic Center Plaza, Rm 106, Santa Ana, CA 92702

From:
Public Agency: South Coast Water District
Address: 31592 West Street
Laguna Beach, CA 92651-6907
Contact: Rick Shintaku, General Manager
Phone: (949) 499-4555

Lead Agency (if different from above):
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

30-2019-0624

State Clearinghouse Number (if submitted to State Clearinghouse): 2016031038

Project Title: Doheny Ocean Desalination Project (Project)

Project Applicant: South Coast Water District (District)

Project Location (include county): Dana Point, California (County of Orange); Cross Streets: Pacific Coast HWY and Park Lantern; Doheny State Beach

Project Description:
The Project would develop, construct, and operate an ocean water desalination facility located in Dana Point, including subsurface intake wells proposed at Doheny State Beach, and various conveyance lines connecting the intake and discharge facilities to existing District property located approximately ½ mile inland, adjacent to San Juan Creek. The District approved only the initial Phase I "Local" Project, which would provide up to 5 million gallons per day (MGD) of potable water. The environmental impact report (EIR) also evaluated a potential future Regional Project of up to 15 MGD, at a programmatic level. However, the District has not approved that Regional Project, which would require further review under CEQA and separate approval. Further information about the Project is provided on the District's website at: www.scwd.org/desal.

This is to advise that the Board of Directors of the South Coast Water District has approved the above
(☒ Lead Agency or ☐ Responsible Agency)

described project on June 27, 2019 (date) and has made the following determinations regarding the above described project.

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
South Coast Water District, 31592 West Street, Laguna Beach, CA 92651-6907

Signature (Public Agency): [signature] Title: General Manager

Date: 6/27/19 Date Received for filing at OPR:

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

RECEIPT NUMBER: 30-2019 0624

STATE CLEARINGHOUSE NUMBER *(If applicable)*: 2016031038

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEAD AGENCY EMAIL	DATE
SOUTH COAST WATER DISTRICT		06/28/2019

COUNTY/STATE AGENCY OF FILING	DOCUMENT NUMBER
Orange	201985000642

PROJECT TITLE: DOHENY OCEAN DESALINATION PROJECT (PROJECT)

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
SOUTH COAST WATER DISTRICT		(949) 499-4555

PROJECT APPLICANT ADDRESS	CITY	STATE	ZIP CODE
31592 WEST ST.	LAGUNA BEACH	CA	92651

PROJECT APPLICANT *(Check appropriate box)*

☐ Local Public Agency ☐ School District ☑ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☑ Environmental Impact Report (EIR)	$3,271.00	$	3,271.00
☐ Mitigated/Negative Declaration (MND)(ND)	$2,354.75	$	0.00
☐ Certified Regulatory Program document (CRP)	$1,112.00	$	0.00

☐ Exempt from fee

- ☐ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$850.00	$	0.00
☐ County documentary handling fee		$	0.00
☐ Other		$	

PAYMENT METHOD:

☐ Cash ☐ Credit ☐ Check ☐ Other **TOTAL RECEIVED** $ 3,271.00

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
x/nadia Alob	NADIA AL OBAIDI, DEPUTY CLERK

Hugh Nguyen

630N Broadway Bldg. 12 Suite
101
92701

County

Finalization: 20190000215577
6/28/19 9:55 am
323 304

Item	Title	Count
1	Z02	1

EIR: Environmental Impact
Report

Document ID	Amount
DOC# 201985000642	3271.00

Time Recorded 9:55 am

Total	3271.00

Payment Type	Amount
Check tendered # 95748	3271.00

Amount Due 0.00

THANK YOU
PLEASE RETAIN THIS RECEIPT
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Attachment A
Mitigation Monitoring and Reporting Program

Doheny Ocean Desalination Project

SECTION 1: AUTHORITY

This environmental Mitigation Monitoring and Reporting Program (Program) has been prepared pursuant to Section 21081.6 of the *California Environmental Quality Act* (CEQA) (Public Resources Code Section 21000 et seq.), and CEQA Guidelines (14 Cal. Code Regs. Section 15000 et seq.) Sections 15091(d) and 15097, to ensure implementation of and provide for the monitoring of mitigation measures required of the Doheny Ocean Desalination Project (Project), as set forth in the Final Environmental Impact Report (EIR) prepared for the Project. This report will be kept on file in the offices of the CEQA Lead Agency, South Coast Water District ("District" or "SCWD").

As noted in the EIR, the Project has been designed to avoid sensitive resources, as reflected in Project design plans and in Project Design Features. The EIR also addresses the potential environmental impacts of the Project, and, where appropriate, recommends mitigation measures to avoid or substantially lessen significant environmental impacts. The Program detailed in the matrix table below is designed to monitor and ensure implementation of all mitigation measures that are adopted for the Project.

The District is the lead agency for the Project and assumes ultimate enforcement responsibilities for implementation of all mitigation measures listed in this Program. The District may assign responsibility for implementation or monitoring to appropriate designees such as a construction manager or third-party monitor. However, as the lead agency, the District remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with this Program. In some cases, the District is required to secure permits or approvals from third-party agencies in order to implement a mitigation measure. In these cases, the District is responsible for verifying that such permits or approvals have been obtained in accordance with the conditions stipulated in the mitigation measure. The District's existing planning, engineering, operations, and procurement review and inspection processes will be used as the basic foundation for the Program procedures and will also serve to provide the documentation for the reporting program.

SECTION 2: MONITORING SCHEDULE

Prior to construction, while detailed design plans are being prepared by District staff or its agents, District staff will be responsible for ensuring compliance with mitigation monitoring applicable to the Project construction, development, and design phases. Once construction has begun and is underway, monitoring of the mitigation measures associated with construction will be included in the responsibilities of District staff, who shall prepare or cause to be prepared periodic monitoring reports as appropriate. Regulatory agencies will have to harmonize CEQA mitigation with regulatory permit conditions and monitoring/reporting as part of the regulatory permitting process and will likely require submittal of formal monitoring reports. Once construction has been completed, the District will monitor the project as specified in the mitigation measures or as otherwise deemed necessary. At minimum, the District will prepare a mitigation monitoring status report prior to commencing construction, prior to commencing operations, within 90 days of commencing operations, and following completion of the first full year of operations.

SECTION 3: SUPPORT DOCUMENTATION

Findings and related documentation supporting the findings involving modifications to mitigation measures shall be maintained in the Project file with the Mitigation Monitoring and Reporting Program and shall be made available to the public upon request.

SECTION 4: FORMAT OF MITIGATION MONITORING MATRIX

The mitigation monitoring matrix on the following pages identifies the environmental issue areas for which monitoring is required, the required mitigation measures, the time frame for monitoring, and the responsible implementing and monitoring agencies.

SECTION 5: DEFINITIONS

The following list provides definitions for acronyms used in the mitigation monitoring and reporting program.

Acronyms/Abbreviation	*Description*
ACM	Asbestos-Containing Materials
AES	Aesthetics, Light, and Glare
AQ	Air Quality
ARB	Air Resources Board
BACT	Best Available Control Technology
BIO	Biological Resources
BMP	Basic Metabolic Panel
BMPs	Best Management Practices
CalARP	California Accidental Release Prevention Program
Cal/OSHA	California Division of Occupational Safety and Health Administration
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CLOMR	Conditional Letter of Map Revision
CM	Construction Manager
County Parks	Orange County Parks Department
CRA	Colorado River Aqueduct
CRS	Cultural Resource Specialist
CSD	Community Services District
CSS	Construction Safety Supervisor
CUL	Cultural Resources
DB	Designated Biologist
District	South Coast Water District
DMMP	Drilling Monitoring and Management Program
DSB …	Doheny State Beach
DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GHG	Green House Gas (Emissions/ Reduction plan/Mitigation)
GPS	Global Positioning System
HAZ	Hazardous Waste Management Plan
HWQ	Hydrology and Water Quality
LID	Low Impact Development
LMC	Landfill Methane Capture
LOMR	Letter of Map Revision

MBTA of 1918..... Migratory Bird Treaty Act of 1918
MGD..... Million Gallons per Day
NMFS ..... National Marine Fisheries Service
NOI..... Noise
NOAA ..... National Oceanic and Atmospheric Administration
NPDES ..... National Pollutant Discharge Elimination System
NPS ..... National Park Service
O&M ..... Operations & Management
OCFA ..... Orange County Fire Authority
OCTA ..... Orange County Transportation Authority
OPA..... Oil Pollution Act
PCH ..... Pacific Coast Highway
PPA ..... Power Purchase Agreement
PV ..... Photovoltaic
RBM ..... Regulated Building Materials
REC..... Recreation
RI..... Remedial Investigation
SCAQMD ..... South Coast Air Quality Management District
SCWD ..... South Coast Water District
SDG&E..... San Diego Gas & Electric
SDRWQCB ..... San Diego Regional Water Quality Control Board
SJBA ..... San Juan Basin Authority
SJCOO..... San Juan Creek Ocean Outfall
SOCWA..... South Orange County Wastewater Authority
State Parks ..... California Department of Parks & Recreation
SWA ..... State Water Project
SWPPP..... Stormwater Pollution Prevention Plan
SWRCP ..... State Water Resources Control Board
TCP..... Traffic Control Plan
TRF ..... Transportation and Traffic
USFWS..... United States Fish and Wildlife Service
UTIL..... Utilities and Service Systems
WEAP ..... Worker Environmental Awareness Program
WMP ..... Waste Management Plan
WQMP ..... Model Water Quality Management Plan

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
AESTHETICS, LIGHT, AND GLARE			
AES-1: Prior to the start of construction, SCWD shall prepare a Construction Lighting & Screening Plan. The Construction Lighting & Screening Plan should indicate aesthetic and lighting treatments for all construction work areas, including staging areas, slant well drill rig work area, and the desalination facility. The Plan shall identify methods used to ensure construction lighting is directional (aimed toward work areas, and not toward nearby sensitive receptors), and limited to sufficient wattage for safety and security. Construction areas visible to sensitive receptors shall be screened via curtains from public view, including the staging and slant well drill rig work area within the State Park and County Park, and the western and southern edges of the desalination facility site and the western edge of the adjacent staging area. Construction screening materials shall be of sufficient height and appropriate color to minimize viewshed impacts, as determined appropriate by the applicable jurisdiction(s). As noted above, for slant well work areas, the construction screening may be open to the ocean for directional sound control and shall include additional aesthetic enhancements such as temporary landscaping in front of the screen.	SCWD	Before construction	SCWD
AES-2: SCWD shall prepare a Site Architectural, Landscape and Lighting Plan Prior to the start of construction, for the purposes of minimizing aesthetic and light/glare impacts from all above-ground facilities, including the electrical control panel near the slant wells, and the desalination facility. Given the desalination facility site's visibility from areas west of San Juan Creek and from PCH, the desalination facility architecture and building elevations shall be designed to create an aesthetically appropriate appearance, as determined by the City of Dana Point and/or California Coastal Commission through the facility's Coastal Development Permit review process. Architectural design shall favor natural appearing materials that blend with the surrounding areas, as well as use of non-reflective glass to minimize glare. A Lighting Plan shall be prepared, demonstrating use of directional lighting and lighting that is limited to intensity needed for site security and safety, in order to minimize light/glare impacts to viewers west of San Juan Creek. All rooftop mechanical and electrical equipment will be screened or placed in areas that are not highly visible from residential and public areas, where feasible. A Landscape Plan shall be prepared, to provide adequate site landscaping for aesthetic enhancement, using non-invasive, drought-tolerant native species. <u>The landscape plan shall be consistent with City of Dana Point's MS4s Permit requirements and City of Dana Point Municipal Code Chapter 9.55 on Water Efficient Landscape Standards and Requirements.</u>	SCWD	Before construction	SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
AIR QUALITY			
AQ-1: During Project construction, all internal combustion engines/construction, equipment operating on the Project site shall meet EPA-Certified Tier 4 emissions standards, or higher according to the following: ▪ All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 4 off-road emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by ARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by ARB regulations. ▪ A copy of each unit's certified tier specification, BACT documentation, and ARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.	Construction Manager	During construction	Construction Manager
AQ-2: On-road vehicle idling time shall be minimized and shall not exceed a five-minute maximum. Additionally, off-road engines shall not idle for longer than five minutes per § 2449(d)(3) of Title 13, Article 4.10, Chapter 9 of the California Code of Regulations. Clear signage of this requirement shall be provided for construction workers at all access points to construction areas.	Construction Manager	During construction	Construction Manager
AQ-3: Although the Project's construction emissions are not projected to exceed the PM10 or PM2.5 significance threshold, the District is committed to reducing levels of particulate matter emissions. This includes the implementation of a fugitive dust control plan that is in accordance with techniques prescribed by SCAQMD's Fugitive Dust Mitigation Measure Tables XI-A through XI-E. Actions would include the following: ▪ Water all active construction areas at least twice daily; ▪ Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard; ▪ Apply water three times daily, or apply (non-toxic) soil stabilizers, on unpaved access roads, parking areas, and staging areas at construction sites;	SCWD	Prior to construction (haul route permit) During construction (fugitive dust, construction material, waste mitigation)	City of Dana Point SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
▪ Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; ▪ Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets; ▪ Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 4 days or more); ▪ Enclose, cover, or water twice daily exposed stockpiles (dirt, sand, etc.); ▪ Limit traffic speeds on unpaved roads to 15 miles per hour; ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways; ▪ Replant vegetation in disturbed areas as quickly as possible; ▪ Wheel washers shall be installed and used by truck operators at the exits of the construction sites. ▪ The applicant (District), or its designee, shall apply for and obtain a haul route permit from the City of Dana Point for all truck activity for the proposed construction activities. The haul route for all activities shall be outlined in the permit application. ▪ During the construction phase, District, or its designee, shall ensure all construction materials, waste, grading or demolition debris, and stockpiles of soil, aggregates, soil amendment, or similar material, shall be properly covered, stored, managed, secured and disposed to prevent transport into the streets, gutters, storm drains, creeks and/or coastal waters by wind, rain, tracking, tidal erosion or dispersion.			
BIOLOGICAL RESOURCES			
BIO-1: Preconstruction Nesting Bird Survey. All construction activities shall comply with the federal MBTA of 1918, and California Fish and Game Code Sections 3503, 3503.5, 3511 and 3513. The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by following the guidelines contained therein. Construction-related tree removal, if any, shall be conducted between September 1 and December 31. If construction occurs inside the nesting season between	Designated Biologist	Before construction (Pre-construction nesting survey)	Designated Biologist

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
January 15 and August 31 (this time frame includes both the passerine and raptor nesting season), the Designated Biologist (DB) [to be approved by the District subject to confirmation by State Parks and CDFW] shall conduct a pre-construction nesting avian species clearance survey in accordance with the following guidelines: a) At least one pre-construction survey shall be conducted within 72 hours preceding initiation of vegetation removal and construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation. b) The survey shall cover all potential nesting habitat and substrate, including the beach, on the Project site and within 500 feet of its perimeter. c) If the DB does not find any active nests, the construction work shall be allowed to proceed. The DB conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests would occur. d) If the DB finds an active nest during the survey and determines that the nest may be impacted, the DB shall establish a no-disturbance buffer zone (protected areas around the nest). The size of the buffer shall be determined by the DB in consultation with the District or its designee (in coordination with CDFW and USFWS), and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed passerine species and 500 feet from the nests of raptors and listed species. e) Any active nests observed during the survey shall be mapped on an aerial photograph using GPS. f) If active nests are detected during the survey, the Designated Biologist (DB) shall monitor all nests with buffers at least once per week, to determine whether birds are being disturbed (distress or other disruption of nesting activity). Activities that might, in the opinion of the DB, disturb nesting activities (e.g., excessive noise, exposure to exhaust), shall be prohibited within the buffer zone. If signs of disturbance are observed, the DB shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed, or placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to		During construction (MBTA compliance)	Biologist

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, placing noisy stationary construction equipment in acoustically engineered enclosures and/or relocating them away from noise-sensitive receptors, and/or reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors. The DB shall implement these or other appropriate measures to ensure that no significant impacts occur to nesting birds pursuant to requirements of the MBTA. g) If active nests are detected during the survey, the DB shall monitor the nest until it is determined that nestlings have fledged and dispersed or the nest is no longer active. h) Only vegetation removal and construction activities (if any) that have been approved by a Biological Monitor (BM) shall take place within the buffer zone until the nest is no longer considered active, consistent with MBTA requirements, such that nesting birds are not disturbed. i) The DB shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no significant indirect impacts on these nests occur, through enforcing measures noted above. j) Prior to the start of any pre-construction site mobilization, the District shall provide applicable regulatory agencies with a letter-report describing the findings of any preconstruction nest surveys, including the time, date, and duration of the survey; identity and qualifications of the surveyor(s); and a list of species observed. If active nests are detected during the survey, the report shall include a map or aerial photo identifying the location of the nest and shall depict the boundaries of the proposed no disturbance buffer zone around the nest. All impact avoidance and minimization measures related to nesting birds shall be included in the monitoring plan.			
BIO-2: DSB Facility Siting. Any facilities sited within DSB shall be reviewed and approved by State Parks and applicable regulatory agencies prior to construction, demonstrating avoidance of sensitive habitat, particularly with respect to the potential well development discharge connection to the existing SOCWA SJCOO vault and the proposed electrical control building.	SCWD	Before construction	State Parks

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
BIO-3: Preconstruction Groundwater Quality Data. Prior to construction of any slant wells at Capistrano Beach Park, the District or its designee shall obtain additional nearshore groundwater quality data (whether onshore or offshore) to refine the anticipated sourcewater quality for the purpose of pretreatment and characterization of well development discharge water quality. Should the water quality data indicate elevated levels of iron or manganese such that the well development water would not meet applicable water quality requirements, the District will either provide suitable onsite treatment (such as use of Baker tanks to settle out solids), convey the well development water to the existing SOCWA vault at DSB campground, or convey the raw water to the desalination facility for supplemental pretreatment via temporary modular treatment units or equivalent (Capistrano Beach Park wells only).	SCWD	Before construction at Capistrano Beach Park	SCWD
BIO-4: DSB Groundwater Monitoring (for SJC Lagoon). The District shall monitor San Juan Creek Lagoon water levels and salinity following commencement of pumping for the first slant well installed at DSB. The monitoring reports shall be submitted monthly to the Coastal Commission, SJBA and NOAA NMFS (at minimum), and shall be used to site any future slant wells at DSB, in consultation with the San Juan Basin Authority, Coastal Commission and NOAA NMFS, such that Phase I slant wells at DSB do not create a significant impact to San Juan Creek Lagoon water levels or salinity relative to southern steelhead trout, as determined by NOAA NMFS.	SCWD	Following slant well installation	SCWD
~~BIO-5: Black Abalone Protection (Capistrano Beach Park only). If construction is proposed in locations that will result in the disturbance of existing riprap structures (e.g. Capistrano Beach Park) the District will consult with a qualified biologist to determine if the work area has potential for the occurrence of black abalone based on the elevation and depth distribution of the construction zone. If a potential for occurrence is identified, then the District contractor will conduct a black abalone survey no more than 90 days prior to initiation of construction work. The District will ensure a survey of the existing riprap structures be conducted at both intertidal and subtidal habitats to the base of the riprap wall to determine if black abalone is present on the structures. The survey team will include qualified divers and biologists experienced in identifying abalone. Survey results will be provided to the District and to the National Marine Fisheries Service (NMFS). If black abalone are determined to be present, the District contractor will consult with NMFS to develop and implement a black abalone protection plan. If necessary and feasible, the District contractor will develop a transplantation plan acceptable to NMFS~~	Not applicable	Not applicable	Not applicable

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
~~that includes the identification of a suitable transplant location nearby, temporary holding and transport methods, and reporting requirements.~~			
OPA-1: OPA Compliance. Prior to issuance of an NPDES Permit, the Project will require an OPA compliance determination from the SDRWQCB and SWRCB in consultation with the State Lands Commission and California Coastal Commission. Should these agencies determine that marine life "mitigation" is required for the Project, the District shall implement required mitigation. One such potential mitigation site would be the San Juan Creek Lagoon, as part of the San Juan Creek Restoration Project outlined in SDRWQCB Resolution NO. R9-2015-0041, adopted June 24, 2015.	SCWD	Prior to issuance of an NPDES Permit	SWRCB, SDRWQCB, Coastal Commission, State Lands Commission
CULTURAL RESOURCES			
CUL-1: Worker Environmental Awareness Training (all components). Prior to ground disturbing activities and ongoing during construction, all contractors shall undergo a Worker Environmental Awareness Program (WEAP). The training, which may be presented in the form of a video, shall include: a) A discussion of applicable environmental resource laws and penalties under the law; b) Samples or visuals of artifacts that may be found in the Project vicinity; c) Information that the Cultural Resource Specialist (CRS) and Construction Manager (CM) have the authority to halt construction to the degree necessary, as determined by the CRS, in the event of a discovery or unanticipated impact to a cultural resource; d) Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources find, and shall contact their supervisor and the CRS or CM; redirection of work shall be determined by the construction supervisor and the CRS; e) An informational brochure that identifies reporting procedures in the event of a discovery; f) An acknowledgment form signed by each worker indicating that they have received the training; and g) A sticker that shall be placed on hard hats indicating that environmental training has been completed. The District (or its designee) shall maintain WEAP Certification of Completion forms of persons who have completed the training.	Construction Manager	Prior to ground disturbance, during construction	SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
CUL-2: Construction Monitoring. Prior to construction, the District (or its designee) shall retain a CRS that meets the minimum qualifications of the U.S. Secretary of Interior Guidelines (NPS 1983). The CRS shall be present during initial deep excavations for pipeline trenches, vaults and desalination facility structures that penetrate below native ground surface. The District shall offer local Native American tribes the opportunity to be present during such initial deep excavations. The CRS and the CM shall have the authority to halt construction if previously unknown cultural resource sites or materials are encountered. Redirection of ground disturbance shall be accomplished under the direction of the construction manager. If such resources are found or impacts can be anticipated, the halting or redirection of construction shall remain in effect until all of the following have occurred: a) The CRS has notified the District (or its designee), and the CM has been notified within 24 hours of the find description and the work stoppage; b) The CRS, the District (or its designee), and the CM have conferred and determined what, if any, data recovery or other mitigation is needed and the scope of that mitigation; c) Any necessary data recovery and mitigation has been completed. All archaeological materials collected as a result of the archaeological investigations (survey, testing, and data recovery) shall be curated in accordance with the State Historical Resources Commission's "Guidelines for the Curation of Archaeological Collections," into a retrievable storage collection in a public repository or museum. The public repository or museum must meet the standards and requirements for the curation of cultural resources set forth at Federal Code of Regulations, Part 79, Title 36. Title to abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the state and under the jurisdiction of the State Lands Commission. Should any cultural resources on state lands be discovered during construction, the District shall contact appropriate Commission staff. The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission.	SCWD SCWD, CRS, CM	Prior to construction During construction	SCWD SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
CUL-3: Paleontological Construction Monitoring and Compliance Program. The following measures would be implemented to reduce potential impacts to paleontological resources to less than significant: ▪ Retain a Qualified Paleontologist. Prior to initial ground disturbance, the South Coast Water District (SCWD) shall retain a project paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology standards for Qualified Professional Paleontologist, to direct all mitigation measures related to paleontological resources. ▪ Paleontological Mitigation and Monitoring Program. After project design has been finalized to determine the precise extent and location of planned ground disturbances, and prior to construction activity, a qualified paleontologist will prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground disturbance activity for the proposed project. This program will outline the procedures for construction staff Worker Environmental Awareness Program (WEAP) training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications. The program will be prepared in accordance with the standards set forth by current Society of Vertebrate Paleontology guidelines (2010) and with proper implementation, will reduce or eliminate potential impacts to paleontological resources. ▪ Paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of construction, the project paleontologist or his or her designee shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be presented at a preconstruction meeting that a qualified paleontologist shall attend. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. If it is determined that the fossil(s) is (are) scientifically significant, the qualified paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources. ▪ Paleontological Monitoring. Ground disturbing construction activities (including grading, trenching, foundation work, and other excavations) in areas mapped as high paleontological sensitivity (see Exhibit 4.4-2, Paleontological Sensitivity Area) should be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. Areas mapped as low to high	SCWD	Prior to initial ground disturbance During Construction	Project Paleontologist Project Paleontologist

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
paleontological sensitivity should be monitored when ground-disturbing activities exceed five feet in depth, because underlying sensitive sediments could be impacted. Areas considered to have an undetermined paleontological sensitivity should be inspected and further assessed if construction activities bring potentially sensitive geologic deposits to the surface. The Paleontological Mitigation and Monitoring Program shall be supervised by the project paleontologist. Monitoring should be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the project paleontologist. If the project paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Supervising Paleontologist. Ground disturbing activity that does not exceed five feet in depth would not require paleontological monitoring. ▪ Salvage of Fossils. If fossils are discovered, the project paleontologist or paleontological monitor should recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the paleontologist would have the authority to temporarily direct, divert, or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. ▪ Preparation and Curation of Recovered Fossils. Once salvaged, the District would ensure that significant fossils would be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the San Diego County Natural History Museum), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the project paleontologist. Field collection and preparation of fossil specimens will be performed by the project paleontologist with further preparation as needed by an accredited museum repository institution at the time of curation. ▪ Final Paleontological Mitigation Report. Upon completion of ground disturbing activity (and curation of fossils, if necessary) the qualified paleontologist should prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report			

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
should include discussion of the location, duration, and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.			
GEOLOGY AND SOILS			
GEO-1: Prior to ground disturbing activities, a site-specific soils engineering report as required by California Building Standards Code § 1803 shall be prepared by a registered geologist. The soils engineering report shall detail existing soils and geologic conditions and shall be required for all Project components located within Liquefaction Investigation Zones, Landslide Investigation Zones or Alquist-Priolo designated Earthquake Fault Rupture Hazard Zones. The soils engineering report shall specifically include laboratory test data, associated geotechnical engineering analysis, and a thorough discussion of seismicity, liquefaction, landslide, dynamic compaction, compressible soils, corrosive soils, and tsunami (as applicable). The soils engineering report shall include any recommendations for ground improvement and/or foundation systems necessary to mitigate potential geologic hazards, as necessary. Recommendations shall be reflected in Project grading and design plans as appropriate. Prior to operations, the District (or its designee) shall ensure that a complete final Geotechnical Report shall be prepared by the Project geotechnical consultant, in accordance with City of Dana Point standards. A copy of the final geotechnical report shall be distributed to all stakeholders including the City of Dana Point. Prior to operations, the District (or its designee) shall ensure that an As-Built Grading Plan shall be prepared by the Civil Engineer of Record. A copy of the as-built grading plans shall be distributed to all stakeholders including the City of Dana Point. Further mitigation requires that: a) The applicant (District), or its designee, shall provide a complete site-specific geotechnical engineering report for review by the City of Dana Point City Engineer b) That geotechnical report shall provide a statement that on-site observation and testing shall be provided to allow the Engineer of Record to certify all work completed.	Registered Geologist, SCWD SCWD, Civil Engineer of record, Project Geotechnical Consultant	Prior to ground disturbing activities, before operations Prior to operations	SCWD City of Dana Point

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
c) That geotechnical report shall also provide geotechnical recommendations for constructing retaining walls and/or associated temporary slopes as applicable.			
GREENHOUSE GAS			
GHG-1: SCWD (or its designee) shall prepare an Energy Minimization and GHG Reduction Plan prior to the start of Project construction activities. The purpose of the Plan is to document Project GHG emissions and the net incremental emissions required to be offset in order to achieve net carbon neutrality (no net increase in GHG emissions beyond emissions associated with imported water, defined as the GHG emissions that are attributed to SCWD's portfolio, with the Project's water supply replaced by water imported from CRA and SWP). The Plan shall, at a minimum, include the following elements: 1) **Project GHG Emissions** – updated GHG emission estimates based upon final design plans; 2) **Construction GHG Emissions** – provide GHG offsets for construction-related GHG emissions in the first year of operation, to be estimated and offset prior to construction and verified following construction, rather than amortizing these emissions over a 30-year period; 3) **Updated CRA and SWP GHG Emissions** – updated emissions associated with importing water that would be imported from CRA and SWP if the Project were not constructed; 4) **Incremental Project GHG Emissions** – Project GHG emissions minus GHG emissions associated with importing water, representing the net incremental GHG emissions requiring offset in order to achieve net carbon neutrality, currently estimated at 5,959 MTCO2eq /year for the up to 5 MGD Project. 5) **GHG Mitigation Options** – the Plan shall identify specific strategies to be implemented which shall, at minimum, be sufficient to reduce or offset the Project's incremental GHG emissions to a "no net increase" performance standard. Strategies shall be verifiable and feasible to acquire and implement over the Project life. The Plan shall identify how each strategy shall be implemented, and the emission reductions associated with strategy. The Plan shall identify the measure prioritization, with onsite measures preferred over Carbon Offsets. Subject to review and modification by other permitting agencies (including the California Coastal Commission and State Lands Commission), SCWD may include any/or all of the following strategies in the Plan:	SCWD	Before construction	SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
a. Minimize Project's Energy Demand – SCWD is committed to constructing and operating an environmentally sound project that minimizes electricity demand through implementation of reasonable and feasible design measures. The Plan shall include a summary of state-of-the-art energy recovery and conservation technologies available for utility-scale desalination facilities and shall include a commitment by SCWD to incorporate all available feasible energy recovery and conservation technologies; or, if SCWD finds that any of the technologies will not be feasible for the project, the Plan shall include a detailed description as to why such technology is considered to be infeasible. The carbon footprint estimate for the approved project shall include consideration of all proposed energy recovery and conservation technologies that will be employed by the project, and shall clearly describe the calculated GHG emissions reductions that will be associated with each technology.			
b. On-site Solar PV – SCWD is committed to installing on-site roof-top solar PV panels or other on-site renewable energy (subject to space availability and only such that there would be no significant visual impacts). The GHG reduction benefit would depend on rooftop surface area availability and other factors. According to initial design calculations, the desalination facility site buildings would accommodate solar panels on a roof surface of approximately 45,000 square feet, with the potential to generate less than 1,000 MWh/year of electricity. If installed, the electricity produced by the onsite PV system would be used by the Project and therefore would reduce the Project's electrical demand on SDG&E. SCWD is in the process of exploring solar proposals and will update this information as it becomes available.			
c. On-site Fuel Cells – The District is committed to reducing GHG emissions by reasonable and feasible methods, including potential use of on-site fuel cells. Potential use of fuel cells is being explored by the District in consultation with SDG&E, relative to cost, requirements for offsite improvements if any, additional permitting requirements, and timeliness of this option. If fuel cells are not deemed feasible, the District commits to a "net carbon neutral" project as described further in Mitigation Measure GHG-2.			
d. GHG Offsets (or "Carbon Offset") – SCWD may pursue a Renewable Power Purchase Agreement (PPA) [1] to achieve the required level of GHG emission reductions to achieve net			

[1] *A renewable power purchase agreement is a contract between two parties where one party sells both electricity and renewable energy certificates (RECs) to another party. The "seller" is often the developer or project owner, the "buyer" is the power consumer. Renewable energy PPAs can take two primary forms – physical or financial (the latter often referred to as "virtual") – the best structure depending on the markets where the consumer and renewable projects are located, as well as the goals, priorities, and risk tolerance of the consumer (from https://3degreesinc.com/ppas-power-purchase-agreements/ (accessed January 27, 2018).*

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
carbon neutrality. If the PPA is not feasible or desirable to provide adequate GHG emissions reduction, SCWD would pursue additional third-party verifiable GHG offsets and/or Renewable Energy Certificates[2]. To the extent practicable, GHG offset projects must be located within California. Offsets may include, but not be limited to: [3] i. *Landfill Methane Capture:* Methane capture removes GHG emissions from the atmosphere. These GHG offsets are readily available across the country from numerous verified providers. ii. *Reforestation:* Reforestation provides GHG reduction associated with carbon sequestration, and is a widely available GHG offset nationally and internationally. iii. *Wind Power:* Wind Power provides clean energy to reduce fossil-fuel related electricity emissions. Wind Power GHG offsets are readily available across the country and internationally.			
GHG-2: SCWD (or its designee) shall prepare and publish an Annual GHG Verification Report in the first quarter of each year following Project construction or operations. The purpose of the Plan is to "true up" the incremental GHG emission estimate annually by reporting on actual estimated Project GHG emissions, emissions associated with importing water, and the GHG offsets associated with verifiable GHG mitigation. The Report shall be prepared by SCWD and verified by an independent accredited verification entity, pursuant to ARB Mandatory Reporting Regulation. The findings of the Report shall be used to adjust the annual GHG offsets required for the subsequent Project operational years. Additional offsets, if required, shall be in place by the end of the next operational year, with verification and validation of any additional offsets included in the following year's Report.	SCWD	Annually in the first quarter of each year following project construction or operations	Independent accredited verification entity

[2] *Carbon offsets, also known as VERs or CRTs (carbon reduction tons), represent the act of reducing, avoiding, destroying or sequestering the equivalent of a ton of greenhouse gas (GHG) in one place to "offset" an emission taking place somewhere else. Offsets generally represent direct emission reductions or sequestration -- for example, the destruction of methane emitted from decaying manure at a dairy farm. So they can be used to offset direct emissions, like those from Scope I in a company's footprint. On the other hand, renewable energy certificates, or RECs, represent proof that one megawatt hour (MWh) of energy was generated from a clean, renewable source, such as wind, solar, hydro, or certain types of renewable biomass, which effectively offsets the GHGs that would have otherwise been associated with the production electricity. RECs are also known as Green Tags, Renewable Energy Certificates or Tradable Renewable Certificates.*

[3] *SCWD assumes that each or any of the identified GHG mitigation strategies either have or will receive any required discretionary approvals prior to being applied to the Project, or otherwise have negligible environmental impact.*

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
HAZARDS			
HAZ-1: Drilling Monitoring and Management Program. Prior to the issuance of a grading, drilling, or construction permit, the District or its designee shall prepare a Drilling Monitoring and Management Program (DMMP) to be implemented as part of the Project. The DMMP would be used to minimize potential hazardous materials effects and releases to the environment, and shall include best management practices (BMPs). BMPs shall include monitoring all drilling activities and to ensure that the loss of drilling fluids including drilling mud, borehole, collapse, and groundwater interference does not occur. To help prevent such releases or collapse, monitoring of all drilling activities shall be done by a qualified geotechnical engineer and will include strategies to minimize the potential for leaks including; using pilot holes to test best drilling location; using muds with naturally occurring materials and that are heavier than water such as bentonite and non-toxic polymers; monitoring of fluid pressures; adjusting fluids to maintain proper drilling pressures; and by using dyes to detect leaks into the water column. In case of a spill, the DMMP shall clearly define measures that would be used to contain spills and minimize other hazards. The monitoring and response measures shall be designed to be specific to the expected subsurface conditions for each Intake Well proposed to be drilled.	SCWD	Prior to grading, drilling, or construction permit	SCWD
HAZ-2: Hazardous Waste Management Plan. Prior to issuance of a grading, drilling, or construction permit, the District or its designee shall prepare a Hazardous Waste Management Plan for all waste generated, used, handled, or transported during facility construction and operation to include, seawater intakes, conveyance system, desalination facility, brine disposal, and water distribution system. The Hazardous Waste Management Plan shall define all wastes expected to be generated during construction activities. The Plan shall contain, at a minimum, the following: ▪ Incorporation of applicable elements of the District's Hazardous Material Business Plan as determined by the District; ▪ Address applicable provisions of local, state and federal law, including CalARP; ▪ A description of all waste streams, including projections of frequency, amounts generated, and hazard classifications; and ▪ Methods of managing each waste, including storage, treatment methods, disposal by a licensed contractor, and companies contracted with for treatment services, waste testing methods to	SCWD	Prior to grading, drilling, or construction permit	SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans. Implementation of the Hazardous Waste Management Plan shall be verified and implemented through the construction and operation horizon. The District also shall complete an Annual Compliance Report, documenting the actual waste management methods used during the year compared to planned management methods.			
HAZ-3: Registered Professional Engineer or Geologist. The District shall have a Registered Professional Engineer or Geologist, with experience in remedial investigation and feasibility studies, available for consultation during soil excavation and grading activities. The Registered Professional Engineer or Geologist shall be given full authority to oversee any drilling, microtunneling, jack and bore, excavation, trenching, or other earthmoving activities that have the potential to disturb contaminated soil or groundwater and provide recommendations for remediation and/or prevention should it be necessary. Slant well construction and operation shall include ongoing groundwater monitoring, both for lagoon surface water levels (BIO-4) and groundwater quality. Groundwater quality will be monitored both for slant well product water quality to ensure drinking water quality standard compliance, as well as groundwater levels and quality in existing and new groundwater monitoring wells. Groundwater modeling in Draft EIR Appendix 10.10.2 (pages 52-62) indicates that the Project is anticipated to have a beneficial effect on existing groundwater plumes. Should the Project adversely affect existing groundwater plumes based on groundwater quality monitoring, the District shall implement a Remedial Action Plan for review and approval by applicable regulatory agencies including the SDRWQCB and DTSC, such that Project drinking water will meet applicable drinking water standards, and existing groundwater pumpers are not adversely affected by Project pumping. A copy of the final hydrology or other studies related to Project slant well construction and monitoring shall be distributed to appropriate stakeholders including the City of Dana Point.	Registered Professional Engineer or Geologist	During soil excavation and grading activities	Registered Professional Engineer or Geologist SDRWQCB, DTSC
HAZ-4: Inspection of Potentially Contaminated Soils. If potentially contaminated soils are unearthed during site disturbance activities as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the Registered Professional Engineer or Geologist (per HAZ-3) shall inspect the identified area, determine the need for sampling to confirm the nature and extent of contamination, and file a written report to the City of Dana Point Community Development Department (Building and	Registered Professional Engineer or Geologist	During site disturbance activities	Registered Professional Engineer or Geologist

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
Safety Division) and the Orange County Department of Environmental Health stating the recommended course of action. Depending on the nature and extent of contamination, the Registered Professional Engineer or Geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If significant remediation may be required, the Registered Professional Engineer or Geologist shall contact representatives of the San Diego Regional Water Quality Control Board, DTSC, and other local agencies, as applicable, for guidance and possible oversight. The District is responsible for implementing all recommended actions. If soil contamination is suspected or observed in the Project area, then excavated soil will be sampled prior to export and disposal. If the soil is contaminated, it will be disposed of in accordance with all applicable and relevant laws and regulations. Contaminated soil will be included as a potential waste stream in the Hazardous Waste Management Plan (HAZ-2). All soil sampling will be conducted under the oversight of the Registered Professional Engineer or Geologist (Haz-3). Any imported soil used for backfill and any backfill soil that will be imported will be properly screened or evaluated to ensure the backfill material is free from contamination. Soils imported from a quarry will be sampled and certified by the quarry prior to acceptance. Soils to be imported from other locations will be evaluated per the Department of Toxic Substance Control's "Information Advisory Clean Imported Fill Material" dated October 2001.			City of Dana Point, Orange County Department of Environmental Health
HAZ-5: Remedial Investigation Workplan. Prior to demolition of any structures or equipment on the proposed desalination facility, in the event hazardous materials are discovered that require remediation (pursuant to HAZ-4), the District shall prepare a Remedial Investigation Workplan (RI Workplan) to the satisfaction of City of Dana Point Community Development Department (Building and Safety Division) and the Orange County Department of Environmental Health. The RI Workplan shall include a detailed site characterization plan with soil and groundwater sampling and analysis to determine the extent and nature of contamination existing beneath the surface of the desalination facility. The RI Workplan shall be provided to the DTSC, San Diego Regional Water Quality Control, and City of Dana Point Fire Department, and other local agencies, as applicable, for review and comment. If contaminated soil or groundwater is found to exist, the District shall contact representatives of appropriate agencies for further guidance and possible oversight. In no event shall the District proceed with site preparation or construction activities at any location on the site where hazardous waste contamination is found to be present until that location is either remediated or shown to pose an insignificant risk to humans and the	SCWD	Prior to demolition of existing structures	City of Dana Point, Orange County Department of Environmental Health, DTSC, SDRWQCB

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
environment as demonstrated to the satisfaction of the applicable agency responsible for remediation oversight.			
HAZ-6: Survey of Asbestos-Containing Materials and Lead-Based Paint. Prior to demolition of any existing structures (including piping materials), the District shall, to the satisfaction of City of Dana Point Community Development Department (Building and Safety Division) and the Orange County Department of Environmental Health, complete and submit a survey of all Asbestos-Containing Materials (ACM) and Regulated Building Materials (RBM) that contain lead-based paint to the listed agencies for review and comment and for approval. If any such materials are located, and after receiving approval and prior to demolition, the District shall remove all ACM and RBM from the site in accordance with all applicable guidelines and regulations pertaining to the safe handling, removal, and disposal of such materials. The District shall contract with a licensed company to perform all related work efforts and shall inform the City of Dana Point and County of Orange when all ACM and RBM were removed from the site.	SCWD	Prior to demolition of existing structures	City of Dana Point, Orange County Department of Environmental Health
HAZ-7: Project Demolition and Construction Safety and Health Program. Prior to demolition of any existing structures, the District shall, to the satisfaction of City of Dana Point Community Development Department (Building and Safety Division) and the Orange County Department of Environmental Health, submit for review and comment a copy of the Project Demolition and Construction Safety and Health Program containing the following: ▪ A Demolition and Construction Safety Program; ▪ A Demolition and Construction Personal Protective Equipment Program; ▪ A Demolition and Construction Exposure Monitoring Program; ▪ A Demolition and Construction Emergency Action Plan; and ▪ A Demolition and Construction Fire Protection and Prevention Plan The Demolition and Construction Fire Protection and Prevention Plan and Emergency Action Plan shall include the following: a) Methods to maintain fire access roadways and submittal of a fire access layout plan for review by the City of Dana Point Fire Department.	SCWD	Prior to demolition of existing structures	City of Dana Point, Orange County Department of Environmental Health

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
b) Provision of fire flow calculations to verify that the available water supply proposed will be adequate for emergency operations. c) A requirement that all temporary fire mains and hydrants shall be adequately braced and tied-down to anticipate the effects of water hammer and that protection from vehicular impact is provided as necessary			
HAZ-8: Project Operations and Maintenance Safety and Health Program. Prior to issuance of any well, grading or construction permit, the District shall, to the satisfaction of City of Dana Point Community Development Department (Building and Safety Division) and the Orange County Department of Environmental Health, submit for approval a copy of the Project Operations and Maintenance Safety and Health Program containing the following: ▪ An Operation Injury and Illness Prevention Plan; ▪ An Emergency Action Plan; ▪ Hazardous Materials Management Program; ▪ Operations and Maintenance Safety Program; ▪ Fire Protection and Prevention Program (8 CCR § 3221); and, ▪ Personal Protective Equipment Program (8 CCR § 3401-3411). The Operation Injury and Illness Prevention Plan, Emergency Action Plan, and Personal Protective Equipment Program shall be submitted to the Cal/OSHA Consultation Service, for review and comment concerning compliance of the program with all applicable Safety Orders for approval. The Operation Fire Protection Plan and the Emergency Action Plan shall also be submitted to the City of Dana Point Fire Department for review and comment. The Project Operations Fire Protection and Prevention Plan and Emergency Action Plan shall address: a) Provision of remote annunciation for all fire alarm and automatic suppression devices and the placement of remote annunciation at applicable project sites. b) Provision of fire alarm system and automatic fire sprinklers for all new structures. c) Adequate emergency access for Fire Department operations.	SCWD	Prior to issuance of a well, grading or construction permit, before construction	City of Dana Point, Orange County Department of Environmental Health City of Dana Point, Orange County Fire Authority

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
Prior to construction, the applicant (District), or its designee, shall prepare a Fire Master Plan and submit said plan to the Orange County Fire Authority (OCFA) and the City of Dana Point Public Works for review and approval. Hydrant locations shall be designated as part of the Plan. A Fire Master Plan shall be required for the proposed facility and slant well location as deemed necessary by OCFA.			
HAZ-9: Retain a Site Construction Safety Supervisor. The District shall, to the satisfaction of City of Dana Point Community Development Department (Building and Safety Division), retain a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of construction activities and relevant laws, ordinances, regulations, and standards; is capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall: ▪ Have over-all authority for coordination and implementation of all occupational safety and health practices, policies, and programs; and ▪ Ensure that the Project's safety program complies with relevant Cal/OSHA and federal regulations, including the following: ▪ Ensure that all construction workers, operational employees, and supervisors receive adequate safety training; ▪ Complete accident and safety-related incident investigations, emergency response reports for injuries, and inform the Project Engineer of safety-related incidents; and ▪ Ensure that all required plans and other applicable mitigation measures are implemented. The CSS shall submit a monthly safety inspection report to the Project Engineer that includes the following: ▪ Record of all employees trained for that month (all records shall be kept on site for the duration of the Project); ▪ Summary report of safety management actions and safety-related incidents that occurred during the month;	SCWD	Before construction	City of Dana Point

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
▪ Report of any continuing or unresolved situations and incidents that may pose a danger to life or health; and ▪ Report of accidents and injuries that occurred during the month.			
HYDROLOGY AND WATER QUALITY			
HWQ-1: Prior to any ground disturbance activities, SCWD shall manage stormwater pollution from construction activities by complying with State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activities. At least 30 days prior to construction, SCWD (or its designee) shall develop and implement a construction Stormwater Pollution Prevention Plan (SWPPP) for the construction of the Project that identifies project-specific best management practices (BMPs) to be implemented during the construction phase. The SWPPP shall include applicable erosion control measures, with the intent to satisfy Erosion Control Plan requirements of regulatory permitting agencies including the California Coastal Commission, State Parks, County Parks and City of Dana Point. District (or its designee) shall ensure that construction activities are coordinated with the City of Dana Point, City of San Juan Capistrano and State Parks relative to ongoing efforts related to dry weather runoff monitoring. During the construction phase, the District (or its designee) shall ensure that all construction materials, waste, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, or similar material are properly covered, stored, managed, secured and disposed to prevent transport into the streets, gutters, storm drains, creeks and/or coastal waters by wind, rain, tracking, tidal erosion or dispersion.	SCWD	Prior to any ground disturbance activities, during construction	City of Dana Point, City of San Juan Capistrano, State Parks (as appropriate)
~~**HWQ-2: High Surf Mitigation** - In order to minimize potential for coastal wave damage, SCWD or its contractor shall prepare a High Surf Mitigation Plan for any slant well construction proposed at Capistrano Beach Park, or otherwise subject to high surf wave damage. This Plan shall be prepared for applicable regulatory agency review and approval at least 30 days prior to construction, and shall include the following at minimum (or equivalent measures as determined appropriate by the Coastal Commission and County of Orange) to provide for public safety and avoid construction site erosion or related water quality impacts):~~	Not applicable	Not applicable	Not applicable

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
~~• The drill rig itself shall be on a skid-mounted platform, secured by temporary pilings keyed into competent underlying material, estimated at 20-30 feet deep.~~ ~~• The drill rig shall be capable of elevating above grade during small wave events.~~ • For ~~smaller coastal storm events (typically less than one foot of water over the site, to be determined by the Contractor, based on typical coastal wave patterns for this season), the drill rig work area shall be secured by sandbags or K-rails.~~ ~~• For larger storm events (typically where more than two feet of water would be over the site, to be determined by the Contractor, where local or National Weather Service warnings indicate high surf hazards or the drill rig work area is otherwise anticipated to be exposed to coastal wave damage beyond which sandbags or K-rails will suffice), the drill rig and appurtenant equipment will be temporarily demobilized and relocated depending on the storm severity, requiring 6-12 hours of advanced warning.~~ ~~• To prevent damage to the slant well drill hole, the temporary casings at the surface would be temporarily sealed.~~			
~~**HWQ-3:** Minimum SJCOO Flow – As part of the Project's NPDES Permit application for brine discharge, the District stipulates that the Project will comply with applicable OPA requirements. If required to meet OPA requirements, the District, as a SOCWA member agency with shared responsibility in managing SJCOO discharges, will ensure that SJCOO wastewater discharges are at least 0.35 MGD where required to provide adequate blending of the Project's brine discharge.~~	Mitigation has been removed	Mitigation has been removed	Mitigation has been removed
HWQ-4: ~~Prior to construction~~ Early in the design/planning, the District (or its designee) shall prepare a Preliminary Water Quality Management Plan (WQMP) for review and approval by the City of Dana Point in conformance with *Model Water Quality Management Plan (Model WQMP) for South Orange County (2017)* and associated *Technical Guidance Document (2017)*, identifying applicable site design BMPs, which address low impact development and designing the site in sustainable ways, source control BMPs, which are operation, management, LID/Treatment Control BMPs (Harvest & Reuse, On-site retention and/or biofiltration), and Hydromodification Management BMPs, as applicable. Prior to final approval and operations, the District (or its designee) shall prepare and submit a Final WQMP and Operations and Maintenance (O&M) Plan pursuant to the City's Water Quality Development Standards to the City for	SCWD	During project design/planning Prior to operations	City of Dana Point City of Dana Point

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
review and approval, including: ~~and~~ housekeeping activities which control pollutants at the source, include staff and contractor training, street sweeping, storm drain system maintenance, efficient irrigation practices, litter management, etc.; and treatment BMPS, which remove pollutants from runoff prior to discharge. All these BMPs will be implemented for comprehensive pollutant management program and management and treatment of the runoff generated from the project. District or its designee shall ensure that final certification for all improvements associated with water quality and the Project WQMP for review shall be submitted to the City Engineer by separate submittal by the project's Civil Engineer. The submittal shall indicate that the improvements are substantially completed and in conformance with the approved WQMP. The City's WQMP Construction Certification letter template, including photos, shall be completed by the project's Civil Engineer, certifying that all structural best management practices (BMPs) described in the Project's WQMP have been constructed and installed in conformance with approved plans and specifications after field inspection has been conducted.			
HWQ-5: Prior to grading, the District or its designee shall prepare a final design hydrology study in compliance with City and FEMA requirements to demonstrate that the desalination facility site is adequately protected from flood hazards, and any associated improvements (including elevating the site above existing grade) do not adversely affect adjacent properties. The District shall coordinate with the City, County and FEMA in preparing and processing a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) to remove the site from the 100-year flood hazard area, at which time FEMA will update its FIRM flood hazard maps for the area.	SCWD	Prior to grading	City of Dana Point, County of Orange, FEMA
HWQ-6: Prior to constructing the electrical control building, the District shall prepare a final hydrology study that demonstrates the facility is adequately protected from flood hazards. The facility should be sited as far as practicable from extreme flood hazard potential areas, recognizing the coastal location may make this challenging. In the event the facility is sited in a flood hazard zone, the building shall be designed to withstand reasonably foreseeable future flood hazard events, to the satisfaction of State Parks. The District (or its designee) will make available the final hydrology study, consistent with other studies and information generated through the final design stages, to Project stakeholders including the City of Dana Point.	SCWD	Before the construction of the electrical control building	State Parks

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
HWQ-7: Prior to any construction shoreward of PCH, the District shall prepare a Coastal Hazard Mitigation Plan, for review and approval by the property owner (State Parks and/or County Parks), in addition to the Coastal Commission. The Coastal Hazard Plan shall demonstrate that the proposed facilities are adequately protected from coastal hazards during construction, operation and maintenance activities, such that facilities and workers are protected, as determined appropriate by the reviewing agencies (State Parks and/or County Parks, and Coastal Commission). For any slant well subject to coastal erosion or wave damage, the Plan shall demonstrate that the slant well vault and associated infrastructure are buried sufficiently deep so as to avoid exposure in the reasonably foreseeable future for the life of the slant well. The Plan shall be implemented by the District (or its designee) for the duration of Project construction and operations.	SCWD	Before construction shoreward of PCH	State Parks, Coastal Commission
NOISE			
NOI-1: Prior to construction, SCWD (or its designee) shall ensure that the Grading Plan, Building Plans, and specifications stipulate that: ▪ All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other State-required noise attenuation devices. ▪ When feasible, construction haul routes shall avoid noise sensitive uses (e.g., residences, convalescent homes, etc.). ▪ During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise sensitive receptors. ▪ Construction activities that generate noise shall not take place outside of the allowable hours specified by the City of Dana Point Municipal Code Chapter 11.10.014 (8:00 p.m. to 7:00 a.m. on weekdays, including Saturdays, or at any time on Sunday or Federal holiday, with exception on PCH between San Juan Creek Bridge and Crystal Lantern) ▪ SCWD (or its designee) or the Project contractor shall, to the extent feasible, schedule construction activities to avoid simultaneous operation of construction equipment so as to minimize noise levels resulting from operating several pieces of high noise levels resulting from operating several pieces of high-noise-level-emitting equipment.	SCWD	Before construction	SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
▪ SCWD (or its designee) shall ensure that construction noise reduction methods such as shutting off idling equipment, construction of a temporary noise barrier, maximizing the distance between construction equipment staging areas and adjacent residences, and use of electric air compressors and similar power tools, rather than diesel equipment, are used where feasible. ▪ SCWD (or its designee) shall ensure that construction hours, allowable workdays, and the phone number of the job superintendent are clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event the City receives a complaint, SCWD (or its designee) shall ensure appropriate corrective actions are implemented and a report of the action provided to the reporting party.			
NOI-2: Slant Well 24-hour Drilling Noise Mitigation a) Construction Hours. SCWD shall conduct construction activities between 7:00 a.m. and 6:00 p.m. Monday through Saturday and 9:00 a.m. to 6:00 p.m. Sunday or for a shorter period if so stipulated in the relevant local noise ordinance. Exceptions shall only apply to drilling operations associated with the proposed slant well construction. b) Temporary Noise Barriers. SCWD, the contractor or designee shall install temporary noise barriers between well drilling and sensitive receptors. Temporary noise barriers shall be installed between the drilling rig and nearby receptors such that noise levels at nearby residences and overnight camping sites are reduced. Depending on the length of the noise barrier, it may need to be repositioned after drilling of each well has been completed and the drilling rig has been repositioned. The height and location of the noise barrier shall be determined based on the size of the drilling rig to be used and the location of the proposed wells, and shall be included in a drilling plan submitted to State Parks and County Parks for review and approval. Exceptions shall apply only upon approval by the State or County. c) Advanced Notice to Sensitive Receptors. SCWD or its construction contractor shall provide advanced notice, between 2 and 4 weeks prior to construction, by mail to all sensitive receptors and residences within 300 feet of construction sites, staging areas, and access roads. The announcement shall state specifically where and when construction would occur in the area. If construction delays of more than 7 days occur, an additional notice shall be made, either in person or by mail. Notices shall provide tips on reducing noise intrusion; for example, by closing windows	SCWD	During construction Prior to construction Prior to construction, during construction and operation	SCWD SCWD SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
facing the planned construction. The notice shall also advise the recipient on how to inform the applicant/contractor if specific noise- or vibration-sensitive activities are scheduled so that construction can be rescheduled, if necessary, to avoid a conflict. SCWD shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur. d) Dedication of a Public Liaison. SCWD shall identify and provide a public liaison before and during construction to respond to concerns of neighboring receptors, including residents, about noise construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCWD shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers. Prior to public notification, procedures included in the notices shall be submitted to State Parks and County Parks for review and approval. SCWD shall provide State Parks and County Parks with a bimonthly letter reporting the number of calls received and a summary of caller concerns and how concerns were addressed. e) Use of Appropriate Mufflers. Construction equipment shall be equipped with the appropriate mufflers to reduce noise impacts to less than significant levels in accordance with applicable noise regulations. f) Use of the Doheny State Beach campground shall be prohibited within 120 feet of the drilling sites on the (Pods D and E) in order to avoid exposure to construction noise levels in excess of City standards. g) Throughout Project construction and operation, SCWD (or its designee) shall document, investigate, evaluate, and attempt to resolve all Project-related noise complaints as soon as possible.			
NOI-3: Prior to construction, SCWD (or its designee) shall review noise specifications (noise ratings, power ratings, etc.) for all stationary equipment (microfiltration units, reverse osmosis units, pumps, generators, etc.) and enclosures to confirm that facility noise levels are within the City of Dana Point's acceptable noise standards at nearby sensitive receptors. If noise levels are anticipated to exceed the applicable City noise standards, noise-attenuation measures, such as locating stationary equipment within an upgraded noise enclosure/structure that provides sufficient attenuation and with adequate	SCWD	Before construction	SCWD

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
setback and screening, would be required to achieve acceptable noise levels at the property lines of nearby sensitive receptors (residential uses) in accordance with the Dana Point General Plan and Dana Point Municipal Code Chapter 11.10 (Noise Standards). Once the equipment is installed, noise levels shall be monitored to ensure compliance with the applicable noise standards. If stationary noise exceeds the City of Dana Point's standards, an acoustical engineer shall be retained to install additional noise attenuation measures, in order to meet the applicable noise standard.			
NOI-4: Pump Facility Noise. Prior to construction, SWCD (or its designee) shall review noise specifications (noise ratings, power ratings, etc.) for all stationary equipment (conveyance pumps, generators, etc.) to confirm that the Project noise levels are within the City of Dana Point's acceptable noise standards at nearby sensitive receptors. If noise levels are anticipated to exceed the applicable City's noise standards, noise-attenuation measures, such as locating stationary equipment within enclosed structures with adequate setback and screening, would be incorporated into Project design sufficient to achieve acceptable noise levels at the property lines of nearby sensitive noise receptors (residential uses) in accordance the Dana Point General Plan and City's Municipal Code § 11.10.10-12 (Noise Standards). Once the equipment is installed, noise levels shall be monitored to ensure compliance with the City's noise standards. If stationary noise exceeds City's standards, an acoustical engineer shall be retained to install additional noise attenuation measures, in order to meet the applicable noise standard.	SCWD	Before construction	SCWD
RECREATION			
REC-1: Minimize Construction Impacts on Parks and Recreational Facilities. As part of final design and permitting, SCWD shall review detailed design plans with affected recreational agencies, in order to refine facility layout, design, staging, construction and operational details. Prior to obtaining encroachment permits or other approvals from State Parks, County Parks and the City of Dana Point, SCWD shall demonstrate that ▪ SCWD has considered potential recreational impacts in its decision for slant well phasing, such that prioritization of Pods A-C and Pods G and H shall be higher for purposes of recreational facility impacts, recognizing that other pods may be more favorable for design purposes, well production capacity, operational/maintenance consideration, or other factors; ▪ Pod F has been eliminated from consideration;	SCWD	Before permitting	State Parks, Orange County Parks (only for Capistrano Beach Park), City of Dana Point

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
▪ Pod G has been shifted south of the basketball courts; ▪ If pipeline trenching across Palisades Drive is necessary (for Pods G and H), use of the CSD maintenance road or other methods have been explored to minimize temporary disruption of the Class I bike trail; ▪ The Project has incorporated appropriate mitigation measures to reduce recreational impacts, related to aesthetics/lighting, noise, and parking/access (as set forth in Section 4.1, 4.10 and 4.13); ▪ Project construction shall maintain pedestrian/bicycle access for routes within the State Park and County Park, through either avoidance or temporary rerouting; ▪ Where Project construction affects existing on-street Class I bike lanes (such as Dana Point Harbor Drive and Del Obispo Street), temporary bicycle lane closures shall include advanced notice of closures and applicable temporary rerouting (see REC-2 below); ▪ Appropriate signage and advance notification is provided to the affected agency for dissemination to the public and posting on-site; and ▪ Where practical, Project construction shall be timed with any other planned improvements to minimize disruption of recreational facilities.			
REC-2: Provide Construction Updates and Detour Information for Bicyclists. If the use of bicycle facilities must be temporarily impacted due to construction of the proposed Project, SCWD or its designee shall coordinate with the affected agency (State Park, County Park and/or the City of Dana Point) to ensure: ▪ Project construction activities are minimized during peak-use periods for any impacted facilities, to the extent practical; ▪ The bicycle facility is restored to its original condition following construction; and ▪ Appropriate advance notification is provided to the affected agency and public, in addition to on-site signage and notices for temporary detours and rerouting of bikeways.	SCWD	During construction	State Parks, Orange County Parks (only for construction at Capistrano Beach Park), City of Dana Point

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
TRANSPORTATION AND TRAFFIC			
TRF-1: Prior to commencing Project construction, SCWD (or its designee) shall develop and implement a Parking and Staging Plan for all phases of construction to require that all Project-related parking occurs on-site or in pre-designated off-site parking areas. The Staging Area shall maintain through park access for motor vehicles, bicycles and pedestrians. To accommodate peak parking demand for Special Events during the off-season, SCWD (or its designee) shall coordinate with State Parks to reschedule Special Events to alternate venues or to outside the off-season construction period, and if not possible, shall arrange for sufficient off-site parking and shuttles such that the displaced parking stalls are offset. The contractor shall utilize shuttles to transport workers to and from any off-site staging/parking areas (if utilized) and Project construction areas. At least 60 days prior to start of site mobilization, SCWD (or its designee) shall submit the Plan to each affected jurisdiction for review and approval. If off-site staging/parking areas are utilized, and are outside of SCWD property, such as in the City of Dana Point, SCWD (or its designee) shall notify and coordinate with the City or other affected jurisdiction(s), on the location and duration of use of the off-site staging/parking area(s).	SCWD	Before construction	City of Dana Point, State Parks
TRF-2: Prior to construction, SCWD (or its designee) shall submit for review and approval a Construction Traffic Control Plan (TCP) to each affected jurisdiction (including State Parks, Caltrans, County Parks, and City of Dana Point), as part of the encroachment permit or related approval process. The TCP shall address, at minimum, the following issues: ▪ Controlling construction traffic flow by use of a flag person at construction site entrances on public roads, including Stonehill Drive/SCWD Access Road, Dana Point Harbor Drive/Park Lantern, and Palisades Drive/PCH; ▪ Signage, lighting, and traffic control device placement if required; ▪ Need, if any, for construction work hours and arrival/departure times outside of peak traffic periods; ▪ Maintaining access for emergency vehicles;	SCWD	Before construction, during construction	State Parks, Caltrans, Orange County Parks, City of Dana Point (for affected roads within each jurisdiction) OCTA

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
▪ Advanced notice to local agencies, transit providers, school districts, and emergency service providers regarding the anticipated schedule, location, and duration of any temporarily reduced through lanes, including clear plans for temporary detours and alternate routes, if applicable; ▪ Main through access in each direction on any public road; ▪ Maintain access to adjacent properties during the construction; ▪ Specify construction related haul routes for any material import/export; ▪ Timing of heavy equipment and building materials deliveries; ▪ Identify specific contractor training and related safety procedures for construction vehicles exiting and entering work areas from public roads. ▪ **For construction-related activities of all project components:** The extent and duration of open trench construction activities, including the timing of construction work shifts, nighttime construction activities (if any), and whether roadway plates will be used when construction is ceased for the day (and re-opened during construction), or used during the weekday AM and PM peak commute hours ▪ **For the preferred South Alignment of Raw Water Conveyance:** SCWD shall confirm with Caltrans and the City of Dana Point that the bents (columns/piles) of the PCH bridge over Doheny Park Road are seismically stable to allow for the transverse crossing of the raw water pipeline within 10 feet of the footings. If the bents are not seismically stable for the transverse crossing, SCWD shall develop an alternate plan to meet the seismic requirements of crossing under the bridge, or, consider use of the North Alignment, via Del Obispo Street. ▪ **For the alternate North Alignment of Raw Water Conveyance:** SCWD shall reimburse the City of Dana Point for loss of the City's Pavement Grant Funds if the North Alignment is selected and construction activities occur before fall 2021. The City completed a major paving project on Del Obispo Street in 2016. The paving was grant funded with a 5-year moratorium on construction. The North Alignment will only be considered should the South Alignment be determined infeasible and if SCWD elects to offset the City's loss of grant funds (which the City would forfeit if repaving occurs prior to fall 2021).			

Mitigation Measures	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
During Construction activities, the applicant (SCWD), or its designee, shall coordinate all traffic, site ingress and egress and construction parking along Shoreline Drive with the City of Dana Point. The coordination shall address and minimize any potential impact to PCH.			
TRF-3: Prior to construction, SCWD (or its designee) shall submit an encroachment permit application to the City of Dana Point for review. SCWD shall work with the City of Dana Point to address impacts expected with the work per the City's Municipal Code, Encroachment Permit Standard Conditions and Detail, and other applicable regulations, and secure an encroachment permit prior to commencement of any work activities. The encroachment permit shall address at a minimum the required traffic control (also included in TRF-1), required asphalt and concrete repairs to City streets, storage of equipment and materials, water quality regulations, dust control, street sweeping, construction hours, and all other impacts/requirements.	SCWD	Before construction	City of Dana Point
UTILITIES AND SERVICE SYSTEMS			
UTIL-1: Prior to the start of both site mobilization and project operation, SCWD (or its designee) shall prepare and submit to the City of Dana Point, and/or any other applicable local agency, for review and comment, a Waste Management Plan (WMP) for all wastes generated during construction and operation of the Doheny Ocean Desalination Project. At a minimum, the WMP shall contain the following: ▪ A description of all waste streams, including projections of frequency, amounts generated and hazard classifications; ▪ Requirements in the demolition/construction contracts that all materials that can feasibly be recovered be salvaged and recycled. The contractor(s) shall submit a recycling plan to the District for review and approval prior to commencing demolition or construction; and ▪ Methods of managing each waste, including storage, treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.	SCWD	Before site mobilization and project operation	City of Dana Point

Findings

Doheny Ocean Desalination Phase I Project

Section 1: Introduction

1.1: Certification of the Final EIR

The Final EIR will be considered by the South Coast Water District (SCWD) Board of Directors (the decision-making body of the lead agency for the project) for certification. The certification will comply with the CEQA Guidelines § 15090, which dictates that before approving a project, the lead agency will make three certifications. The first is that the final EIR has been completed in compliance with CEQA. The second is that the Final EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project. The third is that the final EIR reflects the lead agency's independent judgment and analysis.

Regarding the adequacy of an EIR, according to CEQA Guidelines § 15151, an EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the Project's environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection in an EIR but for adequacy, completeness, and a good faith effort at full disclosure."

1.2: Project Description

Project Location

The Project site is located in the City of Dana Point, a coastal community in southern Orange County, situated approximately three miles southwest of San Juan Capistrano and six miles northwest of San Clemente. As discussed in Draft EIR Section 3.0, Project Description, the slant wells would be located and fully buried near Doheny State Beach. The desalination facility site is located on a parcel owned by the District, less than a quarter mile north of Doheny State Beach. Conveyance facilities are located in the City of Dana Point, potentially on either side of San Juan Creek depending on the subsurface intake well location. The Project would discharge brine through the existing San Juan Creek Ocean Outfall, which is located adjacent to the desalination site and terminates approximately 10,550 feet offshore, off the coast of Dana Point.

Proposed Project

The Project consists of all actions related to the construction and operation of an ocean water desalination facility and associated desalination subsurface intake system. The Project would reduce SCWD's dependency on imported water supply by integrating desalinated ocean water with the existing local water supply portfolio. The Doheny Ocean Desalination Project would consist of the following main components, with each described further in Draft EIR Section 3.4, Project Facilities, and shown in Exhibit 1-1, Project Facilities (as amended in the Final EIR Section 3, *Draft EIR Errata).*

- **A subsurface water intake system** consisting of subsurface slant wells that draw ocean water from offshore subsurface alluvial material (located below the ocean floor), while providing natural sand bed filtration and eliminating the entrainment and impingement of marine biota. This subsurface intake system is the recommended approach by state and federal regulators and is consistent with the State Water Resource Control Board's (State Board or SWRCB) recently adopted Ocean Plan Amendment. The slant wells would be located and fully buried near Doheny State Beach (DSB). Related Project elements include a small electrical control building (located near the slant well in a disturbed area), and a temporary well development water discharge system, either through connecting to the existing San Juan Creek Ocean Outfall (SJCOO) vault at the DSB campground or discharging to an existing or new beach diffuser.

- **A raw (ocean) water conveyance pipeline** that would deliver the subsurface intake system's ocean water to the desalination facility site.

- **A desalination facility** that would receive ocean feedwater at up to approximately 10 million gallons per day (MGD), with a recovery rate of ~50% resulting in up to 5 MGD of potable drinking water (for the Phase I Project). The proposed desalination facility is located on the District's existing San Juan Creek Property, on an industrial site located away from the beach but in close proximity to the subsurface intake wells. This facility siting is consistent with state and federal regulator preference to minimize desalination facilities on the coast while being close enough to avoid lengthy raw water and brine conveyance pipelines. The desalination facility includes a variety of typical desalination process equipment and appurtenant facilities, such as pretreatment, seawater reverse osmosis (SWRO) membranes, an energy recovery system, post-treatment conditioning, solids handling and disposal, brine discharge tank, electrical equipment, staff facilities, and connections to off-site brine disposal, sanitary sewer, and product water conveyance facilities. It is assumed there will be a utility power connection required; however, the District is also evaluating the feasibility of supplementing or replacing that supply with an alternative energy source. The desalination facility will include solar photovoltaic panels on flat rooftops where feasible. Other alternative energy sources being evaluated include natural-gas turbines and fuel cells to maximize efficiency and minimize energy cost.

- **A concentrate (brine) disposal system** that would utilize the existing SJCOO, to return brine and treated process waste streams to the ocean with negligible impact on coastal and marine water

quality. SJCOO is owned by South Orange County Wastewater Authority (SOCWA), in which the District is a member agency. Mixing desalination brine with existing wastewater treatment plant flow (a "comingled discharge") is the preferred method by state and federal regulators and is consistent with the State Board's Ocean Plan Amendment.

- **A product water storage tank and product water distribution system** that would feed into the District's local distribution system and, depending on plant capacity and District demands, other adjacent local and regional transmission pipelines that are located adjacent to the site. Desalinated product water from the Phase I project could be conveyed entirely using existing District and local infrastructure with no off-site improvements other than a short connection to the District's existing local transmission lines.

- **All appurtenant facilities** (e.g., pump stations, valves, and metering) as well as all construction, operation and maintenance activities associated with all project facilities.

- **Offsite Electrical Transmission Facilities** provided by San Diego Gas & Electric Company (SDG&E). At this time, SDG&E has indicated that electrical service can be provided to the Phase I project using existing facilities, with a short connection from the desalination site to underground electrical lines in Stonehill Drive.

The Project is anticipated to be developed in two or more phases. Phase I would have a capacity of up to five (5) MGD of potable water, and the Regional Project would have a capacity of up to 15 MGD. At this time, the District is only pursuing approvals for the Phase I project, as there are currently no partners identified for the Regional Project.

1.3: Project Objectives

The project's objectives are:

- To create a drought-proof, hydrologically independent, reliable and high-quality source of potable drinking water for the District.

- To further diversify the District's water supply portfolio through a locally-controlled supply, combining conservation, recycling, and local supplies to reduce dependence on imported water supplies.

- To provide emergency backup water supplies, should an earthquake, system shutdown, or other event disrupt the delivery of imported water to the south Orange County area.

1.4: CEQA Public Review Process

As set forth in Draft EIR Section 2.4, the District has incorporated an extensive stakeholder and public involvement program as part of the Project's CEQA review process, including four NOP scoping meetings,

multiple agency and stakeholder meetings, a Water Reliability Working Group, and a Draft EIR public information meeting. The Draft EIR was circulated for a 60-day public review period according to CEQA Guidelines § 15087 and 15105. The Draft EIR was made available to the general public at the City of Dana Point Library, South Coast Water District headquarters, and the South Coast Water District website. The District held a Draft EIR public information meeting on June 26, 2019. Comments from the public, interested agencies, and organizations were received on the project EIR, as noted below.

1.5: Responses to Comments on the Draft EIR

At the end of the 60-day comment period, the District evaluated the comments received and prepared written responses to the comments pursuant to CEQA Guidelines § 15088. The Final EIR was prepared, pursuant to CEQA Guidelines § 15132, which includes the Draft EIR, the Draft EIR comments and recommendations either verbatim or summarized a list of all parties commenting on the Draft EIR, and the Lead Agency's responses to significant environmental points raised in the review and consultation process. After completion of the Final EIR, SCWD provided written responses to each public agency that commented on the Draft EIR, at least ten days before the certification of the EIR.

1.6: Mitigation Monitoring and Reporting Program (Attachment A to Project Resolution)

CEQA requires public agencies to adopt monitoring and reporting programs to ensure compliance with mitigation measures adopted or made conditions of project approval in order to mitigate or avoid the significant environmental effects identified in environmental impact reports. A Mitigation Monitoring and Reporting Program (MMRP) incorporating the mitigation measures set forth in this EIR was prepared and will be approved by SCWD concurrently with adoption of the findings of this EIR and prior to approval of the proposed project.

1.7: Use of the Final EIR by the District and Other Agencies

The lead agency of this project is the South Coast Water District, which is the Project proponent and also has the primary approval authority over the Project. As CEQA Lead Agency, the District has prepared the EIR and will utilize the EIR as part of the Project review and approval process. The District has prepared the Final EIR to satisfy CEQA requirements for trustees and responsible agencies consulted during the EIR process, as discussed in the Draft EIR Section 3.7. In addition, as noted in Draft EIR Section 2.3, the Final EIR is intended to satisfy DWR's CEQA-Plus SRF loan requirements and may also be used as part of National Environmental Policy Act (NEPA) compliance for federal permits, approvals or funding.

1.8: Substantial Evidence

The District finds and declares that substantial evidence for all findings made in this document can be found in the Draft Environmental Impact Report, the Final Environmental Impact Report, and the other materials included in the Record of Proceedings. These documents provide objective information

regarding the project to assist the decision-makers and the public in their consideration of and future commentary on the project.

1.9: Independent Judgement

CEQA requires that the lead agency exercise its independent judgment in reviewing the adequacy of a Final EIR and that the decision of a lead agency in certifying a FEIR and approving a Project not be predetermined. The District finds that the FEIR was prepared in compliance with CEQA and the CEQA Guidelines.

The District has conducted its own review of the DEIR, FEIR, Appendices, and all other related materials, and the FEIR reflects the independent judgment and analysis of the lead agency.

1.10: Record of Proceedings

The Record of Proceedings for the Doheny Ocean Desalination Project includes:

- A Notice of Preparation (NOP) informing interested parties and agencies of the project was distributed on March 14, 2016
- An amended NOP containing refinements to the project was distributed on November 17, 2017
- The NOP comment letters.
- The written and verbal testimony given at any of the public scoping meetings, Draft EIR informational meeting, and hearing for the project.
- The Draft Environmental Impact Report (DEIR) including technical appendices
- The Final Environmental Impact Report (FEIR) including appendices
- The Mitigation Monitoring and Reporting Program (MMRP) for the project
- Any reports or documents referenced in the Draft or Final Environmental Impact Report as well as their appendices
- All documents, studies, EIRs, or other materials incorporated by reference in the DEIR and the (FEIR)
- All Ordinances and Resolutions presented to and/or adopted by the SCWD in connection with the Project; and all documents incorporated by reference therein
- Any other relevant materials required to be in the record of proceedings under CEQA Statutes (Public Resources Code) § 21167.6(e).

1.11: Custodian of Documents

The custodian of documents and all material which is included in the Record of Proceedings with which the South Coast Water District (the District) will make its decision is located at 31592 West Street, Laguna Beach, California 92651-6907. The General Manager of the District will act as custodian of documents.

1.12: Type of EIR

As discussed above, the Project is anticipated to be developed in two or more phases. Phase I would have a capacity of up to five (5) MGD of potable water, and the Regional Project would have a capacity of up to 15 MGD. Since partners have not been identified for the Regional Project, the design of the Regional Project has not yet been determined. Accordingly, this EIR evaluates the Phase I Project at a "project-level" for final CEQA review for use by Responsible and Trustee agencies in the project's future permit and approval process. The Regional Project (up to 15 MGD) is evaluated at a "programmatic" level pursuant to CEQA, although construction approvals are not being sought at this time. To the extent there are plans to expand the Project to any capacity above 5 MGD, the District will complete additional CEQA review and associated regulatory approvals.

Furthermore, this EIR also satisfies the "CEQA Plus" requirements for the California State Revolving Fund (SRF) program for low-interest loans to public agencies. As discussed in Draft EIR Section 2.0, *Introduction and Purpose*, the District intends to apply for SRF funding, and as such, the District must demonstrate compliance with several federal regulations, including the Endangered Species Act (ESA), National Historic Preservation Act (NHPA), and the General Conformity Rule for the Clean Air Act (CAA) in the EIR.

1.13: Incorporation of Final EIR by References

The Final EIR consists of: (1) the Draft EIR, including revisions; (2) all appendices to the Draft EIR (Appendices 10.1 through 10.12); (3) Section 1, "Introduction"; Section 2, "Draft EIR Comments and Responses"; Section 3, "Draft EIR Errata"; and Section 4, "Final EIR Appendices" (including all Final EIR Appendices 4.2.1 through 4.2.5.2). As required by CEQA Guidelines section 15132, the Final EIR Sections 1 through 4, and Appendices 4.2.1 through 4.2.5.2, including the District's written responses to comments, including master responses to comments; a list of persons, organizations, and public agencies commenting on the Draft EIR; the District's written responses to significant environmental points raised in the review and consultation process; and copies of all comments received. The Final EIR consisting of the aforementioned components is hereby incorporated by reference into these Findings.

1.14: Relationship of Findings to the Final EIR

The findings are based on the most current information available. If there happen to be any inconsistencies between the Draft Environmental Impact Report or the Final Environmental Impact Report and this Findings document, then the Findings will act as control and the Environmental Impact Reports will be amended to consistency with these Findings.

Section 2: CEQA Findings: General

Pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091, no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless the public agency makes one or more of the following findings with respect to each significant impact:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. [referred to in these Findings as "Finding 1"].

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency. [referred to in these Findings as "Finding 2"].

3. Specific economic, legal, social, technological, or other consideration, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report. (The concept of infeasibility also encompasses whether a particular alternative or mitigation measure promotes the Project's underlying goals and objectives, and whether an alternative or mitigation measure is impractical or undesirable from a policy standpoint. See, *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957; *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410).

The District has made one or more of these specific written findings regarding each significant impact associated with the Project. Those findings are presented below, along with a presentation of facts in support of the findings. The District certifies these findings are based on full appraisal of all viewpoint, including all comments received up to the date of adoption go these findings, concerning the environmental issues identified and discussed.

The mitigation measures adopted as part of the Project are feasible and mitigate the environmental impacts to the maximum extent feasible as discussed in the findings made below. The Final EIR includes minor clarifications to the Draft EIR. These changes made to the Draft EIR are shown in the Final EIR in response to individual comments and are shown in ~~strikethrough~~ and <u>underline</u> text. Thus, it is the finding of the District that such clarifying changes as described in the Final EIR, do not present any new, significant information requiring recirculation or additional environmental review under CEQA Guidelines Section 15088.5.

A Mitigation Monitoring and Reporting Program ("MMRP") for the Project has been adopted pursuant to the requirements of Public Resources Code Section 21081.6 to ensure implementation of the adopted mitigation measures to reduce significant effects on the environment and is included in the Final EIR document. The District is the custodian of the documents and other material that constitute the record of the proceedings upon which certification of the Final EIR for the Project is based, as described above in Section 1.13, Custodian of Record.

It is the finding of the District's Board of Directors that the proposed Final EIR fulfills environmental review requirements for the Project, and that the document constitutes a complete, accurate, adequate, and good faith effort at full disclosure under CEQA, and reflects the independent judgment of the District's Board of Directors.

Section 3: Environmental Impacts Found to Have No Impact

Agriculture and Forestry Resources

Impact 7.1.1: ***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

Basis for Conclusion: According the Orange County Important Farmland 2014 map from the California Department of Conservation, none of the Project facilities are located on important farmlands. Project facilities (onshore) would primarily be located on existing urban land, within public roads, or within active areas of public parks. No impact would occur (DEIR, p. 7.0-1).

Impact 7.1.2: ***Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

Basis for Conclusion: Refer to Impact 7.1.1, above. No Project facilities are on lands zoned for agricultural use, and no Project facilities would require cancellations of a Williamson Act contract. No impacts would occur (DEIR, p. 7.0-1).

Impact 7.1.3: ***Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?***

Basis for Conclusion: Refer to Impact 7.1.1, above. No portions of the Project site are located in areas zoned or utilized for forest lands. No impact would occur in this regard (DEIR, p. 7.0-1).

Impact 7.1.4: ***Would the project result in the loss of forest land or conversion of forest land to non-forest use?***

Basis for Conclusion: Refer to Impact 7.1.3, above. No Impact would occur in this regard (DEIR, p. 7.0-1).

Impact 7.1.5: ***Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

Basis for Conclusion: Refer to Impacts 7.1.1 through 7.1.4, above. There is no Farmland or forest land on or near the proposed Project facilities, as the Project is located in a highly urbanized setting. Project implementation would not involve changes in the existing environment which, due to their location or

nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. No impact would occur in this regard (DEIR, p. 7.0-1).

Geology and Soils

Impact 4.5-5: ***Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

Basis for Conclusion: The proposed Project consists of a desalination facility and associated infrastructure including subsurface intakes, raw water conveyance system, brine disposal, and connections to water distribution pipelines. The Project does not propose the use of septic tanks or an alternative waste water disposal system. The proposed Project would utilize the existing sanitary sewer system. Therefore, no impacts would not occur, and mitigation is not required (DEIR, p. 4.5-26).

Hazards and Hazardous Materials

Impact 4.7-5: ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?***

Basis for Conclusion: The Project will be located more than two miles from a public airport or public use airport. The nearest airport is the John Wayne Airport which is approximately 18 miles away from the proposed desalination facility. The Project will also be located outside of the John Wayne Airport influence area as shown in Airport Environs Land Use Plan (AELUP). Therefore, no impact would occur (DEIR, p. 4.7-37).

Impact 4.7-6: ***For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

Basis for Conclusion: The Project will not be located within the vicinity of a private airstrip and thus could not result in an airstrip-related safety hazard for individuals working in the Project area. Therefore, no impact would occur. (DEIR, p. 4.7-38).

Hydrology and Water Quality

Impact 4.8-7: ***Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Insurance Rate Map or other flood hazard delineation map?***

Basis for Conclusion: The Project does not involve the development of housing and thus would not involve any housing within a 100-year flood hazard area. Therefore, no impact would occur (DEIR, p. 4.8-34).

Land Use and Planning

Impact 4.9-1: ***Would the project physically divide an established community?***

Basis for Conclusion: The desalination site is industrial, and is already physically isolated from the surrounding communities, with San Juan Creek along its western border, PCH along its southern border, and the MetroLink railroad along its eastern border, with an additional District property to the north. Similarly, the slant well locations are physically isolated already, being located within DSB and Capistrano Beach Park. The Project is proposed entirely within an active, previously disturbed, District property (San Juan Creek Property) that is occupied by various storage and commercial tenant uses. The Project would therefore not divide an established community. Therefore, no impact would occur (DEIR, p. 4.9-9).

Mineral Resources

Impact 7.2.1: ***Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

Basis for Conclusion: No mineral resources have been identified within the City of Dana Point. Potential sand and gravel resources exist within San Juan Creek, primarily north of the City limits. Project development would not directly impact San Juan Creek and as such no effect would occur to potential mineral resources within San Juan Creek. No impact would occur (DEIR, p. 7.0-2).

Impact 7.2-2: ***Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

Basis for Conclusion: Refer to Impact 7.2.1, above. The proposed Project's construction and operation would not be located on a locally-important mineral resource recovery site and no such sites are delineated on a local general plan, specific plan or other land use plan. No impact would occur in this regard (DEIR, p. 7.0-2).

Population and Housing

Impact 7.3.1: ***Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?***

Basis for Conclusion: No existing residential land uses are present on any of the lands proposed for construction and operation of the proposed facilities. Therefore, Project construction or operation would not displace existing people or housing, nor would it necessitate the construction of replacement housing. Therefore, no impact would occur in this regard (DEIR, p. 7.0-2).

Noise

Impact 4.10-5: ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

Basis for Conclusion: The Project site is located 18 miles northwest of the nearest airport, John Wayne Airport, and so the Project would not expose people residing or working in the Project area to excessive noise levels. Therefore, no impact would occur. (DEIR, p. 4.10-33). Refer to Impact 4.7-5, above.

Impact 4.10-6: ***For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?***

Basis for Conclusion: The Project is not within the vicinity of a private airstrip. Therefore, no impact would occur. (DEIR, p. 4.10-34). Refer to Impact. Refer to Impact 4.7-6, above.

Recreation

Impact 4.12-2: ***Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

Basis for Conclusion: The Project facilities would not involve a recreational facility or require construction or expansion of recreational facilities. Therefore, no impact would occur (DEIR, p. 4.12-15).

Transportation and Traffic

Impact 4.13-3: ***Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

Basis for Conclusion: The Project would have no effect on air traffic patterns or change in location of air traffic considering the nature (water supply facility) and location (approximately 18 miles from the nearest airport) of the Project. Therefore, no impact would occur (DEIR, p. 4.13-21).

Section 4: Environmental Impacts Found to be Less Than Significant (No Mitigation Required)

Project Design Features

The Project has been designed to further avoid sensitive resources and avoid or minimize environmental impacts, as reflected in the Project design plans and in Project Design Features noted in respective Draft EIR sections.

The Project:

- Has been sited in an area favorable to subsurface ocean intakes, which avoids marine life impingement and entrainment associated with screened ocean intakes;
- Utilizes subsurface intakes, which is the preferred method for ocean desalination intake by the Coastal Commission and California State Resources Control Board's (Water Board's) Ocean Plan Amendment (Refer to Chapter III.M of the 2015 California Ocean Plan Water Quality Control Plan Ocean Waters of CA);
- Utilizes an existing ocean outfall to allow brine commingling with wastewater, which avoids the need for new outfall construction, avoids new marine construction in open ocean water, and is the preferred brine disposal method in the Water Board's Ocean Plan Amendment;
- Construction staging and laydown areas utilize existing disturbed or developed sites to avoid disruption to existing sensitive resources;
- Limits slant well construction to the off-season for coastal recreational visitors to limit impacts to coastal recreation, access and parking;
- The subsurface slant well vaults have been moved inland, as far as practicable from the active beach recreation areas, to reduce both visual and recreation impacts;
- Project facilities are sited at existing developed or disturbed sites, avoiding impacts to sensitive natural habitat;
- Proposes the desalination facility in close proximity to the slant wells to reduce the extent of raw water conveyance pipeline construction;
- Proposes the desalination facility in close proximity to regional product water conveyance lines to reduce the extent of product water pipeline construction;
- Pipeline installation will utilize trenchless construction to avoid potential impacts to San Juan Creek, San Juan Creek Lagoon, and drainage channel L01S02;
- Slant well construction drill rig work areas are set back from the beach to minimize potential conflicts with shorebirds;
- The District is no longer pursuing Pod F due to potential impacts to the Class I bike trail connecting PCH to the DSB Class III bicycle route along Park Lantern;
- The Project proposes uses of trenchless pipeline construction under sensitive transportation facilities, including Class I bike paths, PCH, and SCRRA MetroLink right of way (ROW);
- No direct sandy beach construction at DSB; and
- No direct impacts to the DSB North Creek drainage channel.

Air Quality

Impact 4.2-5: ***Would the Project create objectionable odors affecting a substantial number of people?***

Basis for Conclusion: The primary source of odor anticipated from the construction of the proposed Project would be exhaust emissions from the diesel equipment and haul (soil import/export) trucks. The emissions from diesel construction equipment and vehicles would be temporary and would not be expected to cause any odor issues that would affect a substantial number of people. During normal operation, the desalination facility has the potential to generate odors attributable to solids generated by the proposed project. The objectionable odors would consist primarily of inorganic constituents, namely silt and iron compounds and therefore are not anticipated to produce significant odors. Therefore, operational odor impacts would be less than significant. (DEIR p. 4.2-33, Final EIR Response O1-8).

Biological Resources

Impact 4.3-6: ***Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

Basis for Conclusion: The project falls outside of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project is also consistent with the requirements presented by the Ocean Plan Amendment regarding desalination facilities. The Regional Board staff, in their comment letter (Comment S7-21) notes that the Project will be consistent with the Ocean Plan. Therefore, impacts would be less than significant. (DEIR p. 4.3-47). Although the project is required to comply with Mitigation Measures BIO-1 through BIO-4, the mitigation measures will serve to further reduce the already less than significant impact.

Cultural Resources

Impact 4.4-1: ***Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?***

Basis for Conclusion: No parcels of historic resource value are located at or near the project development area. The construction and operation of the subsurface intake systems, the construction and operation of the subsurface intake systems would not impede on any historical resource with the nearest one, a shipwreck, located approx. 2.5 miles away. The main desalination facility will be built in an already developed site that has no historical significance. Similarly, the brine disposal system will be utilizing the existing SJCOO wastewater system in its operation and would require no additional construction. Also, the raw water conveyance pipeline would be constructed below the ground surface in the existing roadway, and would avoid impacts to historical resources. Upon completion of construction the APE would be returned to its original condition resulting in no substantial change. Therefore, impacts would be less than significant. (DEIR p. 4.4-24, Final EIR Response S4-12).

Geology and Soils

Impact 4.5-1: ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

- ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?***

Basis for Conclusion: None of the Project components are located in proximity to any known active earthquake fault. The nearest active fault zone and the Newport-Inglewood Fault Zone which moves offshore miles before reaching the facility or its subsurface structures. The other fault zones in the area are not currently active. (DEIR p. 4.5-13). Therefore, impacts would be less than significant. Furthermore, the Project will require final geotechnical reports and building plan reviews to demonstrate compliance with applicable seismic design standards (Mitigation Measure GEO-1, as modified in Final EIR Section 3, *Draft EIR Errata*) which would further reduce the less than significant impacts.

Impact 4.5-2: ***Would the project result in substantial soil erosion or the loss of topsoil?***

Basis for Conclusion: None of the Project elements contain valuable topsoil. The desalination facility will be constructed on a developed parcel of land. All construction (including subsurface components) and operations will comply with statutes set forth by the Municipal National Pollutant Discharge Elimination System (NPDES) and the Dana Point Municipal Code which will minimize potential soil erosion effects. Further detail regarding methodology can be found in Section 4.5.4 (p 4.5-19) of the DEIR. In the operations of each component, there is little to no expected soil erosion. The subsurface components and brine disposal system are located underground, and the desalination facility does not involve activity that would result in soil loss. Therefore, impacts would be less than significant.

Hazards and Hazardous Materials

Impact 4.7-7: ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Basis for Conclusion: The subsurface structures including the intake wells, and the raw water conveyance system that will be constructed within Doheny State Beach and existing ROW's would not impede access to driveways or designated evacuation routes and thus would not interfere with the City of Dana Point's emergency response plan or evacuation zone. Although potential lane closures can occur, the intake wells will be built mainly on the beach and will not block any evacuation routes nearby. While the raw water conveyance would also be built within the City's ROW, being subsurface structures, their use will not infringe on any evacuation plan or zone as they function completely underground. The site boundary for the project similarly does not affect any emergency plan or evacuation route, and since the desalination facility will be built inside of this boundary it too will not affect any emergency plans or evacuation routes. (DEIR p. 4.7-38). Therefore, impacts would be less than significant. Where applicable, construction traffic

will require coordination with local agencies, including preparation of a Construction Traffic Control Plan as part of applicable encroachment permits (Mitigation Measure TRF-2, as modified in Final EIR Section 3, *Draft EIR Errata*) which would further reduce the less than significant impacts.

Impact 4.7-8: ***Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?***

Basis for Conclusion: The Project is proposed to be located in the City of Dana Point, which is a fully urbanized area and is not next to or inclusive of wildlands. Concurrently, the project is in an area designated as Non-High Fire Areas (NHFA). Therefore, the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. (DEIR p. 4.7-40). Therefore, impacts would be less than significant.

Hydrology and Water Quality

Impact 4.8-2: ***Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?***

Basis for Conclusion: In function, the project aims to decrease the District's reliance on groundwater as a source of its potable water through the desalination of ocean water. However, the slant wells have the potential to reduce annual yield from the subterranean channel underlying San Juan Creek by up to 392 acre-feet-year (AFY). This is not considered a significant impact given that in the absence of the Project slant well pumping, seawater intrusion would require inland pumping to be significantly reduced, as demonstrated by the water quality change which occurred during the most recent drought period. SCWD was required to take its groundwater well off-line in order to improve water quality in the subterranean channel. Furthermore, the slant wells will actually create a pumping "trough" which will reduce further seawater intrusion into the subterranean channel. The maintenance of a seaward gradient from the Project slant wells will act to inhibit seawater intrusion and prevent degradation to water quality of inland groundwater even while maintaining inland pumping. Therefore, impacts would be less than significant. (DEIR, pp. 4.8-20 to 4.8-30). This is further clarified in Final EIR Responses L6-10, L7-7, L7-9, and Final EIR Appendices 4.2.3.2 and 4.2.3.1.

Impact 4.8-3: ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?***

Basis for Conclusion: All aboveground structures will be constructed on existing developed parcels of land which avoids altering the course of a stream or river by using trenchless methods. The Project design features include avoiding direct impacts to San Juan Creek, San Juan Creek lagoon and the local drainage channel L01S02 and the North Creek drainage channel at DSB. Construction and operation of the

subsurface intake wells, raw water conveyance alignment, and brine disposal system would not significantly increase the impervious surface or otherwise affect the drainage patterns, since all facilities would be buried underground. Site design has avoided San Juan Creek modifications by elevating the site to protect the desalination facility from the 100-year storm event. This is further clarified in Final EIR Response S1-3 and Final EIR Appendix 4.2.4. (DEIR, p. 4.8-32). Therefore, impacts would be less than significant.

Impact 4.8-4: ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alternation of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

Basis for Conclusion: The Project would not substantially alter any drainage patterns because the Project would avoid direct impacts to existing drainage features, and the Project's hydrology modeling has shown that Project design features, including elevating the desalination site above the 100-year flood plain, would not significantly impact downstream properties. Please refer to Impact 4.8-3 and 4.8-9 (DEIR, p. 4.8-32). Please refer to Impact 4.8-3. Therefore, impacts would be less than significant.

Noise

Impact 4.10-2: ***Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

Basis for Conclusion: During Project operation, the desalination facility would involve equipment that may cause ground-borne vibration and noise. However, these equipment and facilities would be located within an enclosed building in the southern portion of the site, and would not be adjacent to any sensitive receptors, resulting in less than significant impacts. Other facilities associated with the Project would not involve equipment that would cause excessive ground-borne vibration and noise impacts. Short term construction noise would be temporary, and less than significant, as onshore structures construction for the intake well construction on Doheny State Beach would be minimal as nearest receptors are more than 600 feet away. Intake well offshore construction activities would take place beneath the water surface and the desalination facility construction would take place within the confines of the SCWD property, which is an existing industrial site bordered by San Juan Creek, the MetroLink railroad, PCH and the District's existing GRF facility causing no vibration impact to nearby sensitive receptors. With the closest residential units 600 feet away, maximum vibration levels would be nominal, roughly 0.0008 inch-per-second PPV. Therefore, construction equipment would not generate ground-borne vibration levels above the FTA architectural damage criterion of 0.20 inches/second. The processes of demolition, excavation, and other construction will create periods of groundborne vibration noise, although anticipated levels are well below applicable thresholds because the nearest receptors are more than 600 feet away. (DEIR p. 4.10-26). Therefore, impacts would be less than significant.

Public Services

Impact 4.11-1: ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

- ***Fire protection?***

Basis for Conclusion: There will be a temporary increase in demand for fire protection services during the construction phase, although this would not require modifications to existing facilities or construction of new facilities. All construction and operational activities will be subject to applicable regulations of the Orange County Fire Authority (OCFA), the California Fire Code, and the City of Dana Point. Many of the Project facilities would be below ground and therefore not affect or require fire protection services. The desalination facility would replace a myriad of temporary tenant spaces with a modern water supply facility with all applicable fire and police protection design and operational features. (DEIR p. 4.11-10). Therefore, impacts would be less than significant.

- ***Police protection?***

Basis for Conclusion: There will be a temporary increase in demand for police protection services during construction phase, although this would not require modifications to existing facilities or construction of new facilities. All construction and operational activities will be subject to applicable regulations. The below ground components would not require additional police protection since they will be buried. The desalination facility design incorporates all required signage and safety measures as well as a Traffic Control Plan to ensure that optimum circulation for emergency vehicles is present. With increased safety features designed into the desalination facility, the Project will have a less than significant impact in police protection services. (DEIR p. 4.11-11).

- ***Schools?***

Basis for Conclusion: No nearby school facilities will be affected by the construction of the desalination facility or its components. The construction will not physically alter any school structures or develop new ones. The Project is a water supply facility, and not a residential land project that will not directly create any demand on public school facilities. No significant impacts are anticipated. (DEIR pp. 4.11-12 to 4.11-13).

- ***Other Public Facilities?***

Basis for Conclusion: The project does not include development of new housing or other uses that could otherwise directly impact public facilities or require construction of new facilities, including library facilities. Therefore, the Project would have less than significant impacts. (DEIR p. 4.11-14).

Transportation and Traffic

Impact 4.13-2: ***Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

Basis for Conclusion: The project is not expected to conflict with the Congestion Management Program (CMP) or with any CMP facility. Project construction traffic is well below the CMP threshold of 50 peak hour trips at a CMP intersection. Therefore, the Project would have less than significant impacts. (DEIR p. 4.13-20).

Utilities and Service Systems

Impact 4.15-1: ***Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

Basis for Conclusion: The current implementation of the facility is intended to produce up to 5 million gallons per day (MGD) of potable water through desalination. The Project has been designed to comply with all applicable wastewater treatment requirements including the Clean Water Act and the California Ocean Plan. Project domestic wastewater and operational discharge to the sanitary sewer system will be well below the treatment capacity of the J.B, Latham Treatment Plant. Brine discharge of up to 5 MGD will be well within the SJCOO outfall capacity, and the Regional Board's permitting program will ensure Clean Water Act and Ocean Plan compliance, as noted by the Regional Board in its Draft EIR comment letter (DEIR pp. 4.15-11 to 4.15-13, Final EIR Response S7-21). Therefore, impacts would be less than significant.

Impact 4.15-2: ***Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

Basis for Conclusion: Other than the Project itself, as a desalinated water production facility, the project will be utilizing existing wastewater discharge facilities through the SJCOO, and the J.B. Latham Treatment Plant. The Project does not require expansion or modification to those facilities other than minor modification in the form of on-site connections to the SJCOO and SCWD sewer lift station within the desalination facility site footprint, none of which will have any significant impacts. (DEIR p. 4.15-13).

Impact 4.15-3: ***Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

Basis of Conclusion: The Project does not require construction of new stormwater drainage facilities or expansion of existing facilities, other than minor drainage improvements within the desalination facility

site. Project design has avoided direct impacts to San Juan Creek, San Juan Creek lagoon, and the local drainage channel L01S02. No significant impacts would occur (DEIR p. 4.15-14).

Impact 4.15-4: ***Would the project have insufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlements needed?***

Basis of Conclusion: The project is designed to create a water supply to support the South Coast Water District. Temporarily the project will require the use of existing water sources for typical construction-related uses, although there are sufficient water supplies to meet this need. On a long-term basis the Project will create a drought-proof, locally controlled, reliable water supply. (DEIR p. 4.15-15). Therefore, impacts would be less than significant.

Impact 4.15-5: ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity, including treatment and/or outfall capacity, to accommodate the project's projected demand in addition to the provider's existing commitments?***

Basis for Conclusion: Please refer to discussion of Impacts 4.15-4, 4.15-2, and 4.5-5. The Project would only generate approximately 600 gallons per day of wastewater from employees with period desalination treatment process water sent to J.B. Latham, well within treatment plant capacities. Brine discharge resulting from the production of 5 MGD is also well within the SJCOO permitted capacity of 38.8 MGD. (DEIR p. 4.15-15). Therefore, impacts would be less than significant.

Impact 4.15-6: ***Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?***

Basis for Conclusion: Solid waste generated by construction activities will be sent to the Prima Deshecha Landfill. This landfill is the closest one to the project site at approximately 4.4 miles away. Construction of the project is estimated to generate 41.5 tons per day (tpd) of waste materials; well below the daily 4,000 tpd limit of the landfill. The project is estimated to produce a total of 15,039 CY of waste. This is well below the 87,384,799 CY capacity of the landfill. In operation, minimal amounts of waste will be sent to the landfill since most of the waste, culminating in brine, will be sent to the SJCOO. It is estimated that about 20 tons of solid waste a month will be sent to the Prima Deshecha Landfill. This amount falls far below the limits on their daily intake and total accumulation, resulting in a less than significant impact. (DEIR pp. 4.15-16 and 4.5-17).

Section 5: Environmental Impacts Found to be Less Than Significant with Mitigation

For each of the impacts discussed below, the Project's potentially significant impacts have been avoided, offset or reduced to less than significant levels in consideration of existing regulatory plans and programs (described in the Draft EIR Section 4 for each applicable impact topic), Project Design Features

(summarized in Findings Section 4), and EIR mitigation measures (as listed in Resolution Attachment A, *Mitigation Monitoring and Reporting Program* (MMRP), and summarized below).

Aesthetics, Light, and Glare

Impact 4.1-1: *Would the project have a substantial adverse effect on a scenic vista?*

Environmental Analysis: Project construction and operation could impact views from existing scenic vistas, such as Doheny State Beach and the Pacific Ocean, and would be visible from locations like Pacific Coast Highway (PCH), the Louise Leyden Park, and Palisades Gazebo Park. Construction-related and operational impacts are minimized through Project Design Features such as siting facilities at existing developed sites (such as DSB, existing public roads and the District's existing San Juan Creek Property which is an industrial site) and limiting DSB construction to the off-peak winter season. Project Design Features (as summarized on Draft EIR page 4.1-8) further reduce or avoid potential significant impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, p. 4.1-8 through 4.1-13).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Mitigation Measure AES-1 requires a Construction Lighting and Screening Plan for work areas, including directional lighting and minimized light intensity. Screening curtains of varied heights will also be utilized in construction to minimize the visibility of the work areas. Mitigation measure AES-2 requires a Site Architectural Landscaping and Lighting Plan to minimize aesthetic/glare lighting impact from any above-ground structures, use of non-reflective glass, architectural plan review, and landscaping plan review (refer to the Attachment A, MMRP for the full mitigation measures).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project Design Features (summarized in Findings Section 4) and mitigation measures (listed in the MMRP) reduce potential impacts to less than significant levels through facility siting in urbanized locations, limiting DSB construction to off-peak periods, having limited above-ground structures, utilizing directional lighting, utilizing lighting of reduced intensity for safety and security only, utilizing construction screening, and by providing adequate perimeter landscaping and architectural design intended to be aesthetically pleasing for the desalination facility.

Impact 4.1-2: *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Environmental Analysis: Refer to Impact 4.1-1 discussion above. There are no outcroppings or historic buildings that would be impacted. PCH is designated as a Scenic Highway corridor on the Dana Point Circulation Element and a Viewscape Corridor on the Orange County Circulation Element. PCH runs along the coast throughout the City of Dana Point. It traverses the area located between the proposed intake wells and desalination facility and would be traversed by the conveyance system. PCH is also designated as an eligible California State Scenic Highway. However, Project construction will avoid direct impacts to

PCH through use of trenchless construction, and views of the desalination facility site (during construction and operation) and slant wells (during construction) from PCH will be mitigated as addressed above, under Impact 4.1-1. Project Design Features (as summarized on Draft EIR page 4.1-8) further reduce or avoid potential significant impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, p. 4.1-13).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Like Impact 4.1-1 above, Mitigation Measures AES-1 and AES-2 will substantially reduce potential impacts to less than significant levels because of measures taken to limit construction hours and lighting, along with adequate perimeter landscaping and architectural design intended to be aesthetically pleasing for the desalination facility (refer to the Attachment A, MMRP for the full mitigation measures).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: In addition to findings noted under Impact 4.1-1, direct impact to PCH will also be mitigated through trenchless construction.

Impact 4.1-3: ***Would the project substantially degrade the existing visual character or quality of the site and its surroundings?***

Environmental Analysis: Project Design Features have substantially reduced or avoided significant visual character impacts through use of subsurface intakes, trenchless construction for sensitive pipeline crossings, and desalination facility siting at the District's existing San Juan Creek Property, which is zoned for industrial/business park and community facility uses. Slant wells and raw water conveyance pipelines will be underground, so any visual character impact would be temporary, and limited seasonally within the State Park and County Park to further reduce the potential for impacts. The desalination facility will replace existing independent tenant storage facilities with a modern, state-of-the-art water supply facility, compatible with surrounding land uses. Project Design Features (as summarized on Draft EIR page 4.1-8) further reduce or avoid potential significant impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, p. 4.1-14).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Like Impact 4.1-1 above, AES-1 and AES-2 will substantially reduce impacts to visual character and quality to less than significant levels because of measures taken to limit construction hours and lighting, along with adequate perimeter landscaping and architectural design intended to be aesthetically pleasing for the desalination facility (refer to the Attachment A, MMRP for the full mitigation measures).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Refer to findings above for Impacts 4.1-2 and 4.1-2.

Impact 4.1-4: ***Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

Environmental Analysis: Refer to discussion above under Impact 4.1-1. Construction impacts would be temporary and are minimized due to construction occurring in urbanized areas and by limiting DSB construction to off-peak periods. Operational light and glare impacts are similarly reduced through facility siting in an urbanized area, and due to most of the Project facilities being located underground (except for the desalination facility and DSB electrical control vault). Project Design Features (as summarized on Draft EIR page 4.1-8) further reduce or avoid potential significant impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Refer to discussion above for Impact 4.1-1. AES-1 and AES-2 will ensure that the light used is properly directed and at an appropriate intensity. Other measures such as on-reflective glass and location of rooftop mechanical and electrical equipment will also minimize light/glare impacts (refer to the Attachment A, MMRP for the full mitigation measures).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Refer to findings above for Impact 4.1-1. In addition to Project Design Features noted above, light and glare sources will be properly mitigated by the Construction Lighting and Screening Plan (MM AES-1). In addition, SCWD shall prepare a Site Architectural, Landscape and Lighting Plan Prior to the start of construction, for the purposes of minimizing aesthetic and light/glare impacts from all above-ground facilities, including the electrical control panel near the slant wells, and the desalination facility (refer to Attachment A, *MMRP*).

Air Quality

Impact 4.2-1: ***Would the Project conflict with or obstruct implementation of the applicable air quality plan?***

Environmental Analysis: The Doheny Ocean Desalination Project is located within the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required to conform to the Clean Air Act's requirement to reduce emissions of criteria pollutants since SCAB is an area of nonattainment. An Air Quality Management Plan (AQMP) was created, using strategies from multiple agencies including: SCAQMD, the Air Resources Board (ARB), the Southern California Association of Governments (SCAG), and the United States Environmental Protection Agency (USEPA). Two requirements were identified for consistency with the AQMP.

1. Whether the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. Whether the project would exceed the assumptions in the AQMP based on the year of project buildout and phase.

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed Project summarized later in this EIR section and provided in Appendix 10.3, Air Quality/GHG Calculations, the Project would not result in emissions of pollutants exceeding the SCAQMD's regional significance thresholds during construction in 2030 or 2031. However, during construction in 2019 and 2020, unmitigated NOx emissions are projected to exceed the significance threshold of 100 pounds per day. To meet the SCAQMD threshold, the Project would implement Mitigation Measures AQ-1 through AQ-3. Implementation of Mitigation Measures AQ-1 through AQ-3 would allow the Project to meet this criterion (refer to the discussion under Threshold 4.2-2). Operation of the Project would not result in significant impacts based on the SCAQMD thresholds of significance. Therefore, Project operation would not increase the frequency or severity of existing air quality violations.

Regarding the second criterion, the proposed Project is generally consistent with the types, intensity, and patterns of land use envisioned for the area in the Regional Comprehensive Plan (RCP). The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to Dana Point; SCAG uses these in all phases of implementation and review. Additionally, as SCAQMD incorporated these same projections into the 2016 AQMP, it can be concluded that the proposed Project would be consistent with the projections. Moreover, the Phase I Project (up to 5 MGD), would expressly be intended to meet District water supply obligations consistent with its Urban Water Management Plan and local retailer growth plans.

Project Design Features substantially avoid or reduce potential air quality impacts, as summarized on Draft EIR page 4.2-20. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.2-20 through 4.2-22).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Mitigation Measure AQ-1 (refer to Attachment A, *MMRP*) requires that during the time of construction, the construction equipment and vehicles with internal combustion engines meet EPA-Certified Tier 4 emissions standards or higher with the required certification and technology (50+ horsepower, Best Available Control Technology (BACT), and ARB or SCAQMD operating permit).

Mitigation Measure AQ-2 requires that on-road vehicle idling be minimized to below five minutes. Any off-road units will also have a five-minute maximum idle time as per § 2449(d)(3) of Title 13, Article 4.10, Chapter 9 of the California Code of Regulations. There will be proper signage placed in visibility of all construction access points.

Mitigation Measure AQ-3 requires the implementation of a fugitive dust plan to further reduce particulate matter emissions. This will align with the techniques recommended by SCAQMD's Fugitive Dust Mitigation Measure Tables XI-A through XI-E. Refer to AQ-3 in the MMRP for the list of actions.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: As discussed in detail in Impact 4.2-2 and in the findings below, Mitigation Measures AQ-1, AQ-2 and AQ-3 will reduce significant NOx emissions to below SCAQMD significance thresholds (refer to DEIR Table 4.2-6).

Impact 4.2-2: ***Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***

Environmental Analysis: All emissions and air quality assumptions are provided in Draft EIR Section 4.2, with detailed calculations provided in Draft EIR Appendix 10.3, Air Quality/GHG Calculations. As shown in Draft EIR Table 4.2-6, Construction Emissions Results (Unmitigated), the Project would not result in emissions of pollutants exceeding the SCAQMD's regional significance thresholds during construction in 2030 or 2032. However, during construction in 2019, 2020, 2021 (for the Phase I Project), unmitigated NOx emissions are projected to exceed the significance threshold of 100 pounds per day. As shown in Table 4.2-8, On-site Construction Emissions Results (Unmitigated), the Project would result in unmitigated emissions of PM10 and PM2.5 that exceed the SCAQMD's localized significance thresholds (LSTs) in 2020 and 2021. As shown in Table 4.2-10, Operational Emissions Results (Unmitigated 2021 Summer), Project operations would not result in emissions of any pollutants exceeding the SCAQMD's significance thresholds. The largest sources of NOx, CO, and particulate matter (PM) emissions result from indirect mobile emissions due to worker commutes and scheduled deliveries, as well as periodic testing of an on-site diesel-fired emergency generator (that would not exceed 200 hours of operation per year). The largest source of VOC emissions comes from the infrequent re-application of corrosion protection and architectural coatings at the facility. Since the operation of the proposed Project would not exceed SCAQMD significance thresholds, the Project operations would not significantly impact air quality standards. Project Design Features substantially avoid or reduce potential air quality impacts, as summarized on Draft EIR page 4.2-20. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.2-22 through 4.2-29; with further clarification of construction and operational air quality assumptions provided in Final EIR Master Response 1 and Responses S4-9 and L1-3).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Similar to Impact 4.2-1, AQ-1 will meet EPA-Certified Tier 4 emission standards. Mitigation Measure AQ-2 requires that on-road vehicle idling be minimized to below five minutes. Any off-road units will also have a five-minute maximum idle time as per § 2449(d)(3) of Title 13, Article 4.10, Chapter 9 of the California Code of Regulations. Mitigation Measure AQ-3, similar to Impact 4.2-1, provides a list of actions that will be implemented prior to and during construction to mitigate levels of particulate matter emissions.

Finding: The District Adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The Mitigation Measures include the use of Tier 4 certified engines during construction, idling restrictions, and a construction fugitive dust control plan. Implementation of Mitigation Measures AQ-1 through AQ-3 would reduce NOx emissions to below the significance threshold

of 100 pounds per day, as shown in Table 4.2-7, Construction Emissions Results (Mitigated). Implementation of Mitigation Measure AQ-3 would reduce fugitive dust generation during project construction. Since the construction of the proposed Project with Mitigation Measures AQ-1 through AQ-3 would not exceed SCAQMD localized significance thresholds, impacts would be less than significant, as shown in Table 4.2-9, On-site Construction Emissions Results (Mitigated).

Impact 4.2-3: ***Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

Environmental Analysis: The project is in an area classified as an extreme non-attainment area for the 8-hour National Ambient Air Quality Standards (NAAQS) for Ozone (O_3), a maintenance area for the 24-hour NAAQS for PM_{10}, and a serious non-attainment area for the NAAQS annual arithmetic mean for $PM_{2.5}$. As discussed under Impact 4.2-2, Project construction emissions would exceed NOx significance thresholds, and construction emissions would also exceed SCAQMD's localized significance thresholds (LSTs) for PM_{10} and $PM_{2.5}$ (unmitigated). Project operational emissions are not anticipated to exceed SCAQMD significance thresholds. Project Design Features substantially avoid or reduce potential air quality impacts, as summarized on Draft EIR page 4.2-20. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.2-29 and 4.2-30).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Similar to Impact 4.2-1, Mitigation Measures AQ-1, AQ-2 and AQ-3 will reduce emissions by meeting EPA-Certified Tier 4 emission standards, minimizing idling time, and implementing a fugitive dust control plan prior to and during construction.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project construction would comply with SCAQMD rules and AQMP emissions control measures. Implementation of Mitigation Measures AQ-1 through AQ-3 would also minimize construction emissions. With implementation of these mitigation measures, construction emissions (including PM_{10}, $PM_{2.5}$, NO_x and ROG) would be reduced to a less than significant level (refer to Table 4.2-6, Construction Emissions Results (Unmitigated) and Table 4.2-7, Construction Emissions Results (Mitigated). The Project would not result in significant operational air quality impacts because emissions would not exceed the SCAQMD-adopted operational thresholds and the Project's contribution is not a significant proportion of the cumulative total basin emissions. Because the operational emissions calculated for the Project do not exceed the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable ambient air quality standards, the Project would not represent a cumulatively considerable net increase of any nonattainment criteria pollutant.

Impact 4.2-4: ***Would the Project expose sensitive receptors to substantial pollutant concentrations?***

Environmental Analysis: The construction of the Phase I Project (up to 5 MGD) is expected to last about 20 months, and would occur during working hours (8 to 10 hours per day), except for slant well construction, which would occur 24/7 for approximately six months out of the year. The construction equipment would also be required to comply with ARB's airborne toxic control measures and off-road equipment rules, which reduces emissions of diesel particulate matter (DPM). Sensitive receptors in proximity to the Project construction sites would have temporary, limited exposure to toxic air contaminant (TAC) emissions during construction that is well below the conditions needed for possible adverse long-term impacts associated with DPM. Therefore, the toxics impact related to construction would be less than significant. As shown in Draft EIR Table 4.2-8, On-site Construction Emissions Results (Unmitigated), the Project would not exceed the LSTs for carbon monoxide (CO) or NOx. However, unmitigated Project construction emissions would exceed the LSTs for PM_{10} and $PM_{2.5}$. Operational TAC emissions and LSTs would not be significant due to the nature of the Project and primary power source from electricity. Project Design Features substantially avoid or reduce potential air quality impacts, as summarized on Draft EIR page 4.2-20. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.2-30 through 4.2-32).

Mitigation Measure (refer to the Attachment A, MMRP for the full mitigation measures)**:** Mitigation Measure AQ-3 requires the implementation of a fugitive dust control plan containing actions that will minimize particulate matter emissions. AQ-3 has been modified to additionally require the District to apply for and obtain a haul route permit from the City of Dana Point, and requiring that during the construction phase that the District ensures that all construction materials, waste, grading or demolition debris, and stockpiles of soil, aggregates, soil amendment, or similar material, are properly covered, stored, managed, secured and disposed to prevent transport into the streets, gutters, storm drains, creeks and/or coastal waters by wind, rain, tracking, tidal erosion or dispersion.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Implementation of Mitigation Measure AQ-3 would reduce fugitive dust generation during Project construction. Because the construction of the proposed Project with Mitigation Measure AQ-3 would not exceed SCAQMD localized significance thresholds, the Project would not significantly impact sensitive receptors. Therefore, the LST impact related to construction would be less than significant with appropriate mitigation.

Biological Resources

Impact 4.3-1: ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Environmental Analysis: The design of the project has intentionally avoided or minimized impacts to biological resources in its construction and its operation, through facility siting at developed urban locations, avoiding direct impacts to sensitive resource locations, setting the slant well construction zone off of the beach on Doheny State Beach (DSB), minimizing the staging and construction areas at DSB, and using the preferred method of ocean water intake, subsurface slant wells (refer to summary of Project Design Features in Findings Section 4). Construction near sensitive wildlife, such as the Western Snowy Plover (WSP) or other coastal species, could cause impacts due to construction noise and light. Although no Special Protection Zones or critical habitat is listed for WSP at DSB, WSP is known to occasionally forage and roost at DSB. Prior to full operation and pumping of raw seawater to the desalination facility, the well heads would require well development. This is the process in which drilling material is cleared from the well casing and remaining loose sediments are flushed and disposed of offsite. Furthermore, accidents resulting in spills of fuel, lubricants, or hydraulic fluid from equipment could occur during proposed drilling operations. (DEIR, pp. 4.3-26 to 4.3-27).

Slant wells are the preferred method of ocean water intake by the California Ocean Plan as the subsurface intake system avoids direct impacts to marine life impingement and entrainment. Similar slant well drilling vibration was evaluated for the proposed slant wells in Marina, California, which found that the slant well construction does not generate significant marine noise or vibration and would not have any significant impacts on marine mammals. In addition to water quality requirements, the Ocean Plan Amendment (OPA) requires that a Project address the potential impacts it has on "all forms of marine life" due to the potential adverse effects from elevated salinity or turbulence mortality. Slant wells at DSB would require an electrical control building, to be sited as part of final design and permitting with State Parks and applicable regulatory agencies. This area would be avoided for siting any new project facilities, as part of final design and regulatory permitting. The Draft EIR also evaluated slant well pumping effects on San Juan Creek lagoon and nearby reaches of San Juan Creek, which is listed as critical habitat for the southern steelhead trout. The Draft EIR found that slant well pumping over time could reduce the water levels in the San Juan Creek Lagoon by approximately 0.14 to 0.26 feet. This is within normal lagoon variation and should not significantly affect the lagoon habitat. The other components of the desalination project will have no impact on sensitive wildlife resources. The brine discharge from the desalination process would fall below the regulatory limit of 2ppt salinity increase within 100 meters of the diffusers. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.3-26 through 4.3-37, as further clarified in Final EIR Responses F2, S7-4 and W6).

Mitigation Measures: BIO-1 (refer to the Attachment A, MMRP for the full mitigation measures) requires the creation and use of a preconstruction nesting bird survey to comply with the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC) sections 3503, 3503.5, 3511, and 3513. The MBTA prohibits the taking of migratory birds, their eggs, parts, and nests.

BIO-2 requires that any facilities sited in DSB be reviewed and approved by any applicable regulatory agencies including State Parks. This review will ensure that the project is demonstrating avoidance of sensitive habitats, with respect to the potential well development discharge connection to the South

Orange County Wastewater Authority (SOCWA) San Juan Creek Ocean Outfall (SJCOO) vault and the planned electrical control building

BIO-4 requires that the District monitor the San Juan Creek Lagoon levels after the first slant well begins pumping at DSB, to further refine groundwater modeling and future slant well siting. The reports from this pumping will be sent to the Coastal Commission and NOAA NMFS at least once a month.

OPA-1 requires that before the NPDES Permit is issued to the Project, an OPA compliance determination from the San Diego Regional Water Quality Control Board (SDRWQCB) and the State Water Resources Control Board (SWRCB) with the State Lands Commission and California Coastal Commission is required, including any applicable conditions to ensure Ocean Plan compliance.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project construction will include Section 7 consultation with the U.S. Fish & Wildlife Service (USFWS) to determine appropriate minimization and avoidance measures. If WSP forage or roost at DSB during the off-season during slant well construction, the birds will typically adapt to local conditions and relocate if needed. DSB is an active public recreation area, and given that the slant well drill rig work areas have been set back away from the beach, there are no significant impacts anticipated to WSP during construction. The area will be monitored during construction (see Mitigation Measure BIO-1) for wintering birds, as well as nesting pairs, with appropriate measures taken as determined by the California Department of Fish & Wildlife (CDFW) and USFWS. The drill rig work areas will be screened for noise and light attenuation (as discussed in DEIR, Section 4.10, Noise and Vibration, and Section 4.1, Aesthetics, Light & Glare). Mitigation Measure BIO-2 and BIO-4 will provide regulatory agency oversight and monitoring to ensure impact avoidance.

Impact 4.3-2: ***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?***

Environmental Analysis: No direct impact to any riparian habitat or sensitive riparian community would occur from the Project. The construction of the subsurface intake wells will not impact any riparian habitat. The trenchless construction methods (under existing drainages) utilized in water conveyance pipeline construction will also avoid impacts to riparian areas. The desalination facility and brine disposal system are both being built on either previously developed land or existing structures. Therefore, no impact to the sensitive environments will come from their construction. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.3-37 through 4.3-39).

Mitigation Measures: (Refer to the Attachment A, MMRP for the full mitigation measures). As with Impact 4.3-1 above, measures BIO-2 and BIO-4 will substantially reduce potential impacts to sensitive natural communities to less than significant levels through facility siting and regulatory agency review and monitoring

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The project is not anticipated to significantly impact sensitive riparian habitats or other natural sensitive communities. In development and operation, most of the components (all but the intake wells) will be built on developed land, existing structures, or existing rights of way. The Project's brine discharge would not have any significant impacts on the marine environment and would comply with OPA requirements. There would be no operational maintenance requirements for the brine disposal system since the Project would utilize SOCWA's existing SJCOO and associated diffusers. Although there are nearby sensitive habitats, including the Dana Point State Marine Conservation Area (SMCA), this area is over a mile from the SJCOO diffusers, and the Project's discharge is required to be reduced to within 2 ppt of ambient ocean water within 100m of the diffusers, a substantial distance from the nearest sensitive habitat. As discussed with findings above for Impact 4.3-1, slant well operation will not significantly impact San Juan Creek lagoon habitat.

Impact 4.3-3: ***Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

Environmental Analysis: During construction of the Project, no federally protected wetlands will be affected by the building of the subsurface intake wells, raw water conveyance system, desalination facility, or brine disposal system. For the desalination facility and the brine disposal system, existing structures or previously developed land will be used. The desalination facility is being built on previously developed land located in a developed inland parcel. The brine disposal system will be attached to the SJCOO structure which has already been built. Operational impacts to San Juan Creek lagoon are described in Impact 4.3-1, and would fall within normal lagoon variations. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.3-39 through 4.3-41).

Mitigation Measure: (Refer to the Attachment A, MMRP for the full mitigation measures). As with Impact 4.3-1 above, measures BIO-2 and BIO-4 will further minimize and avoid potential impacts to protected wetlands to less than significant levels through lagoon monitoring and regulatory agency review

Finding: The District adopts CEQA Finding 1(CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: No federally-protected wetlands would be affected by slant well construction. The slant wells would be drilled from previously disturbed locations within DSB at on-shore locations (well removed from Clean Water Act regulated portions of DSB below the mean high tide), including landscaped parking lots, other existing hardscaped areas, and areas with non-native landscaping such as trees at the DSB campground. Appurtenant facilities would avoid San Juan Creek Lagoon and its associated jurisdictional waters. Mitigation Measure BIO-2 further ensures wetlands avoidance through regulatory agency design review. No impacts would occur in this regard. The District will monitor lagoon levels to refine the groundwater modeling and facilitate siting of subsequent slant wells, in order to ensure that no significant impacts occur. See Mitigation Measure BIO-4 and detailed discussion above under Impact 4.3-1

and Appendix 10.10.1. Therefore, impacts would be less than significant with Mitigation Measures BIO-2 and BIO-4.

Impact 4.3-4: ***Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Environmental Analysis: No marine life migration pattern at Doheny State Beach or San Juan Creek Lagoon is expected to be impacted by the construction of the slant wells. The slant wells will be placed in an area often used for recreation and therefore, already separated from migratory patterns of wildlife. The offshore area is influenced by coastal recreation users, recreational and commercial boating associated with the adjacent Dana Point Harbor, and coastal wave-energy related noise and vibration as waves approach the shoreline. As discussed in Draft EIR Impact 4.3-1, the slant well construction-related noise and vibration is not anticipated to significantly impact marine mammals. All Project construction will comply with the MBTA as noted in BIO-1. The construction of the raw water conveyance alignments would occur in established right of ways and would have little to no impact. The brine disposal system will utilize an existing structure as well. As discussed above in Impact 4.3-1, slant well operation will not significantly impact San Juan Creek and lagoon, which are critical habitat for southern steelhead habitat and associated migration. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.3-41 through 4.3-45).

Mitigation Measures: BIO-1 (refer to the Attachment A, MMRP for the full mitigation measures) requires the creation and use of a preconstruction nesting bird survey. In the survey, all the construction must comply with the federal MBTA and CFGC sections 3503, 3503.5, 3511, and 3513. The MBTA prohibits the taking of migratory birds, their eggs, parts, and nests. To comply with the MBTA, construction related tree removal must take place between September 1 and December 31, and the Designated Biologist must be approved by the District and confirmed by State Parks and CDFW

BIO-4 requires that the District monitor the San Juan Creek Lagoon levels after the first slant well begins pumping at DSB, to further refine groundwater modeling and future slant well siting. The reports from this pumping will be sent to the Coastal Commission and NOAA NMFS at least once a month.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: In addition to Project Design Features and existing regulatory programs, BIO-1 requires MBTA compliance to avoid migratory bird impacts. As discussed with Impact 4.3-1, slant well operations may affect lagoon levels, although this would be within normal lagoon level seasonal variation, and further monitored through BIO-4.

Impact 4.3-5: ***Would the project conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance?***

Environmental Analysis: The Doheny State Beach slant wells will be under the State Parks jurisdiction, and does not conflict with the DSB General Plan. The desalination facility is located inland in an industrially developed area and will comply with applicable City of Dana Point regulations. Detailed discussion of local regulation and ordinance compliance is provided in Draft EIR Table 4.9-2, Doheny State Beach General Plan Consistency Analysis, and Draft EIR Table 4.9-4, Dana Point General Plan Consistency Analysis, Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.3-45 through 4.5-47).

Mitigation Measures: (Refer to the Attachment A, MMRP for the full mitigation measures). BIO-1 through BIO-4 as described above and in Attachment A, MMRP, will substantially reduce potential impacts to local policies and ordinances to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: In addition to Project Design Features summarized in Findings Section 4, EIR mitigation measures and regulatory agency oversight will ensure Project consistency with applicable local plans and policies. The Project requires construction encroachment permits from State Parks and the City of Dana Point, as well as an operational license or lease agreement from State Parks, which allows each agency to ensure that the Project is consistent with applicable local plans and policies. In particular, the City of Dana Point requested a number of clarifications and modifications to the Draft EIR and associated mitigation measures to ensure Project consistency, as discussed in Final EIR Response L1 and Final EIR Section 3, *Draft EIR Errata*.

Cultural Resources

Impact 4.4-2: ***Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5?***

Environmental Analysis: Project Design Features as summarized in Findings Section 4 substantially avoid potential impacts to archaeological resources through facility siting at existing developed and disturbed sites, which avoids grading natural undeveloped land where archaeological resources are more commonly found. One archaeological resource was identified within the Study Area, within the Southern Alignment - Resource CA-ORA-188. However, the mapped boundary of the site likely exceeds the actual size because

the written description of the site places it on the bluff rather than at the lower elevations of the streets and railroad. Further, the site was completely destroyed during the development of the Dana Bluffs project circa 1973. Due to archaeological sensitivity of the study area, and as requested by native American tribes through AB52 consultation, the Project construction will include archaeological monitoring to mitigate potential impacts to currently unmapped surface or subsurface archaeological resources. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.4-25 through 4.4-29).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** CUL-1 requires that prior to, and during construction with ground disturbing activities, all contractors will go through a Worker Environmental Awareness Program (WEAP). This training will include discussions of applicable environmental laws and penalties including information that Cultural Resources Specialists (CRSs) and Construction Managers (CMs) can stop construction if there is a potential impact to cultural resources. There will also be instruction that employees must stop work near found cultural resources and inform their supervisor and the CRS or CM, with the CRM and supervisor redirecting work. Reporting procedure will be distributed in an informational brochure. As well, the program will include samples or visuals from the project vicinity. Once training is completed each worker will sign off on an acknowledgment form indicating that they have received the training and a sticker will be placed on their helmet. The WEAP certification forms for each person that has completed training will be kept by the District or its designee.

CUL-2 requires that before construction the District or its designee will retain a CRS that has met the minimum requirements of the U.S. Secretary of the Interior Guidelines. The CRS will be present for all digging activities and the District shall provide the opportunity to be present during initial deep excavations to local Native American Tribes. If previously unknown cultural activities are found, then the CM and CRS have the power to stop construction with the CM redirecting construction activities. If resources are found, then construction will be stopped until the CRS has informed the District or its designee (implied henceforth) and the CM within 24 hours of the find and provided a description of the work stoppage. As well, any necessary data recovery and mitigation will need to be completed with any archeological materials collected curated following the "Guidelines for the Curation of Archeological Collections" by the Historic Resources Commission. The public repository or museum must also meet the requirements by the Federal Code of Regulations Part 79, Title 36 regarding the curation of cultural resources.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: No significant archaeological resources have been identified within the Project's area of potential effect (APE). In addition to Project Design Features, Mitigation Measures CUL-1 and CUL-2 will provide worker training and construction monitoring to avoid and mitigate any significant resources should they be discovered during construction, including best practices to use and avoid impacting resources of cultural significance.

Impact 4.4-3: ***Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Environmental Analysis: The subsurface intake wells would be in an area with undetermined paleontological sensitivity. Unnamed Miocene marine sediments are mapped offshore in the shallow sub-surface and are not known to contain fossils but would be inspected if construction activities bring them to the surface. However, no significant paleontological resources have been identified during field surveys of the Project site. Project Design Features summarized in Findings Section 4 further reduce the potential for paleontological resource impact. Impacts are further reduced through mitigation measures described

below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.4-29 through 4.4-33).

Mitigation Measure (refer to the Attachment A, MMRP for the full mitigation measures)**:** CUL-3 requires that a Paleontological Construction Monitoring and Compliance Program be enacted. The District will employ a paleontologist that meets the Society of Vertebrate Paleontology standards for Qualified Professional Paleontologist to direct mitigation regarding paleontological resources. The paleontologist will create a Paleontological Mitigation Monitoring Program for any ground disturbance activity and outline the procedures for construction workers in the WEAP program. Areas mapped as low to high paleontological sensitivity should be monitored when ground-disturbing activities exceed five feet in depth, because underlying sensitive sediments could be impacted. Areas considered to have an undetermined paleontological sensitivity should be inspected and further assessed if construction activities bring potentially sensitive geologic deposits to the surface. The mitigation monitoring program will also outline paleontological monitoring extent and duration, salvage and fossil preparation, the final mitigation report, and paleontological staff qualifications.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: With the location of the project components being in paleontologically significant areas, construction monitoring through CUL-3 will avoid and mitigate any potential discovery of currently unknown subsurface resources encountered during construction.

Impact 4.4-4: ***Would the project disturb any human remains, including those interred outside of formal cemeteries?***

Environmental Analysis: No human remains are known to be in the project area. Project Design Features summarized in Findings Section 4 further reduce the potential for encountering human remains during construction, through facility siting at existing developed and disturbed sites. Project construction will include standard construction monitoring and notification practices in the event that human remains are discovered during construction. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR p. 4.4-33).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** CUL-1 and CUL-2 include construction worker training and monitoring. District standard practice, as required by State law, is to include training on required procedures in the event human remains are discovered.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: No human remains are known to exist in the Project construction footprint. Project Design Features and compliance with existing regulations pertaining to discover of human remains will avoid or mitigate any impacts to human remains, should they be discovered during construction. These procedures are described on DEIR page 4.4-33 and in Final EIR Comment Letter S5.

Geology and Soils

Impact 4.5-1: ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

- ***Strong seismic ground shaking?***

Environmental Analysis: The Project is located in the Southern California region, which is prone to ground shaking. All Project components would be constructed to Uniform Building Code standards and would be designed in conformance with all applicable standards to resist the harmful effect of seismic ground shaking. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.5-14 through 4.5-16).

Mitigation Measure (refer to the Attachment A, MMRP for the full mitigation measures)**:** GEO-1 requires that before ground disturbing activities begin, a site-specific soils engineering report prepared by a registered geologist is required by the California Building Standards Code Section 1803. The soils engineering report will detail geologic conditions including existing soils and is required for all project components inside of Liquefaction Investigation Zones. The report will include lab test data, associated geotechnical engineering analysis, and a discussion of seismicity, liquefaction, landslide, dynamic compaction, compressible soils, corrosive soils, and tsunamis if applicable. The report will also include any recommendations for ground improvement and/or foundational systems necessary to mitigate potential geologic hazards. The recommendations will be reflected in Project grading and design plans.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: GEO-1 (refer to the Attachment A, MMRP) mitigates seismic risk by requiring a site-specific geotechnical report and oversight by a registered geologist. Seismic design recommendations are required to be reflected in Project grading and building plans. These plans are, in turn, subject to the District's standard plan check process as well as submittal for review and approval by the City of Dana Point prior to building permit issuance as clarified further in the Final EIR, Response F1.

- ***Seismic-related ground failure, including liquefaction?***

Environmental Analysis: The areas that the project components are in have a history of liquefaction and are defined as "areas where local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation would be required" (California Geological Survey, 2001). The risk of ground shaking can also adversely impact the components operation as well. A concrete wall protects the San Juan Creek, which the desalination facility is near, from erosion and liquefaction. The project will be designed to comply with the California Building Standards Code (CBSC). Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.5-16 through 4.5-17).

Mitigation Measure (refer to the Attachment A, MMRP for the full mitigation measures): GEO-1 will substantially reduce potential impacts from seismic related ground failure to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: To reduce impacts due to liquefaction, compliance with Mitigation Measure GEO-1 would be required. Mitigation Measure GEO-1 would require a qualified geologist and geotechnical engineer to prepare site-specific geotechnical hazard investigations and recommendations for design level measures. The investigation would include any necessary recommendations for soils remediation and/or foundation systems necessary to reduce seismic-related hazards, such as liquefaction, to a less than significant level.

- ***Landslides?***

Environmental Analysis: The raw water conveyance alignments to the north and south are adjacent to some steep slopes as it traverses Park Lantern Road. These areas have been classified as landslide zones by the California Geologic Survey (CGS). However, the Project construction does not propose activity nearby the steep zones and will stay in an already established right of way. The desalination plant is being developed in an industrialized and populated area. The construction on site would be conformed to the California Building Code (CBC) standards and would be surrounded by relatively flat land. Operation of the subsurface intake wells would be less than significant, as there are no slopes in the surrounding area. After construction, the raw water conveyance alignment would have no significant impacts due to the subsurface nature of the alignments. However, the facility will conform to the CBC and any other applicable building codes. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.5-18 through 4.5-19).

Mitigation Measure (refer to the Attachment A, MMRP for the full mitigation measures)**:** GEO-1 will substantially reduce potential impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Due to the active seismicity of the region, the desalination facility would conform to the CBC standards as well as any applicable building code regulations from the City of Dana Point. Overall, development of the desalination facility could expose an essential public utility as well as persons and structures to potential substantial adverse effects involving strong seismic ground shaking, seismic-related ground failure (liquefaction/lateral spreading), and seismically-induced landslides. Therefore, implementation of Mitigation Measure GEO-1 would further reduce impacts related to landslides. Impacts are less than significant with mitigation.

Impact 4.5-3: ***Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or-off-site landslide, lateral spreading, subsistence, liquefaction or collapse?***

Environmental Analysis: As discussed above in Impact 4.5-2, the Project is not in an area subject to landslide hazards. Portions of Project components are in areas subject to liquefaction, including raw water conveyance pipelines and the desalination facility. This Project design would reduce the possible impact from liquefaction on the existing site by elevating the site with compacted dirt. In general, soil liquefaction could result in excessive differential settlement which can cause damage to structures. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.5-22 through 4.5-24).

Mitigation Measure (refer to the Attachment A, MMRP for the full mitigation measures)**:** GEO-1 will substantially reduce potential impacts of unstable geologic units or soil to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding:

Mitigation Measure GEO-1 would require that SCWD (or its designee) identifies a qualified geologist and geotechnical engineer to investigate the site area prior to commencement of construction. GEO-1 would also require areas with potential exposure to seismic hazards be subject to a site-specific geotechnical investigation prior to ground disturbing activities. The investigation would include any necessary recommendations for soils remediation and/or foundation systems necessary to reduce seismic-related hazards to less than significant. Typical construction technique and building designs such as structural fill mats to dampen settlement effects, deep foundations extending through the zone of liquefaction, deep dynamic compaction, grouting, or the use of stone columns to relieve groundwater pore pressures are a few design features which would address liquefaction impacts. In addition, ocean water desalination facility design and construction would be subject to compliance with the CBSC. Implementation of the project design features discussed previously, as well as compliance with the CBSC and Mitigation Measure GEO-1, would reduce impacts related to unstable soils to less than significant levels.

Impact 4.5-4: ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

Environmental Analysis: Soils that expand and contract in volume ("shrink-swell" pattern) are considered to be expansive and may cause damage to aboveground infrastructure as a result of density changes that shift overlying materials. Fine-grain clay sediments are most likely to exhibit shrink-swell patterns in response to changing moisture levels. According to the USDA Natural Resource Conservation Service Web Soil Map, the Project area consists of Myford sandy loams, Sorrento loams, Alo clays, and beaches. The primary concern regarding expansive soils is with above-ground structures, particularly those that may be occupied, such as the desalination facility. Standard design and construction practices will mitigate potential impacts related to expansive soil. In addition, the Project design includes regrading and importing new soil which will then be compacted, further reducing potential impacts associated with expansive soils. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.5-24 through 4.5-25).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** GEO-1 will substantially reduce potential impacts to life or property to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding:

The desalination facility operation would be subject to various controls to reduce the exposure of people and structures to the effects of expansive soils. Specifically, the Project would be subject to compliance with requirements set forth in the 2016 CBSC and site-specific mitigation measures. Mitigation Measure GEO-1 requires preparation of a soils engineering report pursuant to CBSC §1803 for areas of the SCWD property where the ocean water desalination facility and its appurtenant facilities would be located. The soils engineering report would identify the presence of soil issues, which if not corrected would lead to structural defects, and would include any necessary recommendations for soils remediation and/or foundation systems necessary to reduce risks to life and property. Compliance with Mitigation Measure GEO-1, and the CBSC, as well as any identified soils engineering report recommendations (which are expected to stipulate the removal of all moderately to highly expansive clay soils and avoidance of clayey soils in compacted fill), would ensure that desalination facility construction would result in a less than significant impact related to risks to life or property associated with expansive soils.

Greenhouse Gas Emissions

Impact 4.6-1: ***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

Environmental Analysis: Draft EIR Table 4.6-4 summarizes the total construction emissions from the Project, estimated at 8,778 MTCO2e (metric tons of CO2 equivalent) per year in year 1 and 3,682 MTCO2e per year in construction year 2, as clarified in the Final EIR Section 3, *Draft EIR Errata*. Project operational emissions are shown in Draft EIR Table 4.6-5, estimated at 5,959 MT/year for the Phase I Local Project (including annualized construction emissions noted above). The majority of Project-related operational emissions are from indirect emissions associated with the Project's electricity consumption from the power grid. As discussed further in Impact 4.6-2, the Project's electricity-related greenhouse gas (GHG) emissions are regulated by the SCAQMD, California Air Resources Board (ARB), the Department of Water Resources (DWR) and others and as such will be further reduced through these agency's efforts to comply with Assembly Bill 32 (AB 32) and related GHG policies and regulations. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pages 4.6-17 through 4.6-24, as further clarified in Final EIR Responses S1-12, S1-13, O1-10, O1-18, O7-10 and O7-11).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures): GHG-1 requires that the District prepares an Energy Minimization and GHG Reduction Plan before construction begins on the Project. The plan will include the Project GHG emissions estimates from the final design plans as well

as the updated emissions associated with importing water from the Colorado River Aqueduct and the State Water Project as if the Project were not constructed.

GHG-2 requires that SCWD will prepare an Annual GHG Verification Report annually in the first quarter after construction and operations begin. This will include reporting on actual estimated Project GHG emissions, water importation emissions, and the offsets from GHG mitigation. The report from SCWD will be verified by an independent accredited verification entity, following the ARB Mandatory Reporting Regulation. Final EIR Section 3, *Draft EIR Errata*, provides minor clarifications and modifications to measures GHG-1 and GHG-2.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)). The District also adopts CEQA Finding 2 (CEQA Guidelines §15091(a)(2)), in consideration of GHG regulations outside the control of the District, as regulated by the State of California, including the ARB, DWR and other state agencies.

Facts in Support of Finding: As noted above, the majority of Project-related operational emissions are from indirect emissions associated with the Project's electricity consumption from the power grid, including GHG associated with importing water through DWR's State Water Project. These GHG emissions are under the control of ARB and DWR. SCWD is committed to achieving a "carbon neutral" ocean desalination Project with no net increase in GHG emissions compared to the baseline scenario (continued reliance on current water supply portfolio which is primarily from imported water). This means that the Project's net increase in GHG emissions would be 100 percent offset through a combination of Project Design Features and mitigation measures. The Project Design Features cited in Section 4.2, Air Quality demonstrate that SCWD has incorporated a variety of design considerations to reduce GHG emissions, including favorable siting and design, installation of roof-top solar panels on Project buildings (where feasible), and incorporation of state-of-the-art energy recovery devices that reduce Project overall energy demand by approximately 35 percent. This is in addition to SCWD's broader commitment to energy efficiency as exhibited through the system-wide energy savings associated with its ongoing conservation and water recycling programs. Mitigation Measures in Section 4.2, Air Quality would also reduce construction and operation-related GHG emissions.

Impact 4.6-2: *Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?*

Environmental Analysis: Refer to findings above regarding Impact 4.6-1. The California Air Resources Board's (ARB) California's 2017 Climate Change Scoping Plan ("2017 Scoping Plan") recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target. "This Scoping Plan for Achieving California's 2030 Greenhouse Gas Target (Scoping Plan or 2017 Scoping Plan) identifies how the State can reach our 2030 climate target to reduce greenhouse gas (GHG) emissions by 40 percent from 1990 levels, and substantially advance toward our 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels."[1] As recognized by the 2017 Scoping Plan, the

[1] California's 2017 Climate Change Scoping Plan at page 1, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (accessed March 24, 2019).

right to "safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes" as outlined in AB 685 (Eng., Chapter 524, Statutes of 2012) (California Legislative Information Website 2017), also known as the "human right to water" bill, should take precedence over achieving GHG emission reductions from water sector activities where a potential conflict exists.[2] The 2017 Scoping Plan Update does not specify GHG reductions needed from the water sector to meet the goals of AB 32 and SB 32, as it recognizes that the energy intensity of water varies greatly depending on the geography, water source, and end use, and that "(a)s the energy sector is decarbonized through measures such as increased renewable energy and improved efficiency, energy intensities will also be reduced." Furthermore, the 2017 Scoping Plan suggests the following project-level GHG reduction actions and thresholds for individual development projects: Beyond plan-level goals and actions, local governments can also support climate action when considering discretionary approvals and entitlements of individual projects through CEQA. Absent conformity with an adequate geographically-specific GHG reduction plan as described in the preceding section above, CARB recommends that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.[3] The State Air Resources Board has also indicated that using the net carbon neutral standard for an ocean desalination project is appropriate where the project would replace water that would otherwise be imported.[4] Electricity-providers are separately required to achieve State-imposed GHG reduction measures through SB 350, SB 32 and related regulations, and the Department of Water Resources has separately committed to consistency with the State's GHG reduction policies through its Climate Action Plan.[5] In addition, many factors would influence the State's ability to attain the 2050 GHG reduction goal, including changes in regulatory standards; fuel, transportation and power generation technologies; population growth; and land use development patterns. The Project would not hinder the State's achievement of the near-term 2020 goal (as codified in AB 32), the interim 2030 goal, and the long-term 2050 goal. Project Design Features (as summarized on Draft EIR page 4.2-20) substantially reduce or avoid potential GHG impacts to a less than significant impact. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.6-24 through 4.6-26; see also, Final EIR Response S1-12).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures): Measures GHG-1 and GHG-2 require the Project to achieve "net carbon neutral" GHG mitigation to offset incremental increases in GHG emissions compared to the District's current water supply portfolio, as well as third-party verification and annual reporting.

[2] *Id*, page 93.

[3] *Id*, page 106.

[4] February 8, 2010 letter from CARB to the Coastal Commission.

[5] California Dept. of Water Resources, Climate Action Plan, available at https://water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan (accessed March 24, 2019).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)). The District also adopts CEQA Finding 2 (CEQA Guidelines §15091(a)(2)), in consideration of GHG regulations outside control of the District, as regulated by the State of California, including the ARB, DWR and other state agencies.

Facts in Support of Finding: Refer to findings above for Impact 4.6-1. In addition to Project Design Features noted in Draft EIR Sections 4.2 and 4.6 and as summarized in Final EIR Section 3, *Draft EIR Errata*, mitigation measures GHG-1 and GHG-2 will ensure that the Project offsets its incremental increase in GHG emissions, the majority of which are under the jurisdiction and regulation of State agencies with respect to energy sector GHG emissions.

Hazards and Hazardous Materials

Impact 4.7-1: ***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Environmental Analysis: In construction, the subsurface intake wells will adhere to federal, state, and local regulations regarding transport, handling, storage, and disposal of hazardous substances. The wells are going to utilize various drilling fluids, muds, and other materials. Those materials are not considered acutely dangerous and all drilling operations will comply with applicable State and County well construction standards as set forth in the Coastal Development Permit and the State Lands Commission lease agreement. The desalination facility will require the use and storage of hazardous materials as well as their transport, which is strictly regulated by various local, state and federal agencies. Mitigation measure listed below have been imposed, are deemed feasible by the District, and are adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.7-22 through 4.7-29).

Mitigation Measures: HAZ-1 (refer to the Attachment A, MMRP) requires that the District create a Drilling Monitoring and Management Program (DMMP) to minimize the impact of potential releases of hazardous material on the environment and to set up best management practices (BMP). Those BMP's will include monitoring of all drilling activities for fluid and mud loss, borehole, collapse, and groundwater interference. A qualified geotechnical engineer will monitor all drilling and create strategies to minimize leaking potential. Strategies may include the use of pilot holes to test locations, muds with naturally occurring materials that are heavier than water, fluid pressure monitoring with pressure adjustments, and dye usage to find possible leaks into the water column. The DMMP will clearly define measures that will apply to spill containment and hazard minimization. Each monitoring response will be configured to the specific situations around each intake well.

HAZ-2 requires that the District creates a Hazardous Waste Management Plan before any drilling, grading, or construction permit is issued. It will cover any waste generated, used, handled, or transported during facility construction and operation; inclusive of waste from all components. The plan will contain applicable elements of the Hazardous Material Business Plan as determined by the District. It will contain applicable provisions of local, state, and federal law, including the California Accidental Release Prevention (CalARP). A description of all waste streams with their frequency, generated amounts, and hazard classifications will be included along with methods of managing each waste. This will include

storage, treatment methods, disposal by licensed contractor, contracted disposal companies, waste testing methods, transportation methods, disposal requirements and sites, and recycling and waste minimization/reduction plans. Along with the plan, the District will create an Annual Compliance Report, documenting the actual waste management methods used during the year compared to planned management methods.

HAZ-3 requires that a Registered Professional Engineer or Geologist experienced in remedial investigation and feasibility studies be available for consultation during soil excavation and grading activities, with full authority to oversee any drilling, microtunneling, jack and bore, excavation, trenching, or other earthmoving activities with the potential to disturb contaminated soil or groundwater.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Compliance with the regulatory framework and implementation of the specified mitigation measures would ensure seawater intake construction would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction. Similar slant well drilling operations have been safely and effectively conducted for test slant wells constructed and operated at Doheny State Beach and in Marina, California

(designed and monitored by the same hydrogeologist for this Project, GeoScience Support Services). Compliance with State and County regulations, and implementation of Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 would ensure drilling activities would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction. With mitigation, a less than significant impact would occur in this regard.

Impact 4.7-2: ***Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

Environmental Analysis: Prior studies have determined there are known incidents of hazardous materials releases that could affect Project construction or operations. As depicted on Draft EIR Exhibit 4.7-1, Recognized Environmental Conditions Map, and discussed in Draft EIR Table 4.7-1, Potential Hazardous Materials Sites On/Near the Project Area, the Environmental Data Resources (EDR) search revealed one site within the Project boundaries (Doheny State Beach Park at 25300 Dana Point Harbor Drive) and 14 sites located adjacent to/within 0.25 miles of the Project area with a reported spill of hazardous materials that could affect the Project site due to location or proximity (e.g., having experienced spills in which materials could have migrated into adjacent areas). Some of these areas include right-of-ways (ROW's), such as Doheny Park Road, Las Vegas Street, and Victoria Boulevard near the northern boundary of the proposed desalination facility. If during Project construction, areas with unknown contaminants are upset, the disturbance associated with construction-related activities could expose the public/construction workers and environment to contaminated soil, contaminated groundwater, or other underground hazards and hazardous materials. Groundwater modeling in Draft EIR Appendix 10.10.2 (pages 52-62) indicates that the Project is anticipated to have a beneficial effect on existing groundwater plumes.

Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.7-29 through 4.7-35, and further clarified in Final EIR Response S2).

Mitigation Measures: In addition to HAZ-1, HAZ-2, and HAZ-3, the following measures HAZ-4 through HAZ-9 will further reduce potential impacts to less than significant levels.

HAZ-4 requires that if contaminated soils are found during ground disturbance activities, then the Regional Professional Engineer or Geologist will inspect the area and report it to the City of Dana Point Community Development Department and the Orange County Department of Environmental Health with a course of action. The Registered Professional Engineer or Geologist will be able to temporarily pause construction at that location for the protection of the workers or the public. If remediation is required, then they will communicate with the San Diego Water Quality Control Board, Department of Toxic Substances Control (DTSC), and any other applicable local agencies for guidance. Implementation is the responsibility of the District.

HAZ-5 requires that the District prepare a Remedial Investigation Workplan if hazardous materials are discovered before the demolition of any structure or equipment at the desalination facility, to the satisfaction of the City of Dana Point Community Development Department and the Orange County Department of Environmental Health. The Workplan will include a detailed site characterization plan with soil and groundwater analysis to determine the extent of the groundwater contamination. The Workplan will be distributed to the DTSC, San Diego Regional Water Control Board, and City of Dana Point Fire Department, amongst other applicable local agencies for review.

HAZ-6 requires that, with consultation from the City of Dana Point Community Development Department and the Orange County Department of Environmental Health, the District create a survey of all Asbestos-Containing Materials (ACM) and Regulated Building Materials (RBM) that have lead-based paint and submit them to the listed agencies for approval. All the ACM and RBM will be removed from the work site by a licensed company and the City of Dana Point and County of Orange will be notified when removal is completed.

HAZ-7 requires that prior to demolition of any existing structures and with the consultation of the City of Dana Point Community Development Department and the County of Orange Department of Environmental Health, the District will prepare a Project Demolition and Construction Safety and Health Program for review and comment. The program will include a Demolition and Construction Safety Program and a Demolition and Construction Personal Protective Equipment Program. It will also include a Demolition and Construction Exposure Monitoring Program, a Demolition and Construction Emergency Action Plan, and a Demolition and Construction Fire Protection and Prevention Plan. The Demolition and Construction Fire Protection and Emergency Action Plan will include methods to maintain fire access roadways and submittal of a fire access layout plan for review by the City of Dana Point Fire Department.

HAZ-8 requires that before any well, grading, or construction permits are issued, and to the satisfaction of the City of Dana Point Community Development Department and County of Orange Department of

Environmental Health, the District submit a copy of the Project Operations and Maintenance Safety and Health Program for review and comment. The program will include an Operation Injury and Illness Prevention Plan and an Emergency Action Plan, as well as a Hazardous Materials Management Program. The Program will also include an Operations and Maintenance Safety Program and a Fire Protection Prevention Program with a Personal Protective Equipment Program. The Cal/OSHA Consultant Service will receive a copy of the Operation Injury and Illness Prevention Plan, Emergency Action Plan, and Personal Protective Equipment Program for review and comment. The City of Dana Point Fire Department will receive a copy of the Operation Fire Protection Plan and the Emergency Action Plan for review and comment. The Project Operations Fire Protection and Prevention Plan and Emergency Action Plan will include provisions of remote annunciation for all fire alarm and automatic suppression devices and the placement of remote annunciation at applicable project sites. The plan will have provisions for fire alarm systems and automatic fire sprinklers for new structures along with adequate emergency access for Fire Department Operations.

HAZ-9 requires that, to the satisfaction of the City of Dana Point Community Development Department, the District will retain a site Construction Safety Supervisor (CSS) who is knowledgeable of construction activities and relevant laws, ordinances, regulations, and standards; can identify workplace hazards relating to the construction activities; and has the authority to take appropriate action to assure compliance and mitigate hazards. The CSS will have authority to coordinate and implement occupational safety and health practices, policies, and programs. The CSS will also submit a monthly safety inspection report to the Project Engineer that includes a record of all employees trained for that month and a summary report of safety management actions and safety-related incidents that happen during the month.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: As discussed in Impact 4.7-1 above, Project construction and operations must adhere to Federal, State, and local regulations for transport, handling, storage, and disposal of hazardous substances. As required by the Orange County Environmental Health Division (OCEHD), the Project must adhere to County hazardous materials and hazardous waste regulations through compliance with various programs (i.e., HMD, BEP, HW, UST, APST, and CalARP). The Project would also be subject to compliance with Mitigation Measure HAZ-8. Therefore, compliance with the regulatory framework and the specified mitigation measure would ensure that desalination facility operations would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. These construction conditions are similar to those encountered during major capital improvement projects, including the District's Groundwater Recovery Facility and related improvements. During extended slant well operations both at Doheny State Beach and Marina, California, no accidental releases of hazardous materials into the environment occurred, and with implementation of standard design and operational practices including compliance with applicable regulations, no such accidental release is anticipated with the Project. The Project would also be subject to compliance with Mitigation Measures HAZ-1 through HAZ-9. Through

compliance with required regulations and implementation of required Mitigation Measures, no significant impacts are anticipated.

Impact 4.7-3: ***Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

Environmental Analysis: Draft EIR Table 4.7-2 lists schools within 0.24 miles of the project. The only school is within that zone for the Phase I Local Project is the San Clemente Christian School on Domingo Avenue. The south raw water conveyance alignment is the closest component of the project to the school. The second closest will be the desalination facility. There are no expected adverse impacts that will occur to the school from either construction or operation, in consideration of District standard construction practices, and mitigation noted below. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR p. 4.7-36).

Mitigation Measures: Measures HAZ-1 through HAZ-9 will substantially reduce potential impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The nearest school would be within 1/10 of a mile of the South Raw Water Conveyance line construction in Doheny Park Road, although this would be for a relatively brief period, and the hazardous materials utilized during pipeline construction would be typical for municipal pipelines, and comply with all applicable safety regulations, as noted in Impact 4.7-1 above. During desalination facility operation, this school would be approximately 0.21 miles from the desalination facility site. However, the school is substantially buffered between itself and the desalination facility, including several blocks of commercial/industrial buildings and the MetroLink railroad. The desalination facility site is zoned for uses such as municipal water supply, and Project operation would comply with all applicable operational safety regulations, as noted above in Impact 4.7-1. With compliance with applicable regulations and implementation of mitigation measures HAZ-1 through HAZ-9, no significant impacts are anticipated.

Impact 4.7-4: ***Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?***

Environmental Analysis: The project site is not listed in any of the searched databases for the Phase 1 ESA search including those required by Government Code Section 65962.5. A fuel leak in 1970 from a UST is listed in the Government Code's list (the Cortese List). The leak is filed with an unknown level of remediation. A Geotracker search on March 20, 2018 does not show the site as active in remediation or LUST. The impact from this is considered insignificant due its 30-year age. Mitigation measures listed below have been imposed, are found feasible by the District, and are adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.7-36 through 4.7-37, as further clarified in Final EIR Response S2).

Mitigation Measures: Measures HAZ-1 through HAZ-9 will substantially reduce potential impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The EDR search did not reveal any records for Cortese sites located on the desalination facility site, subsurface intake wells, or raw water conveyance pipeline alignments. As concluded in Impact 4.7-2 above, implementation of Mitigation Measures HAZ-1 through HAZ-9 would ensure that Project construction and operations would not create a significant hazard to the public or the environment. Therefore, with mitigation, the Project would not result in a significant hazard to the public or environment concerning a Government Code § 65962.5-listed site.

Hydrology and Water Quality

Impact 4.8-1: ***Would the project violate any water quality standards or waste discharge requirements?***

Environmental Analysis: Project construction has the potential to result in temporary water quality impacts associated with stormwater runoff. Temporary groundwater dewatering and slant well development would require discharge into the Pacific Ocean or local wastewater treatment plant. Project operations include brine discharge through the San Juan Creek Ocean outfall (SJCOO) outfall, which must comply with applicable state and federal water quality requirements including the Clean Water Act and Ocean Plan Amendment. Project drinking water must meet strict potable drinking water standards, which are enforced by the State's Division of Drinking Water. Project Design Features summarized on Draft EIR page 4.8-22 substantially reduce or avoid potential impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.8-22 through 4.8-29).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** HWQ-1 requires that SCWD, before any ground disturbance activities, manage stormwater pollution from construction by complying with the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activities. SCWD will create and implement a construction Stormwater Pollution Prevention Program (SWPPP) at least 30 days before construction to find BMPs for the construction phase. The SWPPP will have applicable erosion control measures, with the intent to satisfy Erosion Control Plan requirements of regulatory permitting agencies including the California Coastal Commission, State Parks, and City of Dana Point.

HWQ-4 requires that before construction, the District prepares a Water Quality Management Plan (WQMP) for review by the City of Dana Point with applicable Best Management Practices (BMPs) that address low impact development and designing the site in sustainable ways, source control BMPs, which are operation, management, LID/Treatment Control BMPs, Hydromodification Management BMPs, and housekeeping activities for controlling pollutants at the source. This includes staff and contractor training, street sweeping, storm drain system maintenance, efficient irrigation practices, litter management, etc.;

and treatment BMPs will be implemented for comprehensive pollutant management program and management and treatment of the runoff generated from the project. Project Design Features and mitigation measures HWQ-1 and HWQ-4 would reduce impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project construction work areas will have appropriate spill containment and erosion prevention measures as required by applicable City, County, State and other regulatory agency permit conditions (refer to Mitigation Measure HWQ-1). Construction activities would be required to comply with the General Construction Permit. This includes the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and associated BMPs. The District would prepare and submit a Notice of Intent (NOI) to the SWRCB, providing notification and intent to comply with the General Construction Permit. Depending on initial and discharge water quality, the initial well development discharge would require a WDR permit or other permits from the Regional Board. If the well development water is discharged directly to the existing SJCOO via the connection point at DSB campground, this would also require a new or modified NDPES permit to temporarily modify the SJCOO discharge. This well development process has been successfully permitted and implemented for similar slant well technology at DSB and at Marina, California.

Subsurface intake well operation will draw a small percentage of inland groundwater into the slant wells at DSB (estimated at 6.6% for wells at Doheny State Beach, when the wells reach a steady-state condition).

Given that there are known groundwater contamination plumes inland of the proposed slant wells, the District modeled slant well operation at various scenarios for representative groundwater contamination constituents in the nearest known plumes. The results of this modeling (contained in Draft EIR Appendix 10.10.2, Section 3.0) indicates that operation of the slant wells will not result in the intake of contaminated groundwater, and in fact has a very limited effect on these plumes. Normal Project operations and regulatory permits will require groundwater monitoring as well as monitoring of feedwater quality from the slant wells to ensure that any contaminants, regardless of source, are detected and treated prior to distribution of product water. No significant impacts are anticipated.

The Project will require a Water Quality Management Plan (WQMP) to provide post-construction BMPs, consistent with City and County of Orange Drainage Area Management Plan (DAMP) requirements (see Mitigation Measure HWQ-4). The Project will incorporate site design BMPs, source control BMPs, and treatment control BMPs to reduce or eliminate post-project runoff, control source pollutants, and treat stormwater runoff before it flows to the storm drain system. Implementation of BMPs would reduce water quality impacts to less than significant levels.

Extensive technical modeling has shown that the Project will meet applicable water quality standards including Ocean Plan standards for salinity and marine life impacts. Marine life impacts have been substantially reduced or avoided through use of subsurface slant well intakes, which eliminates marine life impingement and entrainment. Brine discharge modeling has been shown to meet Ocean Plan requirements, as further refined in Final EIR technical analyses contained in Final EIR Section 3, *Draft EIR*

Errata, Final EIR Appendix 4.2.2, and Final EIR Response S7. The Regional Board's comment letter (S7) itself affirms that the Project will comply with the Ocean Plan (Comment S7-21).

The operation of the desalination facility would require a Permit to Operate a Public Water System (California Health and Safety Code § 116525). All potable water produced by the desalination facility would be treated to a level suitable for human consumption in compliance with SWRCB Division of Drinking Water requirements for potable water (CCR Title 17 and 22). The SWRCB is also responsible for issuance of NPDES permits for discharges from drinking water systems to surface water in California (Order No. WQ 2014-0194, NPDES No. CAG140001). Given the Project is mandated by law to comply with

applicable drinking water standards, desalination facility operation would not violate any water quality standards or waste discharge requirements. Therefore, impacts would be less than significant.

Impact 4.8-5: ***Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

Environmental Analysis: With respect to increasing stormwater runoff, the majority of Project facilities are either below ground or so small that they will not create substantial new sources of stormwater runoff, which can easily be accommodated by existing drainage facilities. With respect to providing substantial additional sources of polluted runoff, during construction and Project operation, Project facilities would follow standard District construction protocols as noted in the District's 2017 Infrastructure Master Plan Update and Capital Improvement Projects IS/MND, including adherence to applicable City, County and State water quality measures to avoid or reduce construction and operational water quality impacts associated with stormwater runoff and erosion control. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR p. 4.8-33).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** HWQ-1 will mitigate ground disturbance activities, manage stormwater pollution from construction by complying with SWRCB's NPDES Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activities.

HWQ-4 will require that before construction, the District prepares a WQMP for review by the City of Dana Point with applicable BMPs that address low impact development and designing the site in sustainable ways, source control BMPs, which are operation, management, LID/Treatment Control BMPs, Hydromodification Management BMPs, and housekeeping activities for controlling pollutants at the source that would mitigate run off generated from the project. Project Design Features and mitigation measures HWQ-1 and HWQ-4 would reduce impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: For the desalination facility site, the Project hydrology study (Draft EIR Appendix 10.9, further clarified in Final EIR Appendix 4.2.4 and Final EIR Response S1-15) modeled existing and future conditions and recommends an on-site detention basin to mitigate post-project increase in runoff. The hydrology study also recommends relocating an existing drainage inlet (the 54" RCP inlet at the site's southern boundary) since the current inlet location is impacted by 100-year flood conditions where San Juan Creek backs up and overtops into the site. This is a favorable improvement to the existing condition. Mitigation Measure HWQ-1 requires compliance with NPDES permitting and implementation of BMPs for construction and operational water quality, and Mitigation Measure HWQ-4 requires a WQMP to address operational water quality impacts. Adherence to the above requirements would prevent significant impacts to existing stormwater drainage systems during construction and operation of the proposed Project facilities, as well as mitigate stormwater runoff water quality impacts. As a result, impacts associated with creating runoff or creating substantial sources of polluted runoff would be less than significant.

Impact 4.8-6: ***Would the project otherwise substantially degrade water quality?***

The Draft EIR addresses this issue under Impact 4.8-1. Therefore, refer to findings under Impact 4.8-1 discussion above. Impacts to water quality would be less than significant with mitigation incorporated.

Impact 4.8-8: ***Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?***

Environmental Analysis: The desalination facility site is currently within the 100-year flood hazard zone, as discussed further in Impact 4.8-9 below. The Project proposes to elevate the desalination facility site approximately three to five feet, prior to placing desalination facility structures on the site. Therefore, following grading, no structures would be placed within the 100-year flood zone. The Project hydrology studies have determined that proposed site improvements would not subject downstream properties to significant flooding impacts (Final EIR Appendix 4.2.4 and Responses S1-15 and S1-16). Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (Draft EIR pages 4.8-34 and 4.8-35).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Measure HWQ-2 is no longer applicable, as the high surf mitigation was only needed for slant wells at Capistrano Beach Park, which is currently not under consideration by the District.

HWQ-5 requires the District to prepare a final design hydrology study complying with the City and FEMA requirements before grading begins. The study will demonstrate that the desalination facility site is adequately protected from various flood hazards, and does not adversely affect nearby properties. In coordination with the City, County, and FEMA, the District will prepare and process a Conditional Letter of Map Revision (CLOMR) and LOMR to remove the site from the 100-year flood zone. Project Design Features and Mitigation Measure HWQ-5 would reduce impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The District is not currently pursuing slant wells at Capistrano Beach Park, which avoids coastal hazard impacts associated with that location, and eliminates the need for Mitigation Measure HWQ-2. The Project proposes to elevate the desalination facility site approximately three to five feet, prior to placing desalination facility structures on the site. Therefore, following grading, no structures would be placed within the 100-year flood zone. The selected flood control design solution (referred to as Alternative 1 in the Draft EIR hydrology study in Appendix 10.9) would cost less, provide adequate flood protection, require no long-term maintenance, could be implemented by the District, and provides added flood hazard protection for properties to the east due to elevating the site. San Juan Creek flood hazards will be mitigated to less than significant levels through Project Design Features and mitigation measure HWQ-5 described above, which requires a final hydrology study prior to grading.

Impact 4.8-9: ***Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?***

Environmental Analysis: The new Trampas Canyon Dam and Reservoir Project, when completed, is estimated to have a dam failure inundation area of approximately two feet, similar to the 100-year flood hazard. The risk of dam failure is considered extremely unlikely. The Project hydrology study (Appendix 10.9) evaluated several potential design solutions to protect the desalination facility site from the 100-year flood hazard. The results of these studies are summarized in Preliminary Design Report (Appendix 10.1, Section 3.6, as further clarified in the Final EIR, Appendix 4.2.4). Several of the alternatives would have required substantial modifications to off-site facilities including San Juan Creek, reliance upon other agencies to ensure the improvements are constructed, and greater long-term maintenance risks. All Project facilities located along the shoreline are subject to coastal hazards, including winter high surf conditions and tsunami hazards. DSB well locations at the North Day Use Area (pods A, B and C) and campground (pods D and E) are relatively well protected from coastal hazards, due in part to the protection provided by Dana Point Harbor. Project Design Features reduce or avoid potential impacts, including siting the slant wells further back from the beach at DSB. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (Draft EIR pages 4.8-35 through 4.8-40).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Measure HWQ-5 will substantially reduce potential impacts of flooding and dam failures to less than significant levels.

HWQ-6 requires that a final hydrology study be prepared by the District before constructing the electrical control building. The study will should conclude that the facility is adequately protected from flood hazards. The location of the facility should be as far as reasonable from extreme flood hazard risk areas. If the facility is sited inside of a flood hazard zone, then the building will be designed to withstand reasonably foreseeable future flood hazard events to the satisfaction of State Parks.

HWQ-7 requires that a Coastal Hazard Mitigation Plan be created before construction shoreward of the PCH by the District. The Plan will be reviewed and approved by the property owner (State Parks), in addition to the Coastal Commission. The Plan is designed to ensure that the project facilities are protected

from coastal hazards during their construction, operation, and maintenance activities as determined by the reviewing agencies (State Parks and the Coastal Commission). This protection includes not only facilities but the workers as well. Any slant well located in an area at risk of coastal erosion or wave damage should be buried deep enough that any future exposure to those hazards can be avoided. Implementation of the plan will be the responsibility of the District for the duration of the project construction and operations. Project Design Features and Mitigation Measures HWQ-5 through HWQ-7 would reduce impacts to less than significant levels.

Finding: The District adopts CEQA Finding 1. (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Well sites will be exposed within the small drill rig work area, requiring high surf mitigation to protect the drill rig site (see discussion above in Impact 4.8-1, and Mitigation Measure HWQ-2). The slant wells and associated pumps and raw water conveyance pipelines will be sufficiently buried at depths to protect the infrastructure from reasonably foreseeable coastal wave and erosion hazards (see Mitigation Measure HWQ-5). The selected flood control design solution (referred to as Alternative 1 in the hydrology study) would cost less, provide adequate flood protection, require no long-term maintenance, could be implemented by the District, and provides added flood hazard protection for properties to the east due to elevating the site. San Juan Creek flood hazards will be mitigated to less than significant levels through Project Design Features and Mitigation Measure HWQ-5 described above, which requires a final hydrology study prior to grading. With implementation of Project Design Features and mitigation, impacts would be less than significant.

Impact 4.8-10: ***Would the Project be subject to inundation by seiche, tsunami, or mudflow?***

Environmental Analysis: None of the Project areas are subject to mudflow hazards. DSB is relatively flat with no adjacent slopes capable of generating mudflows. The desalination facility component would be located on the eastern edge of the San Juan Creek channel. The channel has a bottom width of approximately 150 feet, with an average height of about 14 feet, which results in a low potential for inundation by seiche at the desalination facility. The remaining Project components would be located subsurface and are not located in areas where inundation by seiche would impact facility components. Tsunamic induced erosion, runup, and inundation were analyzed for the Doheny State Beach profiles for present and future sea levels, with low and high range sea level rise projections. A hypothetical tsunami would cause flooding at the slant well sites at DSB for high sea level rise scenarios in Year 2070 and Year 2100. This study was further amplified and clarified in the Final EIR (see Final Appendix 4.2.1 and Final Response S1-3). Project facilities along the coast would be below ground and not affected by a tsunami, except perhaps during construction. Project Design Features, including shifting slant well sites further inland away from the beach and using subsurface intake facilities, reduces or avoids potential impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.8-40 and 4.8-41).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Measure HWQ-2 is no longer applicable, as the high surf mitigation was only needed for slant wells at Capistrano Beach Park, which is currently not under consideration by the District.

Measure HWQ-7 (Coastal Hazard Mitigation Plan) will substantially reduce potential impacts of seiche, tsunami, or mudflow to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: None of the Project areas are subject to mudflow hazards. Remaining Project components would be located subsurface and are not located in areas where inundation by seiche would impact facility components. The likelihood of a tsunami occurring at the Project area during construction is considered extremely remote. The District is currently not considering slant wells at Capistrano Beach Park, where coastal hazards were of greatest concern, thereby eliminating the need for measure HWQ-2 (High Surf Mitigation). Therefore, in consideration of the above, and with implementation of Mitigation Measure HWQ-7, the Project is not anticipated to be significantly impacted by mudflows, seiche or tsunami hazards.

Land Use and Planning

Impact 4.9-2: ***Would the project conflict with any applicable land use plan, policy, regulation of an agency with jurisdiction over the project, adopted for the purpose of avoiding or mitigating an environmental effect?***

Environmental Analysis: The subsurface intake wells, desalination facility site and portions of the conveyance lines are within the California Coastal Zone, under the jurisdiction of the City of Dana Point and its Local Coastal Program (LCP). Although much of the project's coastal facilities are within the City of Dana Point's LCP authority, the City's LCP allows for consolidated permit review where the Project's Coastal Act consistency and associated CDP review is undertaken by the California Coastal Commission (CCC). In addition, the portions of the slant wells that would extend through the shoreline and offshore beneath the Pacific Ocean, and the San Juan Creek Ocean Outfall (SJCOO), are within California State Lands Commission (CSLC) jurisdiction. Therefore, prior to construction of the intake wells and use of the existing SJCOO for the brine disposal system, a new lease would be required for the slant wells and a new or modified lease would be required to allow use of the SJCOO for brine discharge. The slant wells, electrical control vault and portions of raw water conveyance are within Doheny State Beach (DSB), under the jurisdiction of State Parks and its DSB General Plan. Project facilities outside of DSB are within the jurisdiction of the City of Dana Point, primarily raw water conveyance lines and the desalination facility site. The Dana Point General Plan (DPGP) Land Use Map indicates the desalination facility site is designated Community Facilities and Industrial/Business Park (i.e., northern and southern portions, respectively). The Community Facilities designation includes a wide range of public and private uses, such as public utilities, and the Industrial/Business Park designation includes parcels of land with mixtures of industrial and commercial uses. The Project has been designed to avoid conflicts with applicable land use plans, policies and regulations, as summarized in Project Design Features listed on Draft EIR pages 4.9-9 and 4.9-11. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.9-10 through 4.9-17).

Mitigation Measures: The Final EIR does not include any additional mitigation measures specific to Land Use and Planning, as mitigation for land use plan and policy compliance issues are addressed in the applicable EIR section(s). Please refer to the mitigation measures in sections 4.2, 4.10, 4.12, and 4.13 and the MMRP (Attachment A).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Please refer to findings in applicable sections 4.2, 4.10, 4.12, and 4.13 for respective topics. Technical analyses of specific Coastal Act issues are addressed in the respective EIR sections and summarized in Tables 4.9-1 and 4.9-4, with respect to visual impacts (Section 4.1, Aesthetics), marine biological resources and ESHA (Section 4.3, Biological Resources), greenhouse gas emissions (Section 4.6, Greenhouse Gas Emissions), public access/recreation for the coast (Section 4.12, Recreation and 4.13, Transportation and Traffic), water quality, including Ocean Plan compliance (Section 4.9, Hydrology and Water Quality, and Section 4.3, Biological Resources), and coastal hazards (Section 4.9, Hydrology and Water Quality). As part of the Project's final design and permitting process, the Project will need to demonstrate compliance with the Ocean Plan Amendment (OPA) §13142.5(b) with respect to ocean desalination intakes and discharge. This process involves inter-agency consultation between the Regional Board, State Water Resources Control Board, CSLC, and Coastal Commission. The process would likely include State Parks, as the landowner for slant wells and related facilities at DSB. The Phase I Local Project (up to 5 MGD) has less than significant environmental impacts, in consideration of Project Design Features, existing regulatory requirements, and EIR mitigation measures, as noted in applicable EIR sections summarized above. In addition, as part of the Final EIR process in reviewing Draft EIR comment letters, the District has elected to not pursue slant wells at Capistrano Beach Park at this time, due to current coastal erosion concerns and limited area available to install slant wells (refer to Final EIR Master Response 1 and Response L5-13). As part of the encroachment/lease agreement permitting with DSB, the Project will likely include one or more concessions for the enhancement and long-term sustainability of coastal recreation facilities (see Mitigation Measure REC-1).

Noise

Impact 4.10-1: ***Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Environmental Analysis: Construction activities are temporary, lasting from a few days to several months. Ground-borne noise and other types of construction-related noise impacts would typically occur during the initial site preparation, which can create the highest levels of noise. Generally, site preparation has the shortest duration of all construction phases. Activities that occur during this phase include demolition, excavation, earthmoving, and soils compaction. High ground-borne noise levels and other miscellaneous noise levels can be created by the operation of heavy-duty trucks, backhoes, and other heavy-duty construction equipment. Noise from construction activities is generated by two primary sources: (1) the noise related to active construction equipment; and (2) the transport of workers, materials, and equipment to construction sites. These noise sources can be a nuisance to local residents and businesses

or unbearable to sensitive receptors (i.e., residential, hospital, hotel/motel, schools, parks, and places of worship).

Intake well construction would occur in three locations in Doheny State Beach and two locations in the campground at Doheny State Beach (DSB). Based on The Federal Highway Administration (FHWA) data, drilling is estimated to be 82 A-weighted decibel (dBA) and cranes are 81 dBA at 50 feet for a combined noise level of 84.5 dBA. Construction at DSB would also affect nearby residential areas in Dana Point, but temporary construction noise is exempt when in compliance with the City's noise ordinance. Night-time construction at DSB could cause temporary significant noise impacts to DSB campers. The closest sensitive receptors to the intake well locations would be recreational areas associated with DSB located approximately 50 feet from the well locations. Additionally, as intake well drilling would also be located within the campground at Doheny State Beach, sensitive receptors at the campground could also be located within approximately 50 feet of the well construction area. Therefore, well construction would exceed the City's 50 dBA nighttime standard and existing ambient noise levels and mitigation would be required.

Project Design Features summarized on Draft EIR page 4.10-13 substantially reduce or avoid noise impacts, including siting facilities in existing urban locations, desalination facility site construction being buffered from sensitive receptors (the site is bordered by San Juan Creek, the MetroLink railroad, PCH and the District's existing Groundwater Recover Facility), and limiting construction at DSB to the off-peak season. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.10-14 through 4.10-25).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** NOI-1 requires that before construction, the District will make sure that the Grading Plan, Building Plans, and specifications stipulate that all construction equipment is equipped with properly operating and maintained mufflers and all State-required noise attenuation devices. Construction haul notes will avoid noise sensitive uses when feasible and construction equipment will be placed to direct noise away from the nearest sensitive receptor. Also, construction activities that generate noise will not take place outside of the allowable hours specified by the City of Dana Point Municipal Code Chapter 11.10.014 (8pm to 7am on weekdays and Saturdays, and any time on Sundays and federal holidays), except for slant well construction at DSB.

NOI-2 requires special slant well construction noise measures. The District, contractor, or designee will install temporary noise barriers between well drilling and sensitive receptors to reduce noise. The barrier may need to be adjusted as construction moves and the height will match the height of the equipment being used. State Parks will receive a copy of the drilling plan for review and approval. The District will provide a public liaison to communicate with the receptors about noise and disturbance. Appropriate mufflers will be used in the construction equipment and DSB campground use will be prohibited within 150 feet of the slant well work site.

NOI-3 requires that the District, before construction, review noise specifications for all stationary equipment and enclosures to stay consistent with the City of Dana Point's noise standards. If an excess of noise is expected, then noise reduction methods will be employed to achieve acceptable noise levels at the property lines of nearby sensitive receptors. Monitoring will occur once the equipment is installed, and if noise is still in excess, an acoustical engineer will be retained to install more sound reduction materials until the standards are met.

NOI-4 requires that before construction the District review noise specifications for all stationary equipment to confirm that the Project noise levels are within the City's acceptable standards at nearby sensitive receptors. If noise levels exceed these standards, then mitigating measures will be used; such as utilizing enclosed structures. Once the noise reduction equipment is installed, noise levels will be monitored to ensure compliance with the City's noise standards.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project Design Features noted in the Draft EIR (page 4.10-13) substantially avoid or reduce potential noise impacts. In combination with mitigation measures noted above, Project construction and operational noise impacts will be less than significant. Encroachment and/or lease or license agreements with the local agencies (State Parks, State Lands, City of Dana Point) will further ensure that local agency noise standards are met. Construction and operational monitoring will provide further assurance. In addition, the District is not pursuing slant wells at Capistrano Beach Park at this time, which avoids construction-related noise impacts to sensitive receptors adjacent to Capistrano Beach Park.

Impact 4.10-3: ***Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?***

Environmental Analysis: All construction-related impacts are temporary and will not result in permanent noise increases (see Impact 4.10-1 above). Slant well operations will have nominal noise impacts not exceeding DSB noise standards, given that the slant well pump is a submersible pump (installed within the slant well itself, below ground). The desalination facility operations would consist of periodic maintenance visits, nominal increases in employee trips, and mechanical equipment operations including the feedwater and product water pumps, which could generate noise in excess of City standards. Project Design Features minimize this impact, including facility siting at an existing developed site that is not bordered by sensitive receptors. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (Draft EIR pages 4.10-26 through 4.10-29).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** As discussed above under Impact 4.10-1, Measures NOI-2 and NOI-4 will substantially reduce permanent ambient noise increases to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: As discussed above under Impact 4.10-1, Project Design Features noted in the Draft EIR (page 4.10-13) substantially avoid or reduce potential noise impacts. In combination with mitigation measures noted above, Project construction and operational noise impacts will be less than significant. Encroachment and/or lease or license agreements with the local agencies (State Parks, State Lands, City of Dana Point) will further ensure that local agency noise standards are met. Construction and operational monitoring will provide further assurance. In addition, the District is not pursuing slant wells at Capistrano Beach Park at this time, which avoids construction-related noise impacts to sensitive receptors adjacent to Capistrano Beach Park.

Impact 4.10-4: ***Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?***

Environmental Analysis: Temporary and periodic increases in noise levels would occur with Project construction and operation, as discussed under Impacts 4.10-1 and 4.10-3. Construction-related impacts are temporary, and particularly high at DSB due to continuous slant well drilling including night-time drilling. Operational noise impacts are substantially reduced or avoided due to the majority of facilities being below-ground (including slant wells and raw water conveyance lines), and the desalination facility itself having pump stations within enclosed buildings to attenuate noise. Project Design Features substantially avoid or reduce these impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.10-30 through 4.10-33).

Mitigation Measures (refer to Attachment A, MMRP for the full mitigation measures)**:** Measures NOI-1, NOI-2, NOI-3, and NOI-4 will substantially reduce potential impacts of temporary or periodic ambient noise to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: As discussed above under Impact 4.10-1, Project Design Features noted in the Draft EIR (page 4.10-13) substantially avoid or reduce potential noise impacts. In combination with mitigation measures noted above, Project construction and operational noise impacts will be less than significant. Encroachment and/or lease or license agreements with the local agencies (State Parks, State Lands, City of Dana Point) will further ensure that local agency noise standards are met. Construction and operational monitoring will provide further assurance. In addition, the District is not pursuing slant wells at Capistrano Beach Park at this time, which avoids construction-related noise impacts to sensitive receptors adjacent to Capistrano Beach Park.

Public Services

Impact 4.11-1: ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in***

order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- ***Parks?***

Environmental Analysis: The Draft EIR discussion regarding impacts to parks is discussed in a separate EIR section; refer to findings for Impact 4.12-1, based on the Draft EIR analysis contained in Section 4.12, Recreation. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR p. 4.11-14).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Measures REC-1 and REC-2 will substantially reduce potential impacts to park to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Refer to findings for Section 4.12, Recreation. As noted with Impact 4.12-1, the District has eliminated Pod F from further consideration, and is not presently considering slant well construction at Capistrano Beach Park, which avoids all park and recreation impacts associated with Project construction and operation at Capistrano Beach Park and associated recreational facilities. With the implementation of Mitigation Measures REC-1 and REC-2, impacts would be reduced to less than significant levels (refer to the Attachment A, MMRP).

Recreation

Impact 4.12-1: ***Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

Environmental Analysis: Within the North Day Use Area (Pods A-C) of Doheny State Beach DSB), slant well construction would result in direct temporary loss of at least one of the picnic table areas and an estimated 10,000 square-foot area of picnic and lawn area. Contractor parking and laydown would temporarily reduce parking, occupying an area of approximately 80 parking stalls. The drill rig area enclosed area and nearby staging area would have a temporary significant impact on Doheny State Beach recreational areas. The Project has been designed to minimize this impact by siting the slant wells inland of the beaches, and by having construction occur during the off-season, between October 1 and May 1. However, even with these Project Design Features, the temporary slant well construction would result in temporary loss of beach parking. Within the Campground (Pods D and E), slant well construction is currently planned to be 24-hours a day drilling for approximately three months per well. Even though this will be off-season, this will temporarily displace approximately 50 campsites to allow for the drill rig work area and a suitable surrounding area for safety and for distance due to noise and lighting during night-time drilling. Ongoing operations and maintenance of the desalination facility and its associated facilities is not anticipated to have significant recreational use impacts. Project Design Features (summarized on Draft EIR pages 4.12-8 and 4.12-9) substantially avoid or reduce potential recreation impacts, including limiting construction at

DSB to the off-peak season, siting slant wells off of the beach at DSB, limiting construction staging areas at DSB, using trenchless construction under sensitive locations (such as San Juan Creek lagoon, San Juan Creek, and PCH), and siting the desalination facility at an existing developed industrial site that does not have any recreational resources. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.12-9 through 4.12-15).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** REC-1 requires that SCWD review design plans with applicable recreational agencies to refine facility layout, design, staging, construction, and operational details as part of the final design and permitting, in order to avoid or minimize recreational impacts to less than significant levels. SCWD will need to consider potential recreational impacts in its decision for slant well phasing. Project construction will maintain, as much as possible, the bicycle and pedestrian access routes within the State Park through either avoidance or temporary rerouting. Notice will be given to the public if any closures or rerouting will occur to bicycle lanes. Proper notice will be given to the affected agency for dissemination to the public and construction will be timed with any other planned improvements to minimize disruption of recreational facilities.

REC-2 requires that the District provide construction updates and detour information to bicyclists. In the case of temporary impacts to bicycle facilities due to construction, the District will coordinate with the affected agency to minimize Project construction activities during peak-use periods for any impacted facilities to reasonable extents. Mitigation Measures REC-1 and REC-2 would substantially reduce potential impacts to parks and other recreational facilities to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project Design Features noted above have substantially reduced or avoided recreational facility impacts. The District consulted extensively with State Parks and the City of Dana Point, and has incorporated design features and modifications to EIR mitigation measures, as reflected in Final EIR Section 3, *Draft EIR Errata* (refer to Final EIR Response L1 for a detailed discussion of minor modifications and clarifications to mitigation measure, including addition of measure TRF-3 and modifications to measures TRF-1 and TRF-2). Recreational impacts at DSB will almost entirely be temporary, as operational impacts will be limited to periodic maintenance. In both cases, for construction and operational impacts, the Project will require encroachment permits and lease or license agreements from State Parks and the City of Dana Point to further ensure avoidance and mitigation of temporary recreational impacts. Furthermore, the District eliminated Pod F from further consideration (which avoided a significant temporary recreation impact), and is not considering slant well construction at Capistrano Beach Park at this time (further avoiding all temporary and permanent recreational impacts at Capistrano Beach Park). In consideration of Project Design Features and Mitigation Measures REC-1 and REC-2, the Phase I Project will not have any significant recreational impacts, nor will it otherwise cause the substantial physical deterioration of existing recreational facilities.

Transportation and Traffic

Impact 4.13-1: ***Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

Environmental Analysis: The volume of automobile and truck traffic associated with Project-related construction activities would vary throughout the construction phases, as different activities occur. To provide a conservative analysis, potential concurrent employment on the Project site and potential concurrent truck activity are included in the construction traffic volumes assumed and evaluated herein. Additionally, pursuant to the existing regulatory requirements, the construction-related traffic would be required to utilize established truck routes that involve Major and Secondary Arterials, thus avoiding local streets, particularly those that traverse residential neighborhoods. During the construction phase, the Project would generate vehicle trips in the vicinity of the ocean water desalination facility and within the jurisdictions traversed by the desalinated water conveyance pipelines. These trips would be associated with construction workers commuting, and transport of materials and equipment to and from the site during construction. Although temporary and limited to Major/Secondary arterials, the addition of Project-related construction traffic to affected roadways and intersections could temporarily conflict with an adopted plan, ordinance, or policy which establishes measures of effectiveness for performance by reducing the existing level-of-service (LOS) or creating increased intersection delays.

Project operational traffic would generate nominal traffic volumes associated with the 12-15 employees and occasional deliveries and visitors. This is not significant, particularly given that the desalination facility would displace numerous existing tenants that are currently generating operational traffic. In addition, the desalination facility is sited at the District's existing San Juan Creek property, which has access through commercial/industrial areas via an existing driveway and access road off of Stonehill Drive.

Project Design Features summarized on Draft EIR page 4.13-11 and 4.13-12 substantially reduce or avoid traffic impacts, including limiting construction at DSB to the off-peak season, using trenchless construction under major transportation facilities (such as PCH and the MetroLink railroad), and limiting the construction and staging areas within DSB by utilized the District's San Juan Creek Property to the extent practical. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.13-12 through 4.13-20).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** TRF-1 requires SCWD to develop and implement a Parking and Staging Plan before beginning construction. The plan will cover all phases of construction to require that all Project related parking occurs on-site or in pre-designated off-site parking areas. The staging area will have park access for motor vehicles, bicycles, and pedestrians. In order to reduce parking impacts for Special Events during offseason, SCWD will coordinate with State Parks to reschedule Special Events to alternate venues or outside of the offseason construction

time, or will arrange for shuttles to transport Project construction workers to and from any off-site staging/parking areas. At least 60 days before site mobilization begins, SCWD will submit the plan to any affected agency for review and approval.

TRF-2 requires that, before construction, SCWD submit a Construction Traffic Control Plan (TCP) for review and approval to any affected agency or jurisdiction. The TCP will give plans for controlling construction traffic flow by use of a flag person at construction site entrances on public roads, including Stonehill Drive/SCWD Access Road, and Dana Point Harbor Drive/Park Lantern. Also, signage lighting, and traffic control device placement will be included in the plan. Also included will be any needs for construction work hours and arrival/departure times outside of peak traffic periods along with plans for maintaining access for emergency vehicles. Advanced notice to local agencies, transit providers, school districts, and emergency service providers regarding the anticipated schedule, location, and duration of any temporarily reduced through lanes, including clear plans for temporary detours are also included. The plan also covers main through access in each direction on any public road and the maintenance of access to adjacent properties during construction. Construction related haul routes for any material import/export and the timing of heavy equipment and building material deliveries will be specified. Finally, the plan will identify specific contractor training and related safety procedures for construction vehicles exiting and entering work areas from public roads.

Note that, in consultation with the City of Dana Point, as part of the Final EIR, Mitigation Measure TRF-2 was modified and Mitigation Measure TRF-3 was added to further clarify Project-related construction traffic mitigation (see Final EIR Section 3, *Draft EIR Errata*, and Final EIR Response L1-13 and L1-14).

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project Design Features noted in the Draft EIR substantially avoid or reduce potential traffic impacts. In combination with mitigation measures noted above, Project construction and operational traffic impacts will be less than significant. Encroachment and/or lease or license agreements with the local agencies (State Parks, State Lands, City of Dana Point) will further ensure that any temporary parking, access and traffic impacts are addressed. In addition, the District is not pursuing slant wells at Capistrano Beach Park at this time, which avoids construction-related parking, access and traffic impacts at Capistrano Beach Park. The Project's temporary traffic impacts are not considered significant, given the off-season timing, Project Design Features, and required mitigation, including TRF-1 (Parking and Staging Plan) and TRF-2 (Construction Traffic Control Plan). TRF-3 provides further clarification of the City of Dana Point's encroachment permit process and associated Project-related review and approvals.

Impact 4.13-4: ***Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

Environmental Analysis: There are no incompatible land uses, such as farm equipment, that represent a potential significant construction traffic safety hazard. All staging and construction areas would have appropriate signage and standard safety control measures as implemented by SCWD through standard construction practices. Trenching under sensitive locations such as Class I bike lanes, the SCRRA rail right-

of-way, and PCH, would be accomplished through trenchless construction to avoid potential safety issues. Project Design Features summarized on Draft EIR page 4.13-11 and 4.13-12 substantially reduce or avoid impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.13-21 and 4.13-22).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures): Measures TRF-1 and TRF-2 will substantially reduce potential impacts of hazards due to design features to less than significant levels. Measure TRF-3 provides further clarification of the City of Dana Point's encroachment permit process and associated Project reviews and approvals.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: All staging and construction areas would have appropriate signage and standard safety control measures as implemented by SCWD through standard construction practices. Trenching under sensitive locations such as Class I bike lanes, the SCRRA rail right-of-way, and PCH, would be accomplished through trenchless construction to avoid potential safety issues. TRF-2 requires use of construction traffic flagmen, signage and other measures subject to local agency review and approval, to ensure safe construction practices. Project construction would not represent a significant traffic-related safety hazard, in consideration of Project Design Features and the required Parking and Staging Plan (TRF-1) and Traffic Control Plan (TRF-2). Also, the District is not pursuing slant wells as Capistrano Beach Park, which avoids all construction-related impacts at this location. In consideration of Project Design Features and Mitigation Measures TRF-1, TRF-2 and TRF-3, potential construction-related traffic impacts would be reduced to a less than significant level.

Impact 4.13-5: *Would the Project result in inadequate emergency access?*

Environmental Analysis: The slant well construction would occur on State Parks property, which limits the potential for emergency access disruption on local streets. The desalination facility will be constructed on SCWD property using an existing SCWD access road, for which emergency access to the site will be maintained at all times. Raw water conveyance pipeline construction has the potential for limited, temporary effects on emergency response, as pipeline construction may require temporary lane closures and detours for affected roadway segments. Project Design Features summarized on Draft EIR page 4.13-11 and 4.13-12 substantially reduce or avoid impacts. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pages 4.13-22 and 4.13-23).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** Measures TRF-1, TRF-2 and TRF-3 will substantially reduce potential impacts to emergency access to less than significant levels.

Finding: The District adopts CEQA Figure 1. (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: Project Design Features (such as use of trenchless construction under PCH) minimize emergency access impacts, and Mitigation Measures TRF-1, TRF-2 and TRF-3 will further reduce potential impacts to less than significant levels, by requiring such measures as adequate signage, emergency service provider notification, and traffic control during construction, in addition to maintaining at least one lane open to through traffic on all public streets. Encroachment and/or lease or license agreements with the local agencies (State Parks, State Lands, City of Dana Point) will further address and incorporate provisions to ensure adequate emergency access. In consideration of Project Design Features and Mitigation Measures TRF-1, TRF-2 and TRF-3, potential construction-related emergency access impacts would be reduced to a less than significant level.

Impact 4.13-6: ***Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?***

Environmental Analysis: Orange County Transportation Authority Route 91 is the only public bus route that could be affected by Project construction. The Route 91 segment along PCH will not be affected, as Project construction will use trenchless construction to avoid direct effects on PCH. Trenchless construction would also be used to avoid direct impacts to the MetroLink rail line and associated transit service. The Route 91 segment along Del Obispo Street would be affected, if the Northern Raw Water Alignment is implemented (currently, the South Alignment is the preferred alignment). Project Design Features summarized on Draft EIR page 4.13-11 and 4.13-12 substantially reduce or avoid impacts, including avoiding construction at DSB during peak Summer months and using trenchless construction to avoid impacts to major transportation facilities like PCH. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR pp. 4.13-23 and 4.13-24).

Mitigation Measures: Measures TRF-1, TRF-2 and TRF-3 will substantially reduce potential impacts from construction on traffic to less than significant levels.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The potential impact to transit, bicycle and pedestrian facilities would be temporary and mitigated through Project Design Features and Mitigation Measures TRF-1 and TRF-2, which require adequate advance notification to transit providers, signage, detours where needed, and maintaining through traffic on all public roads. Mitigation Measures TRF-1 and TRF-2 are applicable (to reduce construction-related traffic impacts), as are Mitigation Measures REC-1 and REC-2 (to reduce construction-related impacts on recreational facilities including pedestrian facilities and bicycle lanes). Measure TRF-3 further reduces impacts by clarifying the City of Dana Point's encroachment permit process and requirements for work in City streets. In addition, the District is not currently considering slant well construction at Capistrano Beach Park, which avoids impacts at this location, including potential impacts to the off-road bicycle trail within Capistrano Beach Park.

Tribal Cultural Resources

Impact 4.14-1: ***Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources defined in Public Resources Code Section 5020.1(k) or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code (PRC) Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

Environmental Analysis: While most of the Project site has been extensively altered by prior ground disturbance and development/infrastructure improvements, there is the potential for Project implementation to affect previously unidentified tribal cultural resources during construction activities including grading, trenching, and excavation. In compliance with Public Resource Code §21080.3.1(b), formal notification has been provided to California Native American tribal representatives which may have interest in projects within the geographic area traditionally and culturally affiliated with the tribe. Correspondence to the tribal representatives is included in Appendix 10.5.2. One response was received from a tribal representative - Ms. Joyce Stanfield Perry of the Juaneño Band of Mission Indians – Acjachemen Nation requested that Native American tribal and archaeological monitoring be provided during all ground-disturbing activities, which has been reflected in EIR mitigation measures. Project Design Features summarized on Draft EIR page 4.14-6 substantially reduce or avoid impacts, including siting facilities in existing developed urban locations. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR p. 4.14-7).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** CUL-1 requires that prior to, and during construction with ground disturbing activities, all contractors will go through a Worker Environmental Awareness Program (WEAP). This training will include discussions of applicable environmental laws and penalties including information that Cultural Resources Specialists (CRSs) and Construction Managers (CMs) can stop construction if there is a potential impact to cultural resources. There will also be instruction that employees must stop work near found cultural resources and inform their supervisor and the CRS or CM, with the CRM and supervisor redirecting work. Reporting procedure will be distributed in an informational brochure. The program will include samples or visuals from the project vicinity. Once training is completed each worker will sign off on an acknowledgment form indicating that they have received the training and a sticker will be placed on their helmet. The WEAP certification forms for each person that has completed training will be kept by the District or its designee.

CUL-2 requires that before construction the District or its designee will retain a CRS that has met the minimum requirements of the U.S. Secretary of the Interior Guidelines. The CRS will be present for all initial deep excavations, and local Native American Tribes shall be offered the opportunity to be present.

If previously unknown cultural activities are found, then the CM and CRS have the power to stop construction with the CM redirecting construction activities. If resources are found then construction will be stopped until the CRS has informed the District or its designee and the CM within 24 hours of the find and provided a description of the work stoppage. Any necessary data recovery and mitigation will need to be completed with any archeological materials collected curated following the "Guidelines for the Curation of Archeological Collections" by the Historic Resources Commission.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: The District has complied with AB 52 consultation requirements and has incorporated recommendations into the Draft EIR and mitigation measures. No known tribal cultural resources exist within the Project construction footprint. Potential impacts associated with encountering tribal cultural resources during construction have been reduced or avoided through Project Design Features to avoid or minimize tribal cultural resource impacts. In addition, Mitigation Measures CUL-1 and CUL-2 are applicable to tribal cultural resources. Compliance with these measures would mitigate potential impacts to tribal cultural resources to a less than significant level.

Utilities and Service Systems

Impact 4.15-7: *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

Environmental Analysis: Construction and operation of the Project would be required to demonstrate compliance with federal, State and local statutes and regulations related to solid waste. Construction and operation of the Phase I Local Project would also be required to demonstrate compliance with the 50 percent diversion of solid waste requirement pursuant to the California Integrated Waste Management Act of 1989 (AB 939). In addition, the Project would be required to comply with the City's Construction and Demolition (C&D) ordinance for diverting solid waste. Compliance with AB 939, along with the City's C&D ordinance, would ensure Project compliance with the statutes and regulations in place relative to solid waste disposal. Solid waste impacts are offset in consideration of the desalination facility displacing numerous existing tenants that generate solid waste. Impacts are further reduced through mitigation measures described below and deemed feasible by the District, as adopted by the District in the MMRP (Attachment A). (DEIR, pp. 4.15-18 through 4.15-19).

Mitigation Measures (refer to the Attachment A, MMRP for the full mitigation measures)**:** UTIL-1 requires that SCWD, before the start of both site and project, prepare and submit a Waste Management Plan (WMP) to the City of Dana Point and/or any other applicable local agency. This will be for all wastes generated during construction and operation of the Doheny Ocean Desalination Project. The WMP will contain a description of all waste streams, including projections of frequency, amounts generated and hazard classification. The WMP will also have requirements for demolition/construction contracts that all materials that can be recovered be salvaged and recycled. The recycling plan will be submitted by the contractor to the District for review before the start of demolition and construction. Finally, the WMP will include methods of managing each waste, including storage, treatment methods, and companies

contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling waste minimization plans.

Finding: The District adopts CEQA Finding 1 (CEQA Guidelines §15091(a)(1)).

Facts in Support of Finding: To ensure compliance with existing solid waste statutes and regulations, Mitigation Measure UTIL-1 would be implemented, which requires SCWD to submit to the City of Dana Point and/or any other applicable agency, a Waste Management Plan for all waste generated during construction and operation of the Project. Compliance with Mitigation Measure UTIL-1, along with the various statutes and regulations pertaining to solid waste disposal, would ensure the Project's construction and operation-related impacts would be less than significant.

Section 6: Environmental Impacts Found to Be Significant and Unavoidable

The Draft EIR concluded that the Phase I Local Project would not result in any unavoidable significant impacts, recognizing the various Project Design Features and mitigation measures that serve to avoid or minimize potentially significant environmental impacts. (Draft EIR Section 6.1). The Final EIR includes responses to all written comments on the Draft EIR submitted during the public review period, and reaffirms that the Phase I Local Project does not have any unavoidable significant impacts. (Final EIR Section 2, Master Response 3, pages 17-21).

Section 7: Alternatives to the Proposed Project

CEQA requires that "an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (State CEQA Guidelines § 15126.6 (a).

Alternatives Rejected from Further Consideration

Section 15126.6(c) of the State CEQA Guidelines permits the elimination of an alternative from detailed consideration due to: Failure to meet most of the basic project objectives; infeasibility; or inability to avoid significant environmental impacts. The following alternatives have been rejected from further consideration:

Alternative Sites

The District and others [(including the Municipal Water District of Orange County (MWDOC)] have been exploring a desalination site at Doheny State Beach (DSB) since early 2000, and the Project site has been identified in numerous policies, planning and facility siting studies (see Draft EIR Section 3.3, Project History). The District is not aware of any feasible alternative to the desalination facility site being identified

in any prior studies and is not aware of any feasible alternative location that would avoid or substantially lessen significant effects of the Project. The District already owns the San Juan Creek Property.

No significant and unavoidable impacts would occur with implementation of the proposed project at the Project site with mitigation measures described in the EIR. Alternative sites located inland are infeasible as the Project must be in close proximity to the ocean. The District has already incorporated various siting and design options as part of the Project, most notably the addition of the southeast intake well study area to explore potential additional feasible subsurface intake well locations. In consideration of the above, the District does not believe an "alternative site" is necessary or relevant to the Doheny Ocean Desalination Project (DEIR pp. 1.0-51 & 52).

Shallow Neodren© Technology

Neodren© is the trademarked name of a patented subsurface ocean water intake system, using horizontal directional drilling (HDD) technology to install porous high-density polyethylene (HDPE) pipe. The Neodren© system has possible advantages over slant wells, including longer well lengths (of 2,000 feet or more), which allow the ability to launch further back from the beach or further out into the ocean. The use of flexible (HDPE) pipe and HDD drilling allows the well to stay relatively shallow, rather than dive deeper on a fixed angle. However, the District has not identified any unavoidable significant impacts associated with slant well construction or operation, and as such this technology is not necessary at this site. Furthermore, the Neodren© method has never been operationally demonstrated in North America (current installations are limited to Spain), and its HDD construction method typically requires the HDD drill to penetrate the ocean floor at the terminus to "pull" the porous HDPE pipe back through the borehole, which represents a new impact not found with slant wells. The District may pilot test the Neodren© technology as part of future subsurface intake well design studies, which would require separate regulatory permitting and CEQA review (DEIR p. 5.0-7).

Vertical Well Technology

Because the Project's slant wells have been shown to meet or exceed source water intake requirements with all impacts mitigated to less than significant levels, alternate technologies such as vertical wells are not being considered. In addition, vertical wells pose other challenges that make this technology less desirable, including lower per unit production rate, greater percentage of inland groundwater, increased variability in groundwater quality, and greater impact upon the San Juan Creek Lagoon (DEIR p. 5.0-8, Final EIR Master Response 4 and Response L6-3).

ALTERNATIVE 1: "NO PROJECT" ALTERNATIVE

The "No Project" Alternative assumes that the existing land uses and condition of the project site at the time the Notice of Preparation (NOP) was published (March 14, 2016) would continue to exist without changes (DEIR p. 5.0-8). The setting of the proposed Project site at the time the NOP was published is described as part of the existing conditions noted throughout Section 4.0 of the Draft EIR, with respect to individual environmental issues, and forms the baseline of the impact assessment of the proposed project.

Elimination of Project impacts should be understood as countered by some level of likely future development impact on the District's San Juan Creek Property should the desalination facility not be constructed (see the 2002 San Juan Creek Property Final EIR). In addition, failure to implement the Project would be in direct conflict with the District's Urban Water Management Plan (UWMP) and Strategic Plan, would completely fail to meet any of the Project Objectives, would contradict over 20 years of water supply planning for the Project, and would necessitate implementation of one or more alternative water supply sources, each of which would have its own environmental impacts. The No Project Alternative would leave the District vulnerable to catastrophic water supply shortages in the event of a major system failure or seismic damage, potentially resulting in extraordinary financial impacts to this area and associated tourism-based economy. For these reasons, the District has rejected the No Project Alternative (DEIR p. 1.0-52 & 53).

ALTERNATIVE 2: "ENHANCED CONSERVATION" ALTERNATIVE

Under the "Enhanced Conservation" Alternative, water users within the District would be required to conserve at least an additional 4,400 acre-feet per year (AFY) of water to meet the identified minimum additional supply needed for water reliability of 3.9 million gallons per day (MGD). Adding an extra 3.9 MGD of annual conservation to conservation efforts that are currently occurring within the District would essentially require nearly tripling the District's future water conservation efforts. To triple the future conservation efforts of the District in such a relatively short period of time (to maintain the District's desired schedule) would require, at a minimum, the imposition of prescriptive water conservation standards for activities, like outdoor residential irrigation, that are currently considered discretionary consumptive water use, or the enactment of the District's Water Conservation and Water Supply Shortage program (Stage 2 or Stage 3) outside of the water supply condition thresholds identified in Table 5-1 in Section 5.0 of the EIR. To achieve a long-term reliable and drought-proof supply similar to the proposed project, Stage 2 and/or Stage 3 water shortage contingency provisions would likely have to be enacted and ultimately enforced on a permanent basis. Enforcement effectiveness at such high conservation targets would likely be challenging.

The "Enhanced Conservation" Alternative would not provide a new, diversified water supply portfolio, and would not provide a hydrologically independent water supply in the event of continued drought. The "Enhanced Conservation" Alternative is not considered a permanent and sustainable method to close the existing minimum additional 3.9 MGD water supply gap while meeting the stated objective of providing an immediate and reliable emergency water source for District customers in the event of a catastrophic failure of District infrastructure or regional distribution facilities such as State Water Project (SWP) and Colorado River Aqueduct (CRA) facilities. As a result, the "Enhanced Conservation" Alternative would not improve the overall supply diversity to the area or improve the protection of public health and welfare during supply shortages that could be caused by outage of the imported system or curtailments in imported water supply due to drought or other emergency outage of the system. As such, the "Enhanced Conservation" Alternative would fail to meet the water reliability needs of the District to the same degree as the proposed project (DEIR p. 1.0-53, Final EIR Response O3-2).

ALTERNATIVE 3: "ENHANCED RECYCLED WATER" ALTERNATIVE

Under the "Enhanced Recycled Water" Alternative, the District would need to construct additional recycled water treatment facilities and infrastructure to create a supplemental water supply of at least 3.9 MGD (4,400 AFY) to offset potable water shortages during a catastrophic outage. Under the "Enhanced Recycled Water" Alternative, the proposed desalination facility, subsurface water intake system, and raw (ocean) water conveyance pipeline would not be constructed and the existing minimum necessary additional potable water supply gap of 3.9 MGD would be supplemented from existing potable water supplies that would become available through the increased recycled water production.

Full implementation of the recycled water facilities envisioned in the District's 2015 UWMP would result in a total projected recycled water demand of 1,350 AFY, which approaches the District's existing 1,350 AFY of available recycled water to supply to customers. Implementation of the "Enhanced Recycled Water" Alternative would require the District to supply an additional 3,350 AFY, or more than four times the District's current recycled production of 850 AFY, by year 2020. This also assumes that recycled water could be used in direct "flange to flange" potable water applications, for which there is no current regulatory pathway in California. In addition, the "Enhanced Recycled Water" Alternative would itself require new infrastructure including pipelines and wastewater treatment facilities, which would have similar impacts to the Project, at least for onshore facilities. The Project's impacts can be mitigated to less than significant levels, so this Alternative does not reduce any unavoidable significant impacts (DEIR p. 1.0-54).

Regardless, the District has insufficient recycled water production potential to make this alternative feasible. In addition, given the time necessary for regulations to allow for this, to investigate, finance, and construct a number of facilities above and beyond those identified in the District's 2015 UWMP, implementation of the "Enhanced Recycled Water" Alternative would fail to produce sufficient recycled water offsets to create a minimum additional 3.9 MGD (4,400 AFY) of reliable water supply and eliminate the existing projected supply gap in a timely manner.

The "Enhanced Recycled Water" Alternative would also fail to meet basic Project objectives, as it would not provide a reliable emergency water source for District customers in the event of a catastrophic failure of District infrastructure or regional distribution facilities such as SWP and CRA facilities. As a result, this Alternative would not improve the overall supply diversity to the area or improve the protection of public health and welfare during supply shortages that could be caused by outage of the imported system or curtailments in imported water supply due to drought or other emergency outage of the system. As such, the "Enhanced Recycled Water" Alternative would fail to meet the water reliability needs of the District to the same degree as the proposed Project, and is not being considered by the District. This alternative is further clarified in Final EIR Response O6-3.

ALTERNATIVE 4: "REDUCED CAPACITY" ALTERNATIVE

A minimum desalination facility capacity of 3.9 MGD has been recommended based on certain specific system reliability parameters (including the minimum capacity needed to meet a 60-day imported water supply interruption). However, the District desires to construct up to a 5 MGD facility with the intent to create further reliability and local water supply security, particularly given the difficulty and cost of developing alternative new water supplies for a water-scarce south Orange County. For the purposes of CEQA alternatives, the EIR evaluates a "Reduced Capacity Alternative," which is hypothesized to be a 3.9 MGD facility to meet the minimum identified 60-day imported water supply shortage gap. This Alternative is assumed to be at the same site and with the same general facility locations, with the exception of reduced source water intake, brine discharge, raw water treatment and desalination and equipment (corresponding to roughly 20% reduction in impacts related to source water production, treatment, and discharge). Depending on individual slant well production, one of the estimated three to four Phase I Project slant wells could be avoided with a 20% reduction in capacity. The desalination facility site would have similar impacts as the Project, since the entire desalination site would require grading, and the structures would be similar in size as those required for the Project.

Overall, the "Reduced Capacity" Alternative would result in a slight reduction in Project impacts, including approximately a 20% reduction in subsurface intake of ocean water, reverse osmosis treatment and associated pretreatment and posttreatment processes, greenhouse gas emissions, and brine discharge volume. However, in each of these cases, the Project's impacts can be fully mitigated, and the "Reduced Capacity" Alternative would therefore not avoid any unavoidable significant impacts. Comparing effects on the San Juan Creek Lagoon, Appendix 10.10 shows little to no effect by reducing slant well pumping by 20 percent. (DEIR p.1.0-55).

The "Reduced Capacity" Alternative would achieve the basic Project objectives, albeit 20% less as effective as the proposed Project. As a result, this alternative would partially improve the overall supply diversity to the area and partially improve the protection of public health and welfare during supply shortages that could be caused by outage of the imported system or curtailments in imported water supply due to drought or other emergency outages of the system. However, the "Reduced Capacity" Alternative would not avoid any unavoidable significant impacts. This Alternative may still be considered by the District. This alternative is further clarified in Final EIR Response O5-7.

"SEAWATER INTRUSION MINIMIZATION (DSB ONLY)" ALTERNATIVE

The District has evaluated a specific alternative to the Phase I Project, involving focusing the initial slant wells in the immediate vicinity of San Juan Creek Lagoon (such as Pods C and D). This Alternative would achieve all of the Project objectives and provide the desired full Phase I production capacity of up to 5 MGD. The overall impacts would, therefore, be similar to the proposed Project, with the exception of more effective barrier against seawater intrusion into inland groundwater, and temporary slant well construction impacts.

In the SCWD Stonehill Well, total dissolved solids (TDS) concentrations begin to rise after approximately 15 years of Project operations (compared to the 13.5 years under Baseline conditions) and reach a concentration of roughly 4,000 mg/L by the end of year 2045 (1976 hydrology). This is approximately 3,000 mg/L less than the concentration under Baseline conditions and indicates that slant well pumping at DSB establishes control over ocean water intrusion through the pumping trough created by the feed water system (Appendix 10.10.2, page 9, further clarified in Final EIR Response L7-9).

Therefore, this Alternative would reduce seawater intrusion compared to the Project (where slant wells could be located anywhere within the Study Area, from Pods A – H). Furthermore, this Alternative involves wells closest to the San Juan Creek Lagoon where slant well production capacity is estimated to be highest, thereby reducing the total number of slant wells and associated temporary construction-related impacts (rather than an assumed three to four wells with the Project, this Alternative could be constructed with two to three slant wells due to higher production capacity). In addition, slant wells sited at San Juan Creek Lagoon would have a shorter total conveyance pipeline length to the desalination facility, thereby reducing pipeline construction-related impacts and would be entirely within DSB thereby avoiding impacts at Capistrano Beach Park (including greater coastal erosion potential and temporary loss of parking). This would also reduce the total number of agencies required for permitting and approvals (avoiding a long-term lease and encroachment permits from County Parks). This Alternative would be in closer proximity to the San Juan Creek Lagoon and would focus slant well construction within DSB. The Draft EIR and Final EIR have explicitly addressed slant well impacts at DSB through analysis of specific slant well pods A through E. Slant well construction and operational impacts at DSB can be mitigated to less than significant levels as discussed throughout the Draft and Final EIRs, including discussion in Section 4.3, Biological Resources, and Section 4.12, Recreation of Draft EIR.

Therefore, the "Seawater Intrusion Minimization (DSB Only)" Alternative would reduce potential Project impacts, would further reduce seawater intrusion, and would meet all of the Project objectives. This Alternative is considered "Environmentally Superior" to the proposed Project, and may be considered by the District, pending further consultation with State Parks and other regulatory agencies and stakeholders.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires an EIR to identify the environmentally superior alternative. The environmentally superior alternative is the one that would result in the fewest or least significant environmental impacts. The context of an environmentally superior alternative is based on the consideration of several factors including the reduction of environmental impacts to a *less than significant* level, the project objectives, and an alternative's ability to fulfill the objectives with minimal impacts to the existing site and surrounding environment. The No Project Alternative would be the environmentally superior alternative because it would eliminate all of the potentially significant impacts of the proposed project. However, while the "No Project" Alternative is the environmentally superior alternative, it is not capable of meeting any of the basic objectives of the proposed Project. Section 15126.6(e)(2) of the State CEQA Guidelines states that if the "No Project" alternative is found to be environmentally superior, "the EIR shall also identify an environmentally superior alternative among the other alternatives."

Therefore, the environmentally superior alternative to the proposed Project is the one that would result in the fewest or least significant environmental impacts while meeting most (or all) of the basic Project objectives. As discussed above, based on the evaluation undertaken, the "Seawater Intrusion Minimization (DSB Only)" Alternative is the environmentally superior alternative, and may be considered by the District, pending further consultation with State Parks and other regulatory agencies and stakeholders (DEIR p. 1.0-56).

In fact, as stated in the Staff Report, Resolution and these Findings, the Board is only considering approval of slant wells at DSB at this time, effectively the "Environmentally Superior Alternative."

Section 8: Additional CEQA Considerations

a. Significant Irreversible Environmental Changes (Draft EIR Section 6.2)

This project will utilize both renewable and non-renewable resources over the course of its construction and operation. The construction will use these resources in a manner consistent with other municipal or industrial developments. While the operation of the proposed desalination facility would result in an increased use of energy and natural gas, it would not require substantial new or expanded energy or natural gas supplies or distribution facilities, or conflict with applicable energy standards (the Project would include minor underground electrical lines extended to the site, and equipment powered by electricity or natural gas). The Project would implement several environmental design features that would reduce energy demand, including a commitment to offset the additional energy consumed by the Project in comparison to baseline conditions. With the implementation of environmentally friendly design features and mitigation from the EIR, the Project would present a less than significant long-term increase in non-renewable resource consumption.

b. Growth-Inducing Impacts (Draft EIR Section 6.3, Final EIR Response to Comment O2-1)

Regarding economic growth (Draft EIR Section 6.3.2), the project would only temporarily employ construction personnel during the development of the project components leading to a less than significant impact economically. In operation the desalination facility would employ 4-6 people (12-15 people for the regional project). This lower employee count does not represent a significant economic expansion or a significant growth inducing impact.

Regarding population growth (Draft EIR, Section 6.3.3) the Project would not create new residential structures and thus would not induce population growth. Also, the project would not create new infrastructure to increase population growth. The public utilities/service systems are already readily available in the area, and would not be increased by the project, further reducing the potential for population increases and significant growth impacts.

Regarding removal of impediment to growth (Draft EIR, Section 6.3.4) the project, while not expected to lead directly to economic or population growth through its development, has the

potential to indirectly lead to the economic and population growth due to the creation of a local, reliable, drought-proof water supply. Even then, due to the new desalinated water replacing reduced imported water levels and land use falling outside of SCWD's jurisdiction, the project is not considered a significant growth-inducing impact (refer to Draft EIR Section 6.3, as further clarified in the Final EIR, including Response to Comment O2-1).

c. Energy Conservation (Draft EIR Section 6.4)

The project does not include any growth causing land uses that would significantly increase energy consumption, in consideration of Project Design Features and EIR mitigation measures. As indicated in Draft EIR Table 6-4, Summary of Energy Consumption, operational energy consumption would represent an approximate 0.13 (5 MGD capacity) percent increase in electricity consumption over the current Countywide usage. These are unmitigated factors as noted above, as GHG measures would further reduce operational related electricity consumption and these electricity providers are required to further reduce emissions from power generation pursuant to SB350 and other state and federal regulations. The proposed Project would not require natural gas and the proposed water treatment equipment would incorporate the most energy efficient technology available. Therefore, the proposed Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. Additionally, the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

d. Cumulative Impacts (Draft EIR Sections 4.04, and 4.1-4.16 Final EIR Response F2-13, L7-7, O1-7, O6-6, P3-3)

The cumulative impacts analysis considers past, present, and current actions that are closely related either in time or location to the project being considered, even if they were undertaken by another agency or another person. The Draft EIR, as further clarified in the Final EIR, provides substantial evidence that the Project would not result in any individual or cumulatively considerable significant environmental impacts. In fact, the Project is the environmentally preferred method for ocean desalination as recognized in the State's Ocean Plan Amendment for Desalination Facilities. Final EIR responses noted above provide further clarification and additional substantial evidence supporting this conclusion, including considerable supplemental technical analyses with respect to cumulative surface hydrology, groundwater and coastal hazards.

e. Summary Conclusion regarding Additional CEQA Considerations

The project consists of an ocean water desalination facility and does not include any growth-inducing land uses that would substantially increase energy consumption (when considering Project Design Features and mitigation measures that reduce electricity-related emissions to less than significant levels). Rather, the project would reduce SCWD's dependency on imported water by integrating desalinated ocean water with the local water supply portfolio.

The project would be subject to compliance with all Federal, State, and local requirements for energy efficiency. The increase in electricity, natural gas, and automotive fuel consumption over existing conditions is minimal (less than 1 percent). For the reasons described above, the project would not place a substantial demand on regional energy supply or require significant additional capacity, or significantly increase peak and base period electricity demand, or cause wasteful, inefficient, and unnecessary consumption of energy during Project construction, operation, and/or maintenance, or preempt future energy development or future energy conservation.