

APPENDIX B

Addendum Mitigation Measures

DEFINITIONS

The following list provides definitions for acronyms used in the mitigation measures.

<i>Acronyms/Abbreviation</i>	<i>Description</i>
AQ.....	Air Quality
ARB	Air Resources Board
BACT	Best Available Control Technology
BIO	Biological Resources
BMPs.....	Best Management Practices
CalARP	California Accidental Release Prevention Program
Cal/OSHA	California Division of Occupational Safety and Health Administration
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
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
GHG	Green House Gas (Emissions/ Reduction plan/Mitigation)
HAZ	Hazards and Hazardous Materials
HWQ.....	Hydrology and Water Quality
LID.....	Low Impact Development
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
PCH	Pacific Coast Highway
PPA.....	Power Purchase Agreement
PV.....	Photovoltaic
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

Appendix B – Addendum Mitigation Measures

State Parks California Department of Parks & Recreation
SWPPP Stormwater Pollution Prevention Plan
UTIL..... Utilities and Service Systems
WEAP Worker Environmental Awareness Program
WMP Waste Management Plan
WQMP Model Water Quality Management Plan

Mitigation Measures – AIR QUALITY	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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:</p> <ul style="list-style-type: none"> ▪ 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. <p>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.</p>	Construction Manager	During construction	Construction Manager
<p>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.</p>	Construction Manager	During construction	Construction Manager
<p>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</p>	SCWD	Prior to construction (haul route permit)	City of Dana Point

Mitigation Measures – AIR QUALITY	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>SCAQMD's Fugitive Dust Mitigation Measure Tables XI-A through XI-E. Actions would include the following:</p> <ul style="list-style-type: none"> ▪ 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; ▪ 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. 		<p>During construction (fugitive dust, construction material, waste mitigation)</p>	<p>SCWD</p>

Mitigation Measures – AIR QUALITY	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<ul style="list-style-type: none"> ▪ 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. 			

Mitigation Measures – BIOLOGICAL RESOURCES	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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</p>	SCWD	Following slant well installation	SCWD

Mitigation Measures – BIOLOGICAL RESOURCES	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
Lagoon water levels or salinity relative to southern steelhead trout, as determined by NOAA NMFS.			

Mitigation Measures – CULTURAL RESOURCES	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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:</p> <ul style="list-style-type: none"> 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; 	Construction Manager	Prior to ground disturbance, during construction	SCWD

Mitigation Measures – CULTURAL RESOURCES	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>e) An informational brochure that identifies reporting procedures in the event of a discovery;</p> <p>f) An acknowledgment form signed by each worker indicating that they have received the training; and</p> <p>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.</p>			
<p>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). <u>Prior to ground disturbance, the District (or its designee) shall retain a Native Monitor representing the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes/Lucero. Prior to ground disturbance, the District shall also contact other culturally-affiliated tribes (including, but not limited to, the Gabrieleño Band of Mission Indians – Kizh Nation and the Gabrielino-Tongva Tribe of the San Gabriel Band of Mission Indians) and shall retain a culturally-affiliated tribal monitor if requested.</u> The CRS and Native Monitor(s) 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, <u>Native Monitor(s)</u>, 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. <u>In the event of unexpected cultural resource</u></p>	<p>SCWD</p> <p>SCWD, CRS, CM</p>	<p>Prior to construction</p> <p>During construction</p>	<p>SCWD</p> <p>SCWD</p>

<p style="text-align: center;">Mitigation Measures – CULTURAL RESOURCES</p>	<p style="text-align: center;">Responsibility for Implementation</p>	<p style="text-align: center;">Timing of Implementation</p>	<p style="text-align: center;">Responsibility for Monitoring and Verification</p>
<p><u>discovery, the District (or its designee) shall coordinate a mutually agreeable solution with the Native Monitor(s), the CRS, and the CM to redirect ground disturbance as appropriate.</u></p> <p>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:</p> <ul style="list-style-type: none"> a) The CRS <u>and Native Monitor(s) has have</u> 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, <u>the Native Monitor(s)</u>, 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. <p>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,</p>			

Mitigation Measures – CULTURAL RESOURCES	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission.</p>			
Mitigation Measures – GEOLOGY AND SOILS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p> <p>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</p>	<p>Registered Geologist, SCWD</p> <p>SCWD, Civil Engineer of record, Project Geotechnical Consultant</p>	<p>Prior to ground disturbing activities, before operations</p> <p>Prior to operations</p>	<p>SCWD</p> <p>City of Dana Point</p>

<p style="text-align: center;">Mitigation Measures – GEOLOGY AND SOILS</p>	<p style="text-align: center;">Responsibility for Implementation</p>	<p style="text-align: center;">Timing of Implementation</p>	<p style="text-align: center;">Responsibility for Monitoring and Verification</p>
<p>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.</p> <p>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.</p> <p>Further mitigation requires that:</p> <ul style="list-style-type: none"> 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. c) That geotechnical report shall also provide geotechnical recommendations for constructing retaining walls and/or associated temporary slopes as applicable. 			

Mitigation Measures – GREENHOUSE GAS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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:</p> <ol style="list-style-type: none"> 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 	<p>SCWD</p>	<p>Before construction</p>	<p>SCWD</p>

Mitigation Measures – GREENHOUSE GAS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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:</p> <p>a. <u>Minimize Project’s Energy Demand</u> – 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.</p>			

Mitigation Measures – GREENHOUSE GAS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>b. <u>On-site Solar PV</u> – 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.</p> <p>c. <u>On-site Fuel Cells</u> – 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.</p>			

Mitigation Measures – GREENHOUSE GAS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>d. <u>GHG Offsets (or “Carbon Offset”)</u> – SCWD may pursue a Renewable Power Purchase Agreement (PPA)¹ to achieve the required level of GHG emission reductions to achieve net 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 Certificates². To the extent practicable, GHG offset projects must be located within California. Offsets may include, but not be limited to:³</p> <p>i. <i>Landfill Methane Capture</i>: Methane capture removes GHG emissions from the atmosphere. These GHG offsets are readily available across the country from numerous verified providers.</p>			

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)).

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 – GREENHOUSE GAS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>ii. <i>Reforestation</i>: Reforestation provides GHG reduction associated with carbon sequestration, and is a widely available GHG offset nationally and internationally.</p> <p><i>Wind Power</i>: Wind Power provides clean energy to reduce fossil-fuel related electricity emissions. Wind Power GHG offsets are readily available across the country and internationally.</p>			
<p>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.</p>	SCWD	Annually in the first quarter of each year following project construction or operations	Independent accredited verification entity

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p> <p>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.</p>	SCWD	Prior to grading, drilling, or construction permit	SCWD
<p>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</p>	SCWD	Prior to grading, drilling, or construction permit	SCWD

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>Hazardous Waste Management Plan shall define all wastes expected to be generated during construction activities. The Plan shall contain, at a minimum, the following:</p> <ul style="list-style-type: none"> ▪ 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 assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans. <p>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.</p>			
<p>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</p>	Registered Professional Engineer or Geologist	During soil excavation and grading activities	Registered Professional Engineer or Geologist

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p> <p>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.</p>			SDRWQCB, DTSC
<p>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</p>	Registered Professional Engineer or Geologist	During site disturbance activities	Registered Professional Engineer or Geologist

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>contamination, and file a written report to the City of Dana Point Community Development Department (Building and 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.</p> <p>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).</p> <p>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.</p>			<p>City of Dana Point, Orange County Department of Environmental Health</p>

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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 environment as demonstrated to the satisfaction of the applicable agency responsible for remediation oversight.</p>	SCWD	Prior to demolition of existing structures	City of Dana Point, Orange County Department of Environmental Health, DTSC, SDRWQCB
<p>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</p>	SCWD	Before construction	City of Dana Point

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:</p> <ul style="list-style-type: none"> ▪ 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. <p>The CSS shall submit a monthly safety inspection report to the Project Engineer that includes the following:</p> <ul style="list-style-type: none"> ▪ 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; ▪ Report of any continuing or unresolved situations and incidents that may pose a danger to life or health; and 			

Mitigation Measures – HAZARDS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
Report of accidents and injuries that occurred during the month.			

Mitigation Measures – HYDROLOGY AND WATER QUALITY	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p>	SCWD	Prior to any ground disturbance activities, during construction	City of Dana Point, City of San Juan Capistrano, State Parks (as appropriate)

Mitigation Measures – HYDROLOGY AND WATER QUALITY	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p>			
<p>HWQ-4: 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 <i>Model Water Quality Management Plan (Model WQMP) for South Orange County (2017)</i> and associated <i>Technical Guidance Document (2017)</i>, 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 review and approval, including: 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.</p>	<p>SCWD</p>	<p>During project design/planning</p> <p>Prior to operations</p>	<p>City of Dana Point</p> <p>City of Dana Point</p>

Mitigation Measures – HYDROLOGY AND WATER QUALITY	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p>			
Mitigation Measures – NOISE	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>NOI-1: Prior to construction, SCWD (or its designee) shall ensure that the Grading Plan, Building Plans, and specifications stipulate that:</p> <ul style="list-style-type: none"> ▪ 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.). 	SCWD	Before construction	SCWD

Mitigation Measures – NOISE	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<ul style="list-style-type: none"> ▪ 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 (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. 			

Mitigation Measures – NOISE	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>NOI-2: Slant Well 24-hour Drilling Noise Mitigation</p> <p>a) <u>Construction Hours</u>. 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.</p> <p>b) <u>Temporary Noise Barriers</u>. 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.</p> <p>c) <u>Advanced Notice to Sensitive Receptors</u>. 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</p>	<p>SCWD</p>	<p>During construction</p> <p>Prior to construction</p> <p>Prior to construction, during construction and operation</p>	<p>SCWD</p> <p>SCWD</p> <p>SCWD</p>

Mitigation Measures – NOISE	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>by mail. Notices shall provide tips on reducing noise intrusion; for example, by closing windows 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.</p> <p>d) <u>Dedication of a Public Liaison</u>. 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.</p> <p>e) <u>Use of Appropriate Mufflers</u>. Construction equipment shall be equipped with the appropriate mufflers to reduce noise impacts to less than significant levels in accordance with applicable noise regulations.</p>			

Mitigation Measures – NOISE	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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.</p> <p>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.</p>			

Mitigation Measures – RECREATION	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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</p> <ul style="list-style-type: none"> ▪ 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 	SCWD	Before permitting	State Parks, Orange County Parks (only for Capistrano Beach Park), City of Dana Point

Mitigation Measures – RECREATION	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>may be more favorable for design purposes, well production capacity, operational/maintenance consideration, or other factors;</p> <ul style="list-style-type: none"> ▪ Pod F has been eliminated from consideration; ▪ 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 <u>Section 4.1</u>, <u>4.10</u> and <u>4.13</u>); ▪ 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 <p>Where practical, Project construction shall be timed with any other planned improvements to minimize disruption of recreational facilities.</p>			

Mitigation Measures – UTILITIES AND SERVICE SYSTEMS	Responsibility for Implementation	Timing of Implementation	Responsibility for Monitoring and Verification
<p>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:</p> <ul style="list-style-type: none"> ▪ 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 <p>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.</p>	<p>SCWD</p>	<p>Before site mobilization and project operation</p>	<p>City of Dana Point</p>