

### 3.0 Draft EIR Errata

Changes to the Doheny Desalination Project (Project) Draft EIR are noted below. The changes to the Draft EIR do not affect the overall conclusions of the environmental document, and instead represent changes to the Draft EIR that provide clarification, amplification and/or insignificant modifications as needed as a result of public and responsible agency comments on the Draft EIR. These clarifications and corrections do not warrant Draft EIR recirculation pursuant to CEQA Guidelines §15088.5. As set forth further below and elaborated upon in the respective Response to Comments, none of the Errata below reflect a new significant environmental impact, a “substantial increase” in the severity of an environmental impact for which mitigation is not be adopted to reduce the impact to a level of insignificance, or a new feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen significant environmental impacts but is not adopted, nor do the Errata reflect a “inadequate” or “conclusory” Draft EIR.

Changes in this Errata Section are listed by chapter, page, and (where appropriate) by paragraph. Added or modified text is shown with double underline (example) while deleted text is shown with strikethrough (~~example~~).

#### SECTION 3.0 PROJECT DESCRIPTION

This Errata makes edits that clarify, amplify or make insignificant modifications to the Project Description, but that do not add significant new information to the EIR.

*Page 3.0-2, Section 3.1, Subsection “Project Summary”, second bullet, fourth sentence*

**“A concentrate (brine) disposal system....** ... regional treatment plants. A brine discharge holding tank allows for sufficient storage during low flow outfall periods; typically late at night and early morning. Mixing desalination brine ....”

*Page 3.0-4, Section 3.1, Subsection “South Coast Water District Background,” first full paragraph on p. 3.0-4*

“Despite significant efforts toward creating a balanced water supply portfolio, the District is currently relying on imported water for approximately ~~85-100~~77% percent of its water supply needs, as summarized below in Figure 3-2, MWDOC and SCWD Current Water Supply Portfolios (with the District relying on up to 100% of its potable water from imported sources during periods when the GRF is not producing groundwater). The water supplied to SCWD by MWDOC is 100 percent imported water.”

*Page 3.0-6, Section 3.2, Subsection “SCWD Water Supply Reliability Study (December 2017 Final Report),” first bullet on p. 3.0-6*

- “Projected year 2040 potable water demand increase to 6,940 AFY (this is a planning assumption projecting an increase of 645 AFY to allow for 90% demand “bounce-back” and climate change).”



*Page 3.0-14, Section 3.4, First full paragraph on page 3.0-14*

“The Doheny Ocean Desalination Project would consist of the following main components: a subsurface water intake system, a raw (ocean) water conveyance pipeline, a desalination facility, a concentrate (brine) disposal system and brine discharge tank, a product water storage tank and distribution system, appurtenant facilities, and Offsite Electrical Transmission Facilities. ...”

*Page 3.0-15, Section 3.4, Subsection “Project Site”, Paragraph 3*

“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 project’s facilities in the Coastal Zone are also appealable to the~~ 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)....”

*Page 3.0-15, Section 3.4.1, New Subsection added before Subsection “Production Capacity/Project Phasing”*

**“Project Facility Siting Criteria**

The Project has been designed to further avoid sensitive resources, as reflected in the Project design plans and in Project Design Features noted in respective Draft EIR sections. The following Project Design Features noted in Section 4 of the Draft EIR specifically relate to Project facility siting criteria:

- Construction staging and laydown areas utilize existing disturbed or developed sites to avoid disruption to existing sensitive resources;
- 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;
- Pipeline installation will utilize trenchless construction to avoid potential impacts to San Juan Creek and San Juan Creek Lagoon; and
- 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; and
- The Project proposes uses of trenchless pipeline construction under sensitive transportation facilities, including Class I bike paths, PCH, and SCRRRA MetroLink ROW.

The Project design avoids impacts to specific sensitive resources as noted below:

- No direct sandy beach construction at DSB;
- No direct impacts to the DSB North Creek drainage channel; and



Trenchless construction to avoid direct impacts to San Juan Creek Lagoon, San Juan Creek, local drainage channel L01S02, PCH, the SCRRA railroad, and major intersections such as Dana Point Harbor Drive and PCH.”

*Page 3.0-16, Section 3.4.1, Subsection “Production Capacity/Project Phasing,” first bullet*

- **“Phase 1 Local Project:** Up to 5 MGD, which equates to up to approximately 5,3203,192-AFY at 95% utilization.”

*Page 3.0-19, Section 3.4.2, Subsection “Subsurface Intake Wells/Southeast Intake Wells – Southeast Intake Wells,” paragraph 1, fourth sentence*

“...This study area is composed of a paleochannel<sup>14</sup> that would feed the Southeast Intake Wells (pods ~~F-G~~ and ~~GH and H~~ as shown in Exhibit 3-3, Project Facility Locations and Appendix 10.1), and is distinct from the paleochannel offshore of DSB at the mouth of San Juan Creek and hydrologically separated from the San Juan Groundwater Basin, which avoids the Project’s effects on inland groundwater and the lagoon, as demonstrated by the modeling work presented in Section 3.3...”

*Page 3.0-21, Section 3.4.2, Subsection “Raw Water Conveyance Alignment,” Third full paragraph on p. 3.0-21*

**“South Alignment:** ... This alignment would connect the wells west of the lagoon via a conveyance section utilizing either the existing Beach Road (“Beach Road” or “Park Lantern”) bridge deck over San Juan Creek or through trenchless construction under San Juan Creek lagoon. Mitigation has been developed to facilitate the construction of this alignment with the PCH bridge’s seismic stability. This mitigation can be found in TRF-2 on page 4.13-20 of this document...”

*Page 3.0-23, Section 3.1.2, Subsection “Desalination Facility,” Second full paragraph on p. 3.0-23, Sentence 2*

“...The conceptual desalination facility layout includes flocculators, sedimentation basins, backwash water clarifier, chemical storage area, media filter backwash tank, brine ~~storage~~discharge tank, a Research & Development pad<sup>18</sup>, RO flush tank, product water pump station, product water tank, RO membrane building, carbon dioxide feed system, media filters, electrical building, calcite contractors, and an admin/lab/operations/public outreach building. ...”

*Page 3.0-24, Section 3.1.2, Subsection “Desalination Facility – Pretreatment,” Second full paragraph on p. 3.0-24, Sentence 3*

“... At steady state, groundwater modeling supports that the Project will only be drawing in approximately 6.6% of brackish groundwater (full equilibrium is estimated to be achieved in approximately four years at Doheny State Beach, where slant well production water salinity is fairly constant, as discussed in detail in Appendix 10.1). ...”



*Page 3.0-26, Section 3.1.2, Subsection “Desalination Facility – Seawater Reverse Osmosis (First Pass),”  
Second full paragraph on p. 3-0-26, Last sentence*

“...The brine will be sent to the brine discharge tank to be disposed of into the ocean through diffusers at the end of SOCWA’s existing SJCOO. The product water will proceed to the next step in the process.”

*Page 3.0-29, Section 3.1.2, Subsection “Chemicals and Discharge”, Paragraph 5*

“Table 3-7, Chemical Use and Application Summary, provides a summary of the chemicals, application points, ~~and~~ average chemical doses, and chemical quantities to be stored onsite based on preliminary design for the Doheny Ocean Desalination Project.”

*Page 3.0-29, Section 3.1.2, Subsection “Chemicals and Discharge – Brine Disposal System,” Paragraph 6,  
New sentence after Sentence 2*

“The brine disposal system 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. This would be achieved in part through blending in the outfall pipe with the existing wastewater stream from the J.B. Latham Wastewater Treatment Plant, and other regional treatment plants. A brine discharge holding tank would allow for sufficient storage during low flow outfall periods, typically late at night and early morning. This connection would be from the Desalination Facility to the existing SJCOO that currently runs through the southwest corner of the desalination facility Project site (the connection location is shown on Exhibit 3-1, Regional Vicinity)....”

*Page 3.0-30, Section 3.4.2, Subsection “Chemicals and Discharge – Brine Disposal System,” Table 3-7*

**Table 3-7: Chemical Use and Application Summary**

Chemical	Description of Use	Application Points	Suggested Dose (mg/L)	<u>Chemical Quantities to be Stored on Site</u>
Antiscalant	Minimize scaling and iron fouling in SWRO membranes.	+1 <sup>st</sup> Pass RO Feed +2 <sup>nd</sup> Pass RO Feed	3 3	<u>330 gallons</u>
Aqueous Ammonia	Generation of chloramines in the presence of chlorine for residual disinfection in product water distribution system.	+Distribution System Feed	1	<u>5,000 gallons</u>
Calcite (Calcium Carbonate)	Increase calcium hardness and pH in RO permeate during post-treatment.	+RO Permeate Post pH Adjustment with Carbon Dioxide	100	<u>Variable</u>
Carbon Dioxide	Alkalinity addition and pH reduction to improve calcium uptake in post-treatment calcite contactors.	+Calcite Contactor Feed	23	<u>36 tons</u>



Chemical	Description of Use	Application Points	Suggested Dose (mg/L)	<u>Chemical Quantities to be Stored on Site</u>
Caustic Soda (Sodium Hydroxide)	Adjust pH to optimize pretreatment oxidation of Mn/Fe, improve boron rejection, for cleaning and neutralization, and control product water pH.	+Pretreatment Feed +2 <sup>nd</sup> Pass RO Feed +Product Water Tank Feed +Cleaning and Neutralization Tanks	10 20 5 As Needed	<u>20,000 gallons</u>
Fluorosilicic Acid	Fluoride supplement for dental health in drinking water.	+Product Water Tank Feed	0.7	<u>1,000 gallons</u>
Polymer	Coagulant aid for onsite clarification	+Pretreatment Feed +Sludge Thickening Feed	0.5	<u>330 gallons</u>
Sodium Bisulfite	Dechlorinate RO feed water and neutralize chlorinated discharges and cleaning solutions before disposal. Preservative for RO membranes during downtime.	+1 <sup>st</sup> Pass RO Feed +Cleaning and Neutralization Tanks	0.2 As Needed	<u>5,000 gallons</u>
Sodium Hypochlorite	Oxidation of Fe/Mn before pretreatment and residual disinfection in product water.	+Pretreatment Feed +Calcite Contactor Feed +Product Water Tank Feed	20 (Intermittent) 3	<u>20,000 gallons</u>
Sulfuric Acid	Periodic cleaning of RO membranes.	+1 <sup>st</sup> Pass RO Feed	5	<u>1,200 gallons</u>

*Page 3.0-37, Section 3.5, Subsection “Desalination Facility Expansion,” Paragraph 1*

“The following desalination facility components are anticipated to be sized initially to accommodate an eventual expansion up to 15 MGD of desalination capacity: the chemical storage area, research and development (R&D) pad, RO membrane building, electrical building, administration/operations/lab building, RO suck-back (flush) tank, product water tank, brine discharge ~~holding~~ tank, and several key components of the seawater intake pipeline.”

*Page 3.0-38, Section 3.6, Subsection “Phases of Construction / Timeline”, entire section*

~~Phases of Construction~~ Schedule/ Timeline

The Project is not yet final, and as such, the final construction schedule has not been prepared. In lieu of a finalized construction schedule and scope, conservative parameters and estimates are identified below for Project construction.

~~Phase I — start October 2019 and complete by December 2021~~

~~Regional Project — Depending on regional partnership, phasing and other factors~~



“Phase I of this Project, and the focus of this EIR consists of a Local facility (up to 5 MGD). Per discussions with State Parks and County Parks, construction at DSB will only be allowable during the “off-season” to minimize impacts to beach access and recreation (the specific timeframes are subject to further discussion with State Parks and County Parks staff as part of the Project’s permitting process, but for the purposes of this EIR it is assumed to be from October 1 through May 1 to avoid the peak Summer season and also to minimize conflict with special events in the Fall and early Summer; this is discussed further in Section 4.12, Recreation). It is estimated that it will take 2-3 months to drill and develop a 1000-foot slant well. Following well construction, the “well development” process (pumping the well to remove sands prior to initiating production) will require approximately one month. Therefore, it is anticipated that two wells can be constructed during one off-season construction window using a single drill rig and a separate well development rig. A conceptual schedule for the Project has been prepared and is outlined in Table 3-9.1.-”

**Table 3-9.1: Conceptual Phase 1 Construction Schedule**

<u>No.</u> <sup>[1]</sup>	<u>Construction Phase</u>	<u>Approximate Start Date</u> <sup>[2]</sup>	<u>Duration (Working Days)</u>
<u>1</u>	<u>Preliminary Site Work</u>	<u>10/01/2019</u>	<u>30</u>
<u>2</u>	<u>Slant Wells 1-2 Drilling</u>	<u>10/04/2019</u>	<u>180</u>
<u>3</u>	<u>Slant Well 1 Development</u>	<u>01/01/2020</u>	<u>30</u>
<u>4</u>	<u>Slant Well 2 Development</u>	<u>04/02/2020</u>	<u>30</u>
<u>5</u>	<u>Raw Water Pipeline</u>	<u>10/20/2019</u>	<u>350</u>
<u>6</u>	<u>Preliminary Site Work 2</u>	<u>11/15/2019</u>	<u>70</u>
<u>7</u>	<u>Project-Wide Pipework Excavation</u> <sup>[3]</sup>	<u>02/01/2020</u>	<u>427</u>
<u>8</u>	<u>Yard Piping</u>	<u>02/01/2020</u>	<u>200</u>
<u>9</u>	<u>Floc/Sed Basins</u>	<u>02/01/2020</u>	<u>210</u>
<u>10</u>	<u>Chemical Storage Area</u>	<u>04/01/2020</u>	<u>210</u>
<u>11</u>	<u>Brine Holding Tank</u>	<u>04/01/2020</u>	<u>210</u>
<u>12</u>	<u>Product Holding Tank</u>	<u>04/01/2020</u>	<u>210</u>
<u>13</u>	<u>Outside Process Equipment Concrete Pads</u>	<u>06/01/2020</u>	<u>100</u>
<u>14</u>	<u>RO Building Foundation</u>	<u>06/01/2020</u>	<u>100</u>
<u>15</u>	<u>R&amp;D Pad</u>	<u>07/01/2020</u>	<u>100</u>
<u>16</u>	<u>Administrative Building Foundation</u>	<u>07/01/2020</u>	<u>100</u>
<u>17</u>	<u>Electrical Building Foundation</u>	<u>07/01/2020</u>	<u>90</u>
<u>18</u>	<u>Electrical Building</u>	<u>11/01/2020</u>	<u>120</u>
<u>19</u>	<u>Outside Process Equipment Mechanical/Electrical Installation</u>	<u>10/01/2020</u>	<u>365</u>
<u>20</u>	<u>RO Building</u>	<u>10/01/2020</u>	<u>150</u>
<u>21</u>	<u>Administrative Building</u>	<u>10/01/2020</u>	<u>180</u>
<u>22</u>	<u>Electrical Equipment Installation</u>	<u>01/01/2021</u>	<u>240</u>
<u>23</u>	<u>Electrical Equipment Mechanical Installation</u>	<u>03/01/2021</u>	<u>240</u>
<u>24</u>	<u>Slant Wells 3-4 Drilling</u>	<u>10/01/2020</u>	<u>180</u>
<u>25</u>	<u>Slant Well 3 Development</u>	<u>01/10/2021</u>	<u>30</u>
<u>26</u>	<u>Slant Well 4 Development</u>	<u>04/01/2021</u>	<u>30</u>
<u>27</u>	<u>RO Building Mechanical/Electrical Installation</u>	<u>03/01/2021</u>	<u>200</u>
<u>28</u>	<u>Architectural Finishes</u>	<u>04/02/2021</u>	<u>60</u>



<u>No.</u> <sup>[1]</sup>	<u>Construction Phase</u>	<u>Approximate Start Date</u> <sup>[2]</sup>	<u>Duration (Working Days)</u>
<u>29</u>	<u>Process Equipment Corrosion Protection</u>	<u>07/01/2021</u>	<u>60</u>
<p><u>Notes:</u></p> <p><u>[1] Construction activity estimates are consistent with the Air Quality modeling found in Appendix 10.3.</u></p> <p><u>[2] Changes to the approximate start dates are expected to change from those presented; though these changes will not affect the results of the analysis of the DEIR.</u></p> <p><u>[3] Phase 1, Construction no. 7, Project-Wide Pipework Excavation, accounts for material removal during trenching. All import/export for soils and demolition materials has been assumed in this phase.</u></p>			

Page 3.0-38, Section 3.6, New Subsection “Construction Equipment” before Subsection “Staging Areas”

### Construction Equipment

“Construction materials for Phase I of the Project will include materials and equipment necessary to construct the local scale facility (up to 5 MGD). In an effort to increase efficiency, construction equipment assumptions for both the currently sought up-to-5 MGD local facility and trenching for raw water conveyance pipelines for the potential future expansion 15 MGD regional facility have been identified. For clarity, the material and equipment assumptions for the current Project (up to 5 MGD) and project-wide pipework excavation are included in Table 3-9.2.”

**Table 3-9.2: Phase 1 Construction Equipment Assumptions**

<u>No.</u> <sup>[1]</sup>	<u>Construction Phase</u>	<u>Equipment</u>	<u>Number</u>	<u>Hours Per Day</u>
<u>1</u>	<u>Preliminary Site Work</u>	<u>Concrete/Industrial Saws</u>	<u>1</u>	<u>8</u>
		<u>Excavators</u>	<u>3</u>	<u>8</u>
		<u>Rubber Tired Dozers</u>	<u>2</u>	<u>8</u>
<u>2</u>	<u>Slant Wells 1-2 Drilling</u>	<u>Air Compressors</u>	<u>1</u>	<u>24</u>
		<u>Bore/Drill Rigs</u>	<u>1</u>	<u>24</u>
		<u>Cranes</u>	<u>1</u>	<u>8</u>
		<u>Forklifts</u>	<u>1</u>	<u>24</u>
		<u>Generator Set</u>	<u>2</u>	<u>12</u>
		<u>Pumps</u>	<u>1</u>	<u>12</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>1</u>	<u>8</u>
		<u>Welders</u>	<u>2</u>	<u>12</u>
<u>3</u>	<u>Slant Well 1 Development</u>	<u>Air Compressors</u>	<u>1</u>	<u>24</u>
		<u>Bore/Drill Rigs</u>	<u>1</u>	<u>24</u>
		<u>Cranes</u>	<u>1</u>	<u>8</u>
		<u>Generator Set</u>	<u>2</u>	<u>12</u>
		<u>Pumps</u>	<u>1</u>	<u>24</u>
<u>4</u>	<u>Slant Well 2 Development</u>	<u>Air Compressors</u>	<u>1</u>	<u>24</u>
		<u>Bore/Drill Rigs</u>	<u>1</u>	<u>24</u>
		<u>Cranes</u>	<u>1</u>	<u>8</u>
		<u>Generator Set</u>	<u>2</u>	<u>12</u>
		<u>Pumps</u>	<u>1</u>	<u>24</u>
<u>5</u>	<u>Raw Water Pipeline</u>	<u>Bore/Drill Rigs</u>	<u>1</u>	<u>8</u>



<u>No.</u> <sup>[1]</sup>	<u>Construction Phase</u>	<u>Equipment</u>	<u>Number</u>	<u>Hours Per Day</u>
		<u>Excavators</u>	<u>1</u>	<u>8</u>
<u>6</u>	<u>Preliminary Site Work 2</u>	<u>Excavators</u>	<u>2</u>	<u>8</u>
		<u>Graders</u>	<u>1</u>	<u>8</u>
		<u>Rubber Tired Dozers</u>	<u>1</u>	<u>8</u>
		<u>Scrapers</u>	<u>2</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>2</u>	<u>8</u>
<u>7</u>	<u>Project-Wide Pipework Excavation<sup>[2]</sup></u>	<u>Rubber Tired Dozers</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>1</u>	<u>8</u>
<u>8</u>	<u>Yard Piping</u>	<u>Bore/Drill Rigs</u>	<u>1</u>	<u>8</u>
		<u>Excavators</u>	<u>1</u>	<u>8</u>
<u>9</u>	<u>Floc/Sed Basins</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>10</u>	<u>Chemical Storage Area</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>11</u>	<u>Brine Holding Tank</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>12</u>	<u>Product Holding Tank</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>13</u>	<u>Outside Process Equipment Concrete Pads</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>14</u>	<u>RO Building Foundation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>15</u>	<u>R&amp;D Pad</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>



<u>No.</u> <sup>[1]</sup>	<u>Construction Phase</u>	<u>Equipment</u>	<u>Number</u>	<u>Hours Per Day</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>16</u>	<u>Administrative Building Foundation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>17</u>	<u>Electrical Building Foundation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>18</u>	<u>Electrical Building</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>19</u>	<u>Outside Process Equipment Mechanical/Electrical Installation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>20</u>	<u>RO Building</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>21</u>	<u>Administrative Building</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>22</u>	<u>Electrical Equipment Installation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>23</u>	<u>Electrical Equipment Mechanical Installation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>24</u>	<u>Slant Wells 3-4 Drilling</u>	<u>Air Compressors</u>	<u>1</u>	<u>24</u>
		<u>Bore/Drill Rigs</u>	<u>1</u>	<u>24</u>
		<u>Cranes</u>	<u>1</u>	<u>8</u>



<u>No.</u> <sup>[1]</sup>	<u>Construction Phase</u>	<u>Equipment</u>	<u>Number</u>	<u>Hours Per Day</u>
		<u>Forklifts</u>	<u>1</u>	<u>8</u>
		<u>Generator Set</u>	<u>2</u>	<u>12</u>
		<u>Pumps</u>	<u>1</u>	<u>12</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>1</u>	<u>8</u>
		<u>Welders</u>	<u>2</u>	<u>12</u>
<u>25</u>	<u>Slant Well 3 Development</u>	<u>Air Compressors</u>	<u>1</u>	<u>24</u>
		<u>Bore/Drill Rigs</u>	<u>1</u>	<u>24</u>
		<u>Cranes</u>	<u>1</u>	<u>8</u>
		<u>Generator Set</u>	<u>2</u>	<u>12</u>
		<u>Pumps</u>	<u>1</u>	<u>24</u>
<u>26</u>	<u>Slant Well 4 Development</u>	<u>Air Compressors</u>	<u>1</u>	<u>24</u>
		<u>Bore/Drill Rigs</u>	<u>1</u>	<u>24</u>
		<u>Cranes</u>	<u>1</u>	<u>8</u>
		<u>Generator Set</u>	<u>2</u>	<u>12</u>
		<u>Pumps</u>	<u>1</u>	<u>24</u>
<u>27</u>	<u>RO Building Mechanical/Electrical Installation</u>	<u>Cranes</u>	<u>1</u>	<u>7</u>
		<u>Forklifts</u>	<u>3</u>	<u>8</u>
		<u>Generator Sets</u>	<u>1</u>	<u>8</u>
		<u>Tractors/Loaders/Backhoes</u>	<u>3</u>	<u>7</u>
		<u>Welders</u>	<u>1</u>	<u>8</u>
<u>28</u>	<u>Architectural Finishes</u>	<u>Air Compressors</u>	<u>1</u>	<u>6</u>
<u>29</u>	<u>Process Equipment Corrosion Protection</u>	<u>Air Compressors</u>	<u>1</u>	<u>6</u>

Notes:

[1] Activity numbers are consistent with the Air Quality modeling found in Appendix 10.3.

[2] Phase 1, Construction no. 7, Project-Wide Pipework Excavation, accounts for material removal during trenching. All import/export for soils and demolition materials has been assumed in this phase.

*Page 3.0-38, Section 3.6, Subsection “Staging Areas,” Paragraph 2*

Construction equipment and materials would be stored in the construction work areas. Construction staging for the subsurface slant wells on Doheny State Beach and Capistrano Beach Park, the SCWD desalination facility, the product water conveyance alignment, and the raw water conveyance alignment would be within the Project area boundary. To facilitate these activities and provide access in a tight area, a construction zone around the slant well drill rig (the “drill rig work area”) will be required, estimated at 130 feet by 75 feet for DSB, and 100 feet by 75 feet for Capistrano Beach Park. The drill rig work areas will be screened to minimize noise, lighting and aesthetic impacts.

“Construction of the slant wells will occur during the beach off-season from October 1 to May 1. This will allow for construction of the necessary wells over two seasons, or up to two wells per season, for the Phase 1 Local Project. Construction equipment and materials will be stored in their respective construction work areas. To facilitate construction and development of the subsurface slant wells, restrict access, and minimize public impacts, a contained construction area around the slant well drill rig (the “installation area”) will be required, estimated at 130 feet by 75 feet for potential wells at DSB, and 100



feet by 75 feet for potential wells at Capistrano Beach Park, as indicated in Exhibit 3-4, Southeast Intake Well Study Area, and Exhibit 3-5, Doheny State Beach Intake Well Installation and Staging Area. The installation areas will be screened to minimize noise, lighting and aesthetic impacts. Drilling of the wells will occur consecutively, with only one well being drilled at any given time within the beach construction window due to limited availability of specialized equipment, to allow for ongoing monitoring, to minimize impacts.”

*Page 3.0-38, Section 3.6, Subsection “Staging Areas,” Paragraph 3, Sentence 1*

“In addition to the ~~drill rig work installation~~ areas, the slant well construction will require staging areas for equipment laydown and storage....”

*Page 3.0-38, Section 3.6, Subsection “Staging Areas,” Paragraph 3, Sentence 5*

“~~...Conceptual locations~~ Feasible staging areas, based on preliminary discussions with State and County Parks are shown on Exhibit 3-5, Doheny State Beach Intake Well Installation and Staging Area, and include a potential 240 foot by 125 foot staging area in the south portion of the DSB North Day Use Area (where the test slant well modular units were located), and/or a narrow staging area within the DSB South Day Use Area, such that through traffic within DSB is maintained.”

*Page 3.0-39, Section 3.6, Subsection “Staging Areas – High Surf Mitigation,” Paragraph 5, Sentence 2 and 3*

“...However, due to the ~~more narrow~~ narrower beach conditions, subsurface slant well construction at Capistrano Beach Park would be exposed to high surf conditions during the winter off-season construction period ~~running from October 1 to May 1, to minimize beach recreational and access impacts~~. Therefore, the following special construction measures are anticipated for ~~High Surf~~ high surf conditions, subject to further refinement during final design and regulation agency permitting.”

*Page 3.0-39, Section 3.6, Subsection “Staging Areas – High Surf Mitigation,” Fifth paragraph, Modification of first bullet list item in last paragraph*

“...The skid-mounted drill rig will be supported by four pilings, which will be keyed in to underlying competent materials and will be grouted in place. It is anticipated the pilings will be on the order of 20-30 feet deep. The drill rig necessary for constructing the slant wells requires anchoring for normal operations independent of high surf conditions. The anchors are constructed by drilling a 10-inch borehole using a truck-mounted hollow-stem auger rig and cementing in a metal bar with eyelet in place. The anchors are needed to stabilize the rig when drilling and when pulling the drill casings. The augering for the installation would not require pile driving and therefore would not result in noise or vibration impacts associated with that process. The platform portion...”

*Page 3.0-40, Section 3.6, Subsection “Staging Areas - Raw Water Conveyance Alignment”, First full paragraph, Last sentence*

“The tunnel construction will require a steel casing sized at 66 inches to accommodate ~~the ultimate pipe size~~ sufficient pipe size for the Regional Project, which avoids further tunneling across sensitive rights-of-way in the event the Regional Project moves forward in the future.”



*Page 3.0-41, Section 3.6, Subsection “Staging Areas – Raw Water Conveyance Alignment,” First paragraph continued from p. 3.0-40, First full sentence on p. 3.0-41*

~~“...approximately 570 LF to the intersection of Las Vegas and Doheny Park Road. The alignment of the raw water pipeline beneath the Caltrans PCH bridge assumes the bents (columns/piles of the bridge) have been seismically retrofitted which will allow a transverse crossing within 10 feet of the footings.~~

*Page 3.0-41, Section 3.6, Subsection “Staging Areas – Desalination Facility Site,” Second full paragraph on p. 3.0-41, New last sentence*

~~“...The Project would require the transport of approximately 79,600 CY of dirt, with 15,000 CY to be hauled from the site and 64,600 CY to be hauled to the site. Further site grading would not be required in the event the Regional Project moved forward in the future, because it would use the same facility site as the Phase 1 Project.”~~

*Page 3.0-41, Section 3.6, Subsection “Staging Areas – Brine Disposal System” Third full paragraph on p. 3.0-41*

~~“The pipe which connects the Brine Disposal Discharge Tank to the existing SJCOO will be sized for the ultimate Regional Project 15 MGD capacity so that multiple connections are not required to the SJCOO if the Regional Project moves forward in the future. Accordingly, a pipe diameter of 24” inches has been assumed based on design criteria of 8 fps for piping.”~~

*Page 3.0-42, Section 3.6, Subsection “Construction Schedule,” First full paragraph in p. 3.0-42, Renamed (with Schedule Discussed Above)*

### ~~“Construction Schedule Maintenance”~~

~~There are two phases of development for the proposed Project: Phase I which would consist of up to an initial 5 MGD facility, and Regional Project consist of up to a 15 MGD facility. Per discussions with State Parks and County Parks, construction at the beach would only be allowable during the “off season” to minimize impacts to beach access and recreation (the specific timeframes are subject to further discussion with State Parks and County Parks staff as part of the Project’s permitting process, but for the purposes of this EIR has assumed to be from 10/1 through 5/1 to avoid the peak Summer season and also to minimize conflict with special events in the Fall and early Summer). It is estimated that it will take 2-3 months to drill and develop a 1000 foot slant well. Following well construction, the “well development” process (pumping the well to remove sands prior to initiating production) would require approximately one month. Therefore, during this off-season construction period, two wells could be constructed with a single drill rig and a separate well development rig, depending on the available construction period based on State Parks and County Parks requirements (the actual available construction period may be less, particularly for DSB, due to relatively steady visitor demand year-round, as discussed in Section 4.12, Recreation). During Phase 1, for example, 2 wells could be drilled during the first winter period and the other 2 wells could be drilled during the second winter period. Overall, the Phase 1 project is expected to last from October 2019 to December 2021. Future expansions of the Regional Project, up to 15 MGD, have yet to be determined by the District, therefore construction schedules are not yet determined.”~~



Pages 3.0-44 and 45, Section 3.7, Table 3-10, Row 9, Second bullet in the third column

California Coastal Commission (CCC)	Coastal Development Permit in accordance with the California Coastal Act (Pub. Res. Code §30000 et seq.)	<ul style="list-style-type: none"> <li>Required for marine-related improvements that change the intensity of land use within the Coastal Zone. Required for Project development proposed on tidelands, submerged lands, and public trust lands (i.e., intake wells and brine discharge facilities).</li> <li><del>With The City of Dana Point's LCP incorporates "consolidated permit review"; automatically, which allows the entire CDP to be processed directly by the Coastal Commission. In this case, the City's LCP is advisory and the Project will be reviewed for consistency with the Coastal Act. may also act as Coastal Act reviewing authority for onshore areas within the jurisdiction of the City of Dana Point.</del></li> </ul>
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Pages 3.0-44 and 45, Section 3.7, Table 3-10, New Row 19

California Department of Parks and Recreation (State Parks)	<u>Encroachment Permit</u>	<ul style="list-style-type: none"> <li>Required for construction activities within or adjacent to <u>Doheny State Beach</u></li> </ul>
	<u>License Agreement</u>	<ul style="list-style-type: none"> <li>Required for further operations and maintenance activities within or adjacent to <u>Doheny State Beach</u></li> </ul>

## SECTION 4.0 ENVIRONMENTAL ANALYSIS

This Errata makes edits that clarify, amplify or make insignificant modifications to the Environmental Analysis, but that do not add significant new information to the EIR.

Page 4.0-8, Table 4-1: Cumulative Projects, Row 8

Table 4-1: Cumulative Projects

Project Name	Project Summary
<b>Cumulative Local Projects</b>	
California Ocean Desalination Projects	<p>The following ocean desalination projects are in the vicinity of the proposed Project. All are subject to the Ocean Plan Amendment and other applicable regulations. Each facility's approximate <u>production capacity and status is noted as follows:</u></p> <ul style="list-style-type: none"> <li>Carlsbad – 50 MGD (Operational)</li> <li>Oceanside – 4.5 MGD (Feasibility Study – currently not planned for implementation)</li> <li>Camp Pendleton – 50 to 150 MGD (Feasibility Study/Pilot Project – currently on hold); <u>Pilot facility with 20 gpm open ocean intake flow, and 20 gpm subsurface intake flow (currently on indefinite hold)</u></li> <li>Santa Catalina Island – <del>0.3250.202</del> MGD (Operational)</li> <li>Huntington Beach – 50 MGD (Entitlement)</li> </ul>



*Page 4.0-7, Table 4-1, Footnote Corrections (table references and footnotes were inadvertently mixed)*

“Doheny Village<sup>1</sup>

Dana Point Harbor Revitalization Project<sup>2</sup>

SCWD CIP MND<sup>3</sup>

San Juan Watershed Project<sup>4</sup>

San Juan Creek Levee Improvement Project<sup>5</sup>

Final EIS for San Juan Creek Watershed Special Area Management Plan (SAMP)<sup>6</sup>

South OC WMA Integrated Regional Water Management Plan<sup>7</sup>

<sup>1</sup> <http://www.danapoint.org/businesses/doheny-village>

<sup>2</sup> <http://www.danapoint.org/Home/ShowDocument/12553>

<sup>3</sup> South Coast Water District, 2017 Update to Infrastructure Master Plan, Available at <https://www.scwd.org/about/plansanddocs/infrastructure.asp>, (accessed January 26, 2018).

<sup>4</sup> <http://sanjuanwatershed.com/>

<sup>5</sup> Orange County Public Works Flood Division, San Juan Creek Levee Improvement Project, Available at [http://www.ocflood.com/nfc/projects\\_a/sjcleveeimp#overview](http://www.ocflood.com/nfc/projects_a/sjcleveeimp#overview), (accessed January 26, 2018); updated website available at [http://www.ocflood.com/gov/pw/flood/nfc/projects\\_a/san\\_juan\\_creek\\_levee\\_improvement\\_project/default.asp](http://www.ocflood.com/gov/pw/flood/nfc/projects_a/san_juan_creek_levee_improvement_project/default.asp) (accessed April 30, 2019).

<sup>6</sup> US Army Corps of Engineers Los Angeles District, Draft Environmental Impact Statement San Juan Creek and Western San Mateo Creek Watershed Special Area Management Plan (SAMP) December 2006.

<sup>7</sup> [http://www.ocwatersheds.com/programs/ourws/wmaareas/wmasouthoc/soc\\_wma\\_irwmp](http://www.ocwatersheds.com/programs/ourws/wmaareas/wmasouthoc/soc_wma_irwmp) (accessed May 3, 2018).”

## SECTION 4.1 AESTHETICS

*Page 4.1-13, Section 4.1.4, Subsection “Mitigation Measures,” Mitigation Measure AES-2, New final sentence*

### “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. 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.”

## SECTION 4.2 AIR QUALITY

*Page 4.2-22, Section 4.2.4, Subsection “Mitigation Measures,” Entire section*

“No mitigation measures are required. Mitigation Measures AQ-1 through AQ-3 regarding Project construction will mitigate this impact to a less than significant level.”

*Page 4.2-29, Section 4.2.4, Subsection “Mitigation Measures,” Mitigation Measure AQ-3, new bullets added to end of mitigation measure on p. 4.2-29*

- “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.”

*Page 4.2-31, Section 4.2.4, Subsection “Construction – Toxic Air Contaminants”, New language added to the end of the first paragraph*

“...According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the health risk relative to exposure of sensitive receptors to TAC emissions, should be based on a 24 hour a day, 7 days per week, 365 days per year, 30-year exposure period (i.e., chronic lifetime) when assessing TACs (such as DPM) that have cancer or chronic non-cancer health effects.<sup>2</sup> The Project will not be emitting TACs in large concentrations, nor on a 24-hour basis. The totality of air quality emissions or “doses” from the project (from both construction and operation) are so low and infrequent, as shown in the modeling for the impact analysis, that there are no significant health risk impacts associated with the Project. “

## SECTION 4.3 BIOLOGICAL RESOURCES

*Page 4.3-11, Section 4.3.1, Subsection “Marine Communities – Pelagic Community,” Third full paragraph on p. 4.3-11, New final sentence*

“...Other species that are likely present in the area that were in habitats similar to that of the Project area include croaker (SCIAENIDAE), Silversides (ATHERINOPSIDAE), California grunion, blennies (BLENNIIDAE), and gobies (GOBIIDAE). The California grunion is not a special status species under the Federal Endangered Species Act or California Endangered Species Act. Further, it is not identified as a sensitive animal species



with known or potential occurrence within or near Doheny State Beach by the Doheny State Beach General Plan or General Plan EIR.”

*Page 4.3-11, Section 4.3.1, Subsection “Connectivity and Migration Corridors,” New first sentence in the fifth full paragraph on p. 4.3-11*

“The terrestrial environmental setting of the desalination facility Project, as described previously, is heavily disturbed, urbanized and currently used for commercial, industrial and recreational uses. Opportunities for wildlife movement in the immediate area may be present within the San Juan Creek channel, although the channel adjacent to the project site is hardened and lined for flood control, and provides little vegetative cover before the creek reaches the lagoon area downstream. California gray whales (*Eschrichtius robustus*) pass offshore of southern California annually during their migration between the Bering Sea and birthing lagoons in Baja California, and are the most frequently observed northward migrating whale in the Project vicinity....”

*Page 4.3-12, Section 4.3.1, Subsection “Connectivity and Migration Corridors,” New paragraph at the end of subsection “Connectivity and Migration Corridors”*

“...Blue whales are known to be slightly further from shore than gray whales, but do still tend to remain fairly close to land during their migration.

Terrestrial biological corridors are areas of continuous habitat or landscape that provide a connection for wildlife passage between areas of natural or relatively undisturbed habitat. In the Project area there are two terrestrial biological corridors (DSB General Plan, 2003). San Juan Creek passes through a highly urbanized landscape to connect the lower creek in the Project area to natural habitat in the upper San Juan Creek Watershed, including the Cleveland National Forest. The San Juan Creek corridor intercepts the shoreline, the second terrestrial biological corridor in the Project area, and the Pacific Ocean. Shorelines and beaches along the Pacific coast provide stopover sites for migratory shorebirds, while vegetated coastal areas, including natural and ornamental landscapes, pockets of riparian habitat, and coastal wetlands, support migration of upland and water-associated birds. In the Project area, a strip of highly disturbed native and ornamental vegetation along Pacific Coast Highway supports movement of resident and migrant wildlife between higher-quality coastal habitat (DSB General Plan, 2003).”

*Page 4.3-17, Section 4.3.2, Table 4.3-2: Managed Fish Species Found in the Project site, Sources in last column*

“Sources:

a: Love 2011; Miller and Lea 1972; Eschmeyer et al. 1983

b: MBC and Tenera 2005; MBC 2007, 2013

c: CDFW 2016; Weston 2011, 2015; MBC 2013; Tetra Tech 2010, CSP 2003; Allen and DeMartini 1983.

Appendix 10.4.1, Table 6, page 16.”

*Page 4.3-26, Section 4.3.3, Subsection “Project Design Features,” First bullet under subsection*

- “The subsurface intakes are the preferred ocean water intake method by the SWRCB’s Ocean Plan Amendment, as they avoid eliminate marine life impingement and entrainment impacts;...”



Page 4.3-36, Section 4.3.4, Subsection “Mitigation Measures,” Mitigation Measure BIO-4

“**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.”

Pages 4.3-36, Section 4.3.4, Subsection “Mitigation Measures,” New mitigation measure beneath Mitigation Measure BIO-4

“**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 that includes the identification of a suitable transplant location nearby, temporary holding and transport methods, and reporting requirements.”

## SECTION 4.4 CULTURAL RESOURCES

Page 4.4-29, Section 4.4.5, Subsection “Mitigation Measures,” Final paragraph of Mitigation Measure CUL-2, New final sentence

“ ...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.”



## SECTION 4.5 GEOLOGY AND SOILS

*Page 4.5-16, Section 4.5.4, Subsection "Operations – All Components," Last Paragraph, Fourth sentence.*

"...The component with the most extensive facility infrastructure is the desalination facility, which is located on the east side of San Juan Creek. The creek is supported by an existing concrete channel wall ~~to,~~ which reduces the potential for impacts due to erosion and liquefaction by providing a structurally stable site...."

*Page 4.5-19, Section 4.5.4, Subsection "Mitigation Measures," Mitigation Measure GEO-1, New language added to the end of the mitigation measure*

**"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 tsunamis (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.
- c) That geotechnical report shall also provide geotechnical recommendations for constructing retaining walls and/or associated temporary slopes as applicable."

## SECTION 4.6 GHG

*Page 4.6-22, Section 4.6.4, Subsection "Mitigation Measures," Mitigation Measure GHG-1, New number 2*



“...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.” ...

*Page 4.6-22, Section 4.6.4, Subsection “Mitigation Measures,” Mitigation Measure GHG-1, Number 4, New fourth sentence*

**“4) 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:...

*Page 4.6-24, Section 4.6.4, Subsection “Mitigation Measures,” Final sentence of Mitigation Measure GHG-2 on p. 4.6-24*

“...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.”

## SECTION 4.7 HAZARDS

*Page 4.7-29, Section 4.7.4, Subsection “Mitigation Measures,” New paragraph added to the end of Mitigation Measure HAZ-3 on p. 4.7-29*

**“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.”

*Page 4.7-33, Section 4.7.4, Subsection “Mitigation Measures,” New Paragraph at the end of mitigation measure HAZ-4*

“...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.”

*Page 4.7-35, Section 4.7.7, Subsection “Mitigation Measures,” New paragraph added to end of Mitigation Measure HAZ-8 on p. 4.7-35*

“...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.

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.”

*Page 4.7-44, modified Exhibit 4.7-2*

See attached modified Exhibit 4.7-2.

## SECTION 4.8 HYDROLOGY AND WATER QUALITY

*Page 4.8-18, Section 4.8.2, Subsection “State – Sustainable Groundwater Management Act”, Paragraph 1*

“The State of California currently lists the subterranean stream underlying San Juan Basin Creek as a “very low” priority groundwater basin relative to SGMA, which means that a date for GSA formation and GSP preparation has not been set by DWR.”

*Page 4.8-28, Section 4.8.3, Subsection “Mitigation Measures,” Mitigation Measure HWQ-1, New final sentence and final paragraph at the end of Mitigation Measure HWQ-1*

**“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.”

*Page 4.8-29, Section 4.8.3, Subsection “Mitigation Measures,” Mitigation Measures HWQ-3 and HWQ-4*

~~**“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."~~

**"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 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."

*Page 4.8-29, Section 4.8.3, Subsection Construction – All Components," Second to last paragraph on p. 4.8-29*

"In the event that interim pumping for iron and manganese removal is required, it would not have any different impact than that evaluated for normal operating conditions, as the pumping rate would be similar. For extended slant well pumping to remove iron and manganese, the net effect on local groundwater supplies would be higher than the steady state condition achieved after 18 months or so of pumping. This initial higher portion of inland groundwater is not considered a significant impact, as it would be temporary, the affected groundwater is not usable due to high salinity levels, and the Project's long-term effect would be to protect groundwater resources by providing a new source of potable water. As discussed below and in Appendix 10.10.1, temporary extended pumping at Capistrano Beach Park



(slant well pods F, G, and H) would not have any impact on San Juan Basin groundwater in the subterranean channel underlying San Juan Creek."

*Page 4.8-30, Section 4.8.3, Subsection "Operations – All Components," Final paragraph on p. 4.8-30*

Slant wells at DSB have the potential to reduce annual San Juan Basin groundwater yield in the subterranean channel underlying San Juan Creek by up to 392 AFY, and the nearshore shallow aquifer groundwater levels could be reduced by as much as 13.96 feet for the Phase I Project during dry geologic periods. (See Table 1 and Table 4-3 in Appendix 10.10.1). 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 which in order to improve water quality in the subterranean channel.<sup>1</sup> Moreover, the majority of potential impact would be on SCWD's groundwater wells (approximately 217 AFY of the 392 AFY reduction would affect SCWD's wells) and SCWD could also possibly adjust its production if needed to account for inland pumping effects, as the affected groundwater is not potable due to elevated salinity levels, and ~~the DSB slant wells will actually create a pumping "trough" which will reduce further seawater intrusion into the subterranean channel~~ San Juan Basin.<sup>22</sup> 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. In addition, Note that the District has a current groundwater right of up to 1,300 AFY (or approximately 1.15 MGD).<sup>23</sup> ~~Subject to confirmation by the San Juan Basin Authority and State Water Resources Control Board,~~ The District is not anticipated to need new or modified water rights, as the inland groundwater drawn in by the slant wells would be less than the District's current groundwater rights (0.6 MGD compared to an existing right of 1.15 MGD)<sup>23</sup>, ~~and the groundwater drawn into the slant wells is "undeveloped" and available for extraction (since it is not usable due to high salinity levels).~~<sup>24</sup> The nearshore shallow aquifer groundwater levels could be reduced by as much as 13.96 feet for the Phase I Project. However, there are no local potable groundwater wells that would be adversely affected by this change (refer to Section 4.3, Biological Resources, for a discussion of groundwater level effects on the San Juan Creek Lagoon and associated wildlife).

*Page 4.8-30, Footnotes 22, 23, 24*

<sup>22</sup> ~~Appendix 10.10.1, page 53. Draft EIR Appendix 10.10.2, pages 4 and 7.~~

<sup>23</sup> ~~South Coast Water District 2015 Urban Water Management Plan, page 3-8.~~

<sup>1</sup> In September 2014, during the recent drought, SCWD shutdown its Groundwater Recovery Facility (GRF) as a response to water quality results that demonstrated elevated levels of specific constituents, as requested by SJBA based on the parameters of SCWD's diversion permit (Permit 21138). In the twelve months before the shutdown, approximately 1,100 AFY was extracted from the Stonehill well, and GRF production placed into the distribution system for beneficial use was approximately 880 AFY. (See, SCWD Well Water Extraction Reports, 2013-2014; see also, Permit for Diversion and Use of Water, Permit 21138, Application 30337 of SCWD (filed March 4, 1995)



~~24~~ State Water Resource Control Board Final Review of California American Water Company's Monterey Peninsula Water Supply Project, July 31, 2013, Section 6.4."

*Page 4.8-40, Section 4.8.3, Subsection "Mitigation Measures," Mitigation Measure HWQ-6, New final sentence*

**"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."

*Page 4.8-48, modified Exhibit 4.8-2*

See attached modified Exhibit 4.8-2.

## SECTION 4.10 NOISE

*Page 4.10-24, Section 4.10.4, Subsection "Mitigation Measures," Mitigation Measure NOI-1, New bullets added after the last bullet on p. 4.10-24*

**"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 (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.”

## SECTION 4.13 TRANSPORTATION AND TRAFFIC

*Page 4.13-13, Section 4.13.4, Subsection “Construction – City of Dana Point/Caltrans,” Second full paragraph on p. 4.13-13, Third sentence*

“...Municipal Code 12.04.115 exempts truck limitations for use on designated truck routes and necessary travel from local streets to the nearest truck route, which include ~~Del Prado (north end to south end)~~, Del Obispo (from PCH to Northern City Boundary), and PCH (from San Juan Creek to Camino Capistrano)....”

*Page 4.13-15, Section 4.13.4, Subsection “Construction – Capistrano Beach Park,” Paragraph 1, Sentence 2*

“... As this planned future improvement is intended to use ~~railroad right-of-way~~ Coast Highway and the slant well construction would not utilize rail right-of-way (and would be temporary), the Project would not conflict with this future planned City bike trail improvement.”

*Page 4.13-15, Section 4.13.4, Subsection “Construction – City of Dana Point/Caltrans,” Paragraph 4, Sentence 2*

“...As noted above, Capistrano Beach Park has direct access to ~~PCH~~ Coast Highway, which is a designated truck route with ready access to I-5....”

*Page 4.13-16, , Section 4.13.4, Subsection “Construction – City of Dana Point,” Third full paragraph on p. 4.13-15, New sentence after the fifth sentence*

“...As noted in Section 3.0.0, Project Description, the North Alignment is presently not the preferred alignment, due to an existing repaving moratorium on Del Obispo Street. The City of Dana Point notes additional concerns for the North Alignment, including traffic impacts to heavily traveled roads including PCH, Dana Point Harbor Drive, and Del Obispo, as well as potential impacts to City parks and facilities due to trenching. Should the South Alignment be determined as infeasible or otherwise undesirable, SCWD would pursue the North Alignment and resolve appropriate compensation...”



*Pages 4.13-19, Section 4.13.4, Subsection "Mitigation Measures," Mitigation Measure TRF-1, New final paragraph*

**"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<sup>5</sup> shall maintain through park access for motor vehicles, bicycles and pedestrians. To accommodate peak parking demand for Special Events during the offseason, 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)."

*Pages 4.13-20, Section 4.13.4, Subsection "Mitigation Measures," New language added to the end of Mitigation Measure TRF-2 and the addition of a new TRF-3*

**"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;<sup>2</sup>
- Need, if any, for construction work hours and arrival/departure times outside of peak traffic periods;
- Maintaining access for emergency vehicles;
- Advanced notice to local agencies, transit providers, school districts, and emergency service providers regarding the anticipated schedule, location, and

<sup>2</sup> SCRRRA made comments on the Amended NOP (letter dated December 18, 2017), requesting consideration of a signal at the intersection of Stonehill Drive and the SCWD access road paralleling San Juan Creek. However, SCWD had previously investigated the potential for a permanent signal at this location and determined it to be infeasible due to the short distance (less than 700 feet) between the access road and Camino Capistrano, as well as potential turning movement conflicts with the hotel and commercial center driveways located less than 200 feet from the SCWD access road.



- 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).

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.”

## SECTION 9.0 REFERENCES

This Errata makes edits that clarify, amplify or make insignificant modifications to the reference, but that do not add significant new information to the EIR.

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## **APPENDIX 10.7.1 COASTAL HAZARD ANALYZIS FOR THE DOHENY DESALINATION PROJECT**

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but that does not add significant new information to the EIR.

*Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendix 4.2.1 in Section 4.2 of the Final EIR for the clarified analysis.”

## **APPENDIX 10.7.2 COASTAL HAZARD SUPPLEMENTAL ANALYSIS FOR THE DOHENY DESALINATION PROJECT**

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but that does not add significant new information to the EIR.

*Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendix 4.2.1 in Section 4.2 of the Final EIR for the clarified analysis.”



## APPENDIX 10.9 LOCAL HAZARD CONDITIONS AND DRAINAGE STUDY (HYDROLOGY STUDY)

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but does not add significant new information to the EIR.

### *Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendix 4.2.4 in Section 4.2 of the Final EIR for the clarified analysis.”

### *Page ii, Subsection “Figure Index”*

“...

Figure 2.3 — Future Flooding 2100 ————— 30

...

Figure 2.5 — Tsunami Flooding 2070 ————— 32

...

### *Page iii, Subsection “Figure Index”*

Figure 3.11a — Flood Inundation Map, 100-Year Event, Future Condition, Alternative 1a ————— 51

...

Figure 3.12a — Change in Flood Inundation, Existing Condition vs Alternative 1a ————— 53

...

Figure 4.1 — Flood Inundation Map, 500-Year Event, Existing Condition ————— 60

Figure 4.2 — Flood Inundation Map, 500-Year Event, Future Condition ————— 61

Figure 4.3 — Change in Flood Inundation, 500-Year Event, Existing vs Future Condition ————— 62

### *Page iii, Subsection “Table Index”*

...

Table 3.12 — Peak Flow Summary at Storm Drain Facilities Creek Outfall ————— 28

Table 4.1 — 500-Year Storm Peak Flow Summary for Project Watersheds ————— 29

Table 4.2 — 500-Year Storm Outfall Boundary Conditions at San Juan Creek ————— 31”



*Page 1, Section 1, Subsection 1.1 "Introduction," First bullet*

- "Coastal Analysis: A Local Hazard Conditions assessment evaluated the potential coastal flooding under the projected sea level rise scenarios. The assessment was conducted pursuant to the California Coastal Commission Sea Level Rise Policy Guidance, (~~August, 2015~~2018)."

*Page 3, Section 2, Subsection 2.1 "Introduction," Paragraph 1, Last sentence.*

"This study was conducted pursuant to the California Coastal Commission Sea Level Rise Policy Guidance (~~August, 2015~~) and the, 2018. The following is a summary of the Local Hazard Conditions assessment based on the process outlined in Appendix B of the Sea Level Rise Policy Guidance, and the sea level rise projections in Appendix G, Table G-11 (California Coastal Commission 2018)."

*Page 3, Section 2, Subsection 2.1 "Introduction," Paragraph 2, Sentence 1*

"The study was completed by Michael Baker International and presented in the ~~February 2017~~updated September 2018 report titled Coastal Hazards Analysis for the Doheny Desalination Project by Scott A. Jenkins (Appendix B)...."

*Page 3, Section 2, Subsection 2.1 "Introduction," Paragraph 4, Sentence 2*

~~"...A critical infrastructure planning horizon of Year 2100 was used as the National Research Council (NRC) sea level projections (NRC, 2012), which form the basis of the sea level projections along the California Shoreline, do not extend beyond Year 2100. Significant uncertainties and variables render reliable sea level projections beyond Year 2100 difficult.~~

*Page 3, Section 2, Subsection 2.1 "Introduction," Paragraph 5, Sentence 2*

...For additional detail refer to GHD May 1, 2017 memo Doheny Desalination Plant Historical Shoreline Assessment (Appendix A), and, Michael Baker International (~~2017~~2018) Coastal Hazards Analysis for the Doheny Desalination Project by Scott A. Jenkins (Appendix B)."

*Page 3, Section 2, Subsection 2.2.1 "Sea Level Rise Projection," Paragraph 6, Sentence 1*

"Sea level rise projections were based on the water level province tabulation from NOAA tide gauge stations with extended periods of record (California Coastal Commission ~~best fit equations (CCC, 2015~~2018). The Doheny Desalination Project falls within the La Jolla tide gauge water level province. Sea level rise projections are provided in Table G-11 in Appendix b) for a 50-year planning horizon at Year 2100-G of the California Coastal Commission 2018. Sea level rise projections for the lower and upper ranges are provided in Table 2.1."



Page 4, Section 2, Subsection 2.2.1 "Sea Level Rise Projection," Table 2.1

**Table 2.1 Sea Level Rise Projections**

Planning Time Period (Year)		Best Fit Equation	
		Lower Range (feet)	Upper Range (feet)
50 year planning horizon (CCC, 2018)	2070	<del>0.72.0</del>	<del>3.23.6</del>
Critical Infrastructure Planning Horizon (CCC, 2018)	2100	<del>1.43.6</del>	<del>5.57.1</del>

Page 4, Section 2, Subsection 2.2.2 "Tidal Range and Future Inundation," Entire section

"Tidal datums were based on water level measurements from the Scripps Pier tide gauge station, NOAA #9410230 for the 1983 – 2001 tidal epoch. Projected sea level rise for 2070 and 2100 were available from Table G-11 in Appendix G of California Coastal Commission 2018. Tidal datums and future datums based on lower and upper sea level rise projections are provided in Table 2.2."

**Table 2.2 Tidal Datums at Scripps Pier NOAA Tide Gage Station 1983-2001 with Projected Sea Level Rise**

Datum	Elevation (ft NAVD)	SLR 2070 lower range (ft NAVD)	SLR 2070 upper range (ft NAVD)	SLR 2100 lower range (ft NAVD)	SLR 2100 upper range (ft NAVD)
<del>Highest Observed</del> EHY (Extreme High Water)	7.47	<del>8.179.47</del>	<del>10.6811.07</del>	<del>8.8411.07</del>	<del>12.9714.57</del>
MHHW (Mean Higher High Water)	5.13	<del>5.837.13</del>	<del>8.348.73</del>	<del>6.58.73</del>	<del>10.6312.23</del>
MHW (Mean High Water)	4.41	<del>5.116.41</del>	<del>7.628.01</del>	<del>5.788.01</del>	<del>9.9111.51</del>
MTL (Mean Tide Level)	2.56	3.26	5.77	3.93	8.06
MSL (Mean Sea Level)	2.54	<del>3.244.54</del>	<del>5.756.14</del>	<del>3.916.14</del>	<del>8.049.64</del>
MLW (Mean Low Water)	0.71	1.41	3.92	2.08	6.21
MLLW (Mean Lower Low Water)	-0.19	0.51	3.02	1.18	5.31
Lowest Observed	-3.06	-2.36	0.15	-1.69	2.44

Page 5, Section 2, Subsection 2.2.5 "Waves, Wave Runup and Flooding Conditions," Paragraph 6, Sentence 1

"Future flooding levels were determined by Michael Baker International (2017) as outlined in Appendix B of CCC (2015), 2018, based on California Coastal Commission 2018."...

Page 6, Section 2, Subsection 2.2.5 "Waves, Wave Runup and Flooding Conditions," First paragraph continued from p. 5

"...The potential future flooding extent for the different scenarios are shown in Figures 2.2 and 2.3 based on topography generated from USACE 2014 LiDAR data. The figure shows total water levels for the accreted beach conditions for each event since these were higher water levels than the eroded beach condition. Note that the flood extent based on the extremal total water levels is a worst case approach since it includes wave runup. Wave runup is a short term process and therefore may not result in flooding



to the full extent of the runup elevation. Also note that the mapping shows flooding for all areas below the given flood elevation even though there may not be a direct flow path to all locations. It can be seen ~~only~~ that the extremal total water level for the low and high range sea level rise for 2100 may reach a very small portion at the very seaward tip of the project site where there is no proposed infrastructure. It also may flood along an existing South Drainage Swale due to backwater from the creek to the low grade area along the swale. The potential for flooded wellheads and overtopping rates for each scenario are summarized in Table ES-1 in Appendix B.

*Page 6, Section 2, Subsection 2.2.5 “Waves, Wave Runup and Flooding Conditions,” First full paragraph on p. 6, First two sentences*

“Alternative flood extent predictions with sea level rise were available from CoSMoS 3.0 (EriksonBarnard et al., ~~2017~~2018). Flooding extents at the study site for the 0.5 m, 2 m and 5 m sea level rise scenarios for a 100-year storm event are presented in Figure 2.43...”

*Page 6, Section 2, Subsection 2.2.6 “Extreme Flooding Events Due to Tsunami,” Second full paragraph on p. 6, Final two sentences*

“...Flooding extents of the low and high range ~~2070 and~~2100 sea level projection scenarios are illustrated in Figure 2.54. Flood limits were very similar to the 100-year wave storm event for the 2100 low and high range sea level rise predictions (Figure 2.62). Flood levels were approximately 0.4 ft higher for the low range and high range sea level rise limits for a 100-year event. It can be seen that ~~only~~ the tsunami for the 2100 low and high range sea level rise scenarios may reach a very small portion at the seaward tip of the property where there is no proposed infrastructure. Flooding also impacts the area around the existing South Drainage Swale due to backwater from the creek to the low grade area along the swale.”

*Page 6, Section 2, Subsection 2.2.6 “Extreme Flooding Events Due to Tsunami,” Fourth full paragraph on p. 6*

“The assessment shows that the projected sea level rise scenarios considered in this study does not pose significant flood risk to the project site. The backwater ponding shown along the South Drainage Swale can be mitigated by site design to regrade the low ground area along the swale.”

*Page 8, Section 3, Subsection 3.2.2 “Boundary Condition at Pacific Ocean,” Table 3.1*

**Table 3.1 Tidal Boundary Elevations Used in HEC-RAS Model**

Pacific Ocean Tidal Boundary Condition	Tidal Elevation (NGVD 29)	Tidal Elevation (NAVD 88)
Mean Higher High Water (MHHW)	<u>1.872.87</u>	<u>4.135.13</u>
2070 Low Sea Level Rise Projection under MHHW	<u>3.584.87</u>	<u>5.847.13</u>
2070 High Sea Level Rise Projection under MHHW	<u>6.086.47</u>	<u>8.348.73</u>
<u>2100 Low Sea Level Rise Projection under MHHW</u>	<u>6.47</u>	<u>8.73</u>
<u>2100 High Sea Level Rise Projection under MHHW</u>	<u>9.97</u>	<u>12.23</u>



*Page 9, Section 3, Subsection 3.2.4 “Analysis Results,” New paragraph 1*

“The HEC RAS model also simulated the Year 2100 High MHHW Sea Level Rise projection for the 100-year storm event, to determine if it had any effect on the water surface elevation in San Juan Creek upstream of the Highway 1 Bridge. Using the high sea level rise projection, the water surface elevation in the creek did change upstream of the bridge, however only during the receding limb of the streamflow hydrograph beginning at hour 30 of the simulation (note: the peak discharge in San Juan Creek occurs at hour 17.25). At this time, the flow in the stream is approximately 300 cfs, which is just a fraction of the flow that occurs at the peak of the storm (approximately 45,000 cfs for the peak of the 100-year storm). The change in water surface elevation only persists for about 500 feet upstream of the bridge, after that there is no effect that the boundary condition has on the water surface elevation at any point in time.”

## **APPENDIX 10.10.2 DOHENY DESALINATION PROJECT - MODEL UPDATE AND REFINEMENT USING RESULTS FROM ONSHORE AND OFFSHORE GEOPHYSICAL SURVEYS AND EXPLORATORY BOREHOLE DATA**

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but does not add significant new information to the EIR.

*Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendices 4.2.3.1 and 4.2.3.2 in Section 4.2 of the Final EIR for the clarified analysis.”

## **APPENDIX 10.10.2 MODELING OF SLANT WELL FEED WATER SUPPLY, IMPACTS AND MITIGATION APPROACHES**

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but does not add significant new information to the EIR.

*Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendices 4.2.3.1 and 4.2.3.2 in Section 4.2 of the Final EIR for the clarified analysis.”

## **APPENDIX 10.10.3 GEOPHYSICAL SURVEY RESULTS**

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but does not add significant new information to the EIR.

*Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendices 4.2.3.1 and 4.2.3.2 in Section 4.2 of the Final EIR for the clarified analysis.”



## APPENDIX 10.11 BRINE DISCHARGE

This Errata makes edits that clarify, amplify or make insignificant modifications to the technical study, but does not add significant new information to the EIR.

*Appendix slipsheet, new final paragraph*

“The following technical appendix has been modified in response to Draft EIR comments. Refer to Appendices 4.2.2, 4.2.5.1, and 4.2.5.2 in Section 4.2 of the Final EIR for the clarified analysis.”

*Page 4.7-44, modified Exhibit 4.7-2*

See attached modified Exhibit 4.7-2.

*Page 4.8-48, modified Exhibit 4.8-2*

See attached modified Exhibit 4.8-2.



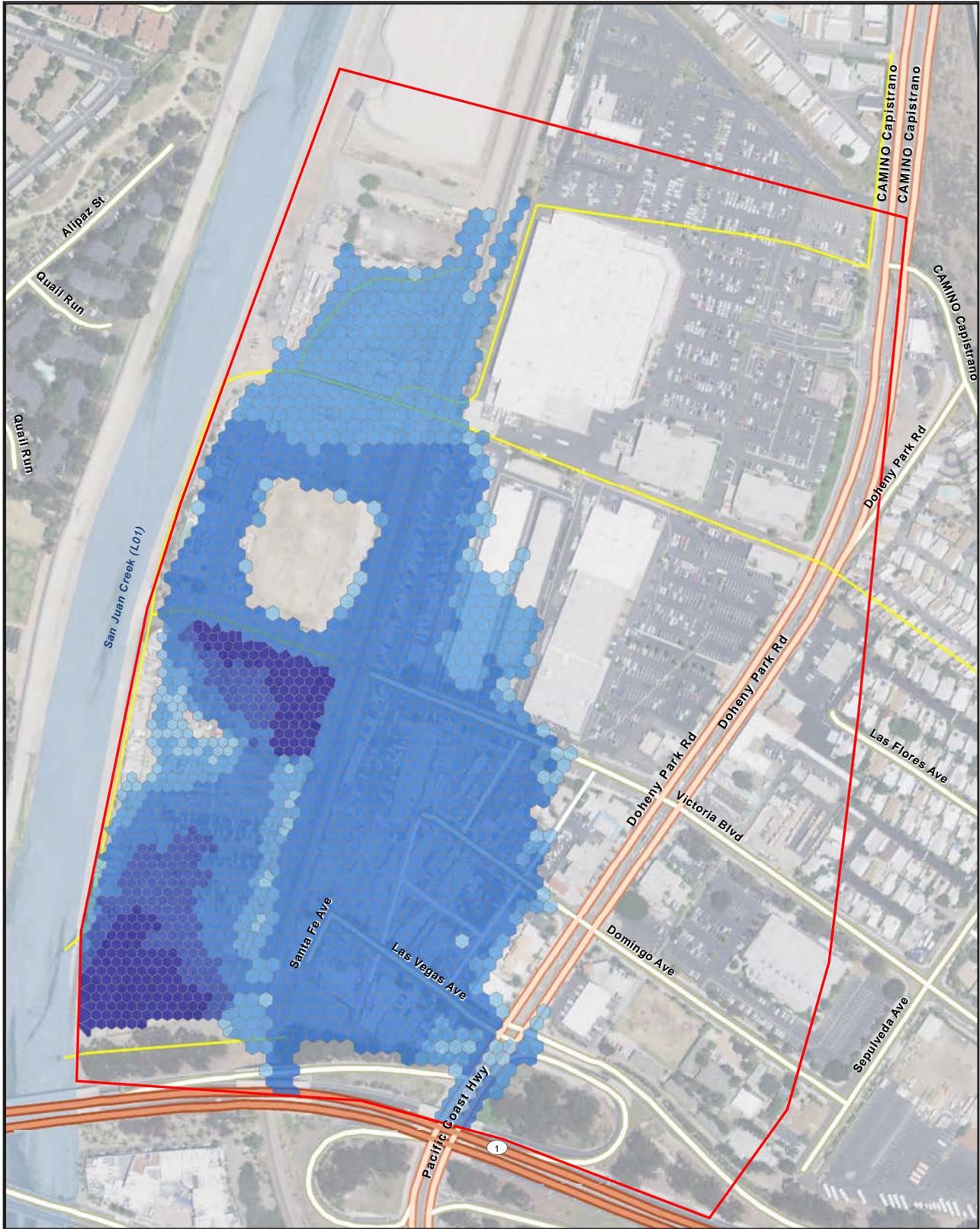


**EXHIBIT 4.7-2: Schools within 0.25 Miles of the Proposed Project**

South Coast Water District  
 Doheny Ocean Desalination Project



**Kimley»Horn**



— Storm Water Conduits (in model)   
  Two-Dimensional Model Boundary   
 Source: GHD Written Correspondence, March 5, 2018.

**Maximum Flooding Depth**

- 2-6"
- 6-12"
- 1-2'
- 2-3'
- >3'

**EXHIBIT 4.8-2: Change in Flood Inundation Existing Condition vs. Alternative 1**

South Coast Water District - Doheny Ocean Desalination Project

