

VENTURA WATER SUPPLY PROJECTS

Final Environmental Impact Report
CASE NO. EIR-9-19-52130
PROJECT# PROJ-1383313707
SCH No. 2017111004

Prepared for
Ventura Water
501 Poli Street, Room 120
Ventura, CA 93002-0099

September 2019



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770 Paseo Camarillo
Suite 310
Camarillo, CA 93010
805.914.1500
www.esassoc.com



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Appendix G	Vegetation Mapping of the Proposed Treatment Wetland Site

CHAPTER 9

Introduction to the Final EIR

9.1 Overview of the Final EIR

This Final Environmental Impact Report (Final EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Administrative Code Section 15000 et seq.). The Final EIR incorporates, by reference, the Draft EIR (DEIR) (State Clearinghouse No. 2017111004) prepared by City of San Buenaventura (City) for the Ventura Water Supply Projects (projects) as it was originally published. Section 15132 of the CEQA Guidelines states that the Final EIR shall consist of the following:

- (a) The DEIR or a revision of the draft.
- (b) Comments and recommendations received on the DEIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the DEIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the Lead Agency.

Before the City may approve the projects, it must certify that the Final EIR: (a) has been completed in compliance with CEQA; (b) was presented to the City Council, which reviewed and considered it prior to approving the projects; and (c) reflects the City's independent judgment and analysis (CEQA Guidelines Sections 15090, 15004).

This Final EIR for the Ventura Water Supply Projects includes the following:

- Chapter 9: Introduction – A list of comments received on the DEIR, a consistency assessment with revised CEQA Appendix G Checklist questions, and a summary of project benefits.
- Chapter 10: Comment Letters and Responses – The written and oral comments received on the DEIR, and written responses to each comment.
- Chapter 11: Clarifications and Modifications – A summary of changes made to the DEIR in response to comments received or initiated by the Lead Agency.
- Chapter 12: References – A list of references used in responding to the comments received on the DEIR.

- Appendices –
 - Appendix E- Estimated Project Costs for Ventura Water Supply Projects and Alternatives Memorandum
 - Appendix F-Santa Clara River Stream Flow Analysis
 - Appendix G-Vegetation Mapping of the Proposed Treatment Wetlands Site Technical Memorandum

9.2 Commenters on the DEIR

The following individuals and agencies commented on the DEIR. Chapter 10 contains responses to these comments.

**TABLE 9-1
LIST OF COMMENTERS**

Commenter Agencies	Source of Comment	Date Received (2019)
<i>Federal</i>		
F1	U.S. Fish and Wildlife	April 10
F2	NOAA Fisheries West Coast Region	April 22
<i>State</i>		
S1	California State Parks	April 9
S2	California State Transportation Agency	April 19
S3	California State Parks	April 19
S4	California Coastal Commission	April 22
S5	California State Lands Commission	April 22
S6	California Department of Fish and Wildlife	April 22
S7	Los Angeles Regional Water Quality Control Board	April 22
S8	Los Angeles Regional Water Quality Control Board	April 23
<i>Local Agencies</i>		
LA1	Ventura County Public Works Agency – Transportation Department	April 16
LA2	Ventura County Watershed Protection District	April 18
LA3	Ventura County Planning Division – Long Range Section	April 22
LA4	Ventura County Air Pollution Control District	April 22
LA5	Fox Canyon Groundwater Management Agency	April 22
<i>Individuals</i>		
I1	Duane Georgeson	March 9
I2	Jean Getchell	March 11
I3	Duane Georgeson	March 25
I4	Katherine Malzacher-Maxwell	March 28

Commenter Agencies	Source of Comment	Date Received (2019)
I5	Steve Oreilly	March 28
I6	Dr. Edo McGowan	March 28
I7	Charles Spraggins	March 28
I8	Adrienne and Bob Krause	March 29
I9	Charles Spraggins	March 30
I10	Charles Spraggins	March 31
I11	Joe Chrisman	April 1
I12	Joseph Richardson	April 1
I13	Jim Oliver	April 1
I14	Duane Georgeson	April 1
I15	Stephen Simms	April 2
I16	Burt Handy	April 4
I17	Burt Handy	April 4
I18	Charles Spraggins	April 7
I19	Debra Barringer	April 10
I20	Randall Novak	April 10
I21	Daniel Cormode	April 12
I22	June Juett	April 14
I23	Kioren Moss	April 15
I24	Mike Juett	April 15
I25	Larry Permen	April 16
I26	Laura Gulovsen	April 16
I27	Burt Handy	April 18
I28	Suzanne McCombs	April 21
I29	Duane Georgeson	April 21
I30	Burt Handy	April 21
I31	Andrew Schneider	April 22
<i>Water Commission Meeting Comment Cards and Supporting Materials</i>		(March 26)
I32	David Johnson	
I33	Randall Novak	
I34	Mike Anderson	
I35	Matthew Doyle	
I36	Daniel Cormode	

9.3 Information Relating to CEQA Amendments Effective in 2019

Consistency with Updated CEQA Appendix G Checklist

CEQA was recently amended to include modifications to the Appendix G Checklist of impact thresholds of significance. **Table 9-2** identifies changes made to the Checklist since the Checklist for the Water Supply Projects DEIR was prepared. The table explains how the analysis in the published Draft EIR is consistent with and inclusive of the issues raised in the updated Checklist.

TABLE 9-2
2019 CEQA UPDATE CONSISTENCY ASSESSMENT

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Aesthetics	Page Number	Summary of Analysis and Conclusions
c) <u>In non-urbanized areas, S-substantially degrade the existing visual character or quality of public views the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?</u>	3.1-24 through 3.1-28	See Impact AES 3.1-3 of the Final EIR. The DEIR evaluates impacts to public views consistent with the CEQA Checklist Updates. Construction activities would require the use of construction equipment and storage of materials within the projects sites. Excavated areas, stockpiled soils, and other materials generated during construction could impact the visual character of the surrounding environment. However, construction would be temporary and would not permanently affect the existing visual character of the surrounding area. Nevertheless, Mitigation Measure AES-1 would require preparation of a Construction Management Plan that would identify staging areas and screening to minimize public views to the maximum extent practicable. The proposed facilities would look different from the vacant land and agricultural fields that currently exist within each proposed parcel. However, there are no sensitive views that would be impacted by the construction of the AWPf or wells. Nevertheless, implementation of Mitigation Measure AES-2 would require that the structures associated with the AWPf and wells be constructed of similar material or painted to match the character of the particular existing surrounding environment.
Air Quality	Page Number	Summary of Analysis and Conclusions
be) <u>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?(including releasing emissions which exceed quantitative thresholds for ozone precursors)?</u>	3.3-30 and 3.3-31	See Impact AQ 3.3-3 of the Final EIR. The DEIR evaluates cumulative impacts to air quality consistent with the CEQA Checklist Updates. While the projects would exceed 2 pounds per day or greater of NO _x , the projects would be consistent with the AQMP. The projects' air quality emissions would be above the VCAPCD significance thresholds (25 pounds per day for ROC and NO _x) and as a result mitigation measures have been identified where appropriate consistent with VCAPCD recommendations. Thus, cumulative air quality impacts would be less than significant. The operation of the Phase 2 components will be similar in nature to the operation of the Phase 1 AWPf components. No additional air quality impacts are anticipated to occur from the operation of the Phase 2 components.

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de)	<u>Result in other emissions (such as those leading to Create objectionable odors) adversely</u> affecting a substantial number of people?	3.3-31 and 3.3-33	<p>See Impact AQ 3.3-4 of the Final EIR.</p> <p>The DEIR evaluates emissions including odor impacts consistent with the CEQA Checklist Updates. Intermittent construction activities associated with the proposed projects would result in short-term emissions of diesel particulate matter, which the state has identified as a toxic air contaminant (TAC). The proposed projects would not include the operation of any land uses routinely involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants. The proposed projects will include new on-site stationary equipment, specifically a diesel emergency generator. The stationary emission source is subject to air permitting by VCAPCD, and TACs impact will be minimized in accordance with VCAPCD Rule 26 (New Source Review). The proposed projects would be required to obtain air permits and operate within the VCAPCD's guidelines and permit conditions. With regard to on-site sources of emissions, the projects would not generate emissions resulting from trucks queuing and idling at the site. Therefore, the proposed projects would not expose surrounding sensitive receptors to TAC emissions. Impacts would be considered less than significant.</p> <p>Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents as well as asphalt paving. However, the projects would be consistent with all applicable rules and regulations governing construction equipment and processes.</p>
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Biological Resources	Page Number	Summary of Analysis and Conclusions
c) Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	3.4-77 through 3.4-80	<p>See Impact BIO 3.4-3 of the Final EIR.</p> <p>The DEIR evaluates impacts to wetlands consistent with the CEQA Checklist Updates. The DEIR evaluates effects to wetlands as defined by local and State entities. The implementation of the project components would reduce discharges to the SCRE, resulting in a reduction of wetted area in the SCRE, and habitat conversion within the lagoon. With lowering water levels, the model predicts that approximately 38 acres could be converted from freshwater wetlands to riparian.</p> <p>The reduction in freshwater wetland acreage would occur as a result of habitat conversion associated with an enhancement of the ecological values in the SCRE. The SRP Final Report concluded that the change in habitat types within the SCRE, including the estimated 38-acre reduction in freshwater wetlands, would result in improved habitat for the native species and designated Critical Habitat within the SCRE. Mitigation Measures BIO-5 and BIO-6 would ensure less than significant impacts.</p> <p>Potential impacts to wetland habitats as defined by the California Coastal Commission would occur to accommodate over 10 acres of treatment wetlands. Mitigation Measure BIO-8 would ensure less than significant impacts.</p>
Cultural Resources	Page Number	Summary of Analysis and Conclusions
a) Cause a substantial adverse change in the significance of a historical resource pursuant to as defined in §15064.5?	3.5-40 through 3.5-49	<p>See Impact CUL 3.5-1 of the Final EIR.</p> <p>The DEIR evaluates historic impacts consistent with the CEQA Checklist Updates. The SCCIC records search</p>

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and cultural resources survey identified 10 historic architectural resources within and adjacent to (within 100 feet) of the area of the proposed projects. Of these 10 resources, three (P-56-001520 [McGrath State Beach], -153056 [warehouse building], and -153094 [steel lattice transmission tower]) have been evaluated as not eligible for listing CRHR and do not qualify as historical resources, five (P-56-150015 [Bard Family Cemetery], -150017 [Ventura Road eucalyptus grove], CA 52C0013 [Santa Clara River Bridge], CA 52C0106 [Edison Canal Bridge], and ESA-Ventura-001B [Southern Pacific Railroad segment]) have not been previously evaluated for the CRHR and have the potential to qualify as historical resources, and two (P-56-000815 [buildings associated with the Olivas Adobe] and -151837 [Thomas R. Bard Estate]) are listed in the NRHP and would automatically qualify for listing in the CRHR, and therefore qualify as historical resources under CEQA.

All of the seven resources that qualify as historical resources or have the potential to qualify as historical resources would be avoided by the proposed projects. Therefore, the proposed projects would not result in impacts to historic architectural resources qualifying as historical resources under CEQA.

Based on the geoarchaeological review and the results of the records search, the proposed projects are considered sensitive for the presence of subsurface archaeological deposits. Portions of the AWPf, water conveyance system, groundwater wells, treatment wetland and concentrate discharge facilities could not be accessed during the cultural resources survey. As a result, the proposed projects would not impact known resources that qualify as or have the potential to qualify as historical resources; however, given the archaeological sensitivity of the proposed projects, ground-disturbing activities associated with the construction of the project components have the potential to impact archaeological resources that may qualify as historical resources under CEQA. Implementation of Mitigation Measures CUL-1 through CUL-6 is required to ensure that unsurveyed portions of the project are subject to cultural resources survey and that impacts associated with the construction of the project to unknown archaeological resources qualifying as historical resources are less than significant.

Energy	Page Number	Summary of Analysis and Conclusions
<u>Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</u>	3.19-31 through 3.19-43	See Impact UTIL 3.19-8 of the Final EIR. The DEIR evaluates impacts associated with energy demands consistent with the CEQA Checklist Updates. The additional energy needed to operate the new facilities would be consistent with energy efficiency policies. During construction of the project, electricity would be consumed to supply and convey water for dust control and to power lighting, electronic equipment, and other construction tools necessitating electrical power. Electricity would be supplied to the project by Southern California Edison and would be obtained from the existing electrical infrastructure or temporary connections to the existing electrical infrastructure. Construction activities typically do not involve the consumption of natural gas. Accordingly, natural gas

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		would not be anticipated to be used for project construction activities.
<u>Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</u>		3.19-31 through 3.19-43 See Impact UTIL 3.19-8 of the Final EIR. The DEIR evaluates impacts associated with energy demands consistent with the CEQA Checklist Updates. The additional energy needed to operate the new facilities would be consistent with energy efficiency policies.
Geology, Soils, and Seismicity	Page Number	Summary of Analysis and Conclusions
a) Directly or indirectly cause exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	3.6-15 through 3.6-25	See Impact GEO 3.6-1 of the Final EIR. The DEIR assesses seismic impacts in a manner consistent with the CEQA Checklist Updates. See below.
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	3.6-15 through 3.6-19	See Impact GEO 3.6-1 of the Final EIR. None of the AWPf locations are located on either the Oak Ridge fault or the Ventura fault. However, the Harbor Boulevard, Transport Street, and Portola Road AWPf sites would be located within approximately 0.5 mile of the Oak Ridge fault and 0.75 mile from the McGrath fault. The proposed conveyance pipelines throughout the proposed system, depending on which AWPf site is chosen, will cross the Oak Ridge fault and/or the McGrath fault. Neither the Oak Ridge or the McGrath faults are designated as an Alquist-Priolo Earthquake Fault Zone; they are listed as potentially active and probably active in the City's General Plan, respectively, and therefore could be exposed to fault rupture. The proposed projects would comply with all applicable local, state, and federal laws regarding building code construction practices. Compliance with the CBC will ensure that the new structures would be designed to withstand predicted seismic activity. The remaining project components do not include any habitable structures, and would not put new residents at risk. Impacts would be less than significant.
ii) Strong seismic ground shaking?	3.6-19	See Impact GEO 3.6-2 of the Final EIR. There are four potentially active faults in the vicinity of the project area, including the Ventura-Foothill fault and McGrath fault, within the Alquist-Priolo Earthquake Fault Zone. A major earthquake associated with these faults could result in moderate to severe ground shaking in the project area and would be a potential hazard to the proposed projects. Damage to conveyance pipelines and aboveground facilities associated with the proposed projects could be expected as a result of ground shaking during a major seismic event. Where applicable, the proposed aboveground facilities would be constructed according to CBC requirements, which include seismic design stipulations designed to reduce effects from ground shaking on these structures and minimize structural damage. Further, proposed groundwater wells would be designed in accordance with the California Well Standards, which include well sealing and casing provisions to prevent corrosion and leaks that would also help secure the well in the event of ground shaking. In addition, proposed conveyance pipelines would be designed per applicable federal, state, and local engineering standards and specifications, which would ensure structural resiliency. With implementation of all CBC and related federal, state, and local standards for

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			all components of the proposed projects, construction and operational impacts related to ground shaking would be considered less than significant.
iii)	Seismic-related ground failure, including liquefaction?	3.6-19 through 3.6-20	<p>See Impact GEO 3.6-3 of the Final EIR.</p> <p>The Harbor Boulevard site, a portion of the proposed groundwater wells, the treatment wetland, the proposed treatment upgrades at the existing VWRP, and a portion of conveyance pipelines (including the discharge pipeline to the Calleguas SMP), are at risk of liquefaction due to the shallow groundwater, creating a potentially significant impact related to seismic-related ground failure. However, with implementation of Mitigation Measure GEO-1, a soils report and a geotechnical investigation report would be prepared for all facilities at risk of liquefaction. The geotechnical report would determine whether liquefaction risk exists, provide recommendations for building materials, and identify structural design requirements that shall be incorporated into the specifications for the proposed projects. With implementation of Mitigation Measure GEO-1, impacts would be less than significant related to ground failure during construction and operation of all project components.</p>
iv)	Landslides?	3.6-20	<p>See Impact GEO 3.6-4 of the Final EIR.</p> <p>The proposed projects would be installed in areas that are relatively flat and surrounded by development or agricultural land. In addition, a portion of the proposed projects, including groundwater wells and conveyance pipelines, would be installed belowground, with the existing grade restored following their installation. Therefore, these facilities would not be exposed to the adverse risks of landslides on the ground surface, nor would they add to the landslide risk of the area. Therefore, the potential for landslides is low, and impacts related to landslides would be less than significant.</p>
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial <u>direct or indirect</u> risks to life or property?	3.6-25	<p>See Impact GEO 3.6-7 of the Final EIR.</p> <p>The DEIR assesses direct and indirect geologic impacts in a manner consistent with the CEQA Checklist Updates. The project area includes zones of highly expansive soils, specifically in the southern portion of the city along the Santa Clara River. However, with implementation of Mitigation Measure GEO-1, requiring a soils report and a geotechnical investigation report would be prepared for all facilities at risk of expansive soils. The geotechnical report will determine whether expansive soil exists, provide recommendations for materials, and identify structural design requirements that shall be incorporated into the specifications for the proposed projects. With implementation of Mitigation Measure GEO-1, impacts would be less than significant related to expansive soil during construction and operation of all project components.</p>
ef.)	<u>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</u>	3.5-54 through 3.5-59	<p>See Impact CUL 3.5-3 of the Final EIR.</p> <p>The DEIR assesses direct and indirect impacts to paleontological resources in a manner consistent with the CEQA Checklist Updates. The paleontological records search prepared by the LACM indicates the project is comprised of surficial deposits of younger Quaternary (Holocene-age) alluvium, which has low potential for the presence paleontological resources due to its young age. The younger Quaternary alluvium is underlain by older Quaternary deposits, which do have the potential to contain paleontological resources. As indicated by the geoarchaeological review, the veneer of</p>

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Holocene-age alluvium extends to depths of up to 50 feet, meaning the depth of the older Quaternary alluvium is variable and may occur at depths shallower than 50 feet. For the purposes of this project it is assumed older Quaternary deposits may be encountered at depths as shallow as 20 feet deep. Given that the older Quaternary alluvium, which has the potential to contain paleontological resources, underlies the project, project ground-disturbing activities extending to depths of 20 feet have the potential to extend into older Quaternary alluvial soils, and therefore have the potential to directly or indirectly destroy unique paleontological resources and/or unique geologic features.

Project ground-disturbing activities exceeding depths of 20 feet have the potential to impact paleontological resources located within the older Quaternary alluvium underlying the veneer of Holocene-age alluvium that comprises the project's surface deposits. Should ground-disturbing activities associated with the construction of the project components exceed 20 feet deep, they could directly or indirectly destroy unique paleontological resources and/or unique geologic features. Implementation of Mitigation Measures CUL-7 through CUL-10 would be required to ensure potential impacts associated with the construction of the proposed project to unique paleontological resources or unique geologic features are less than significant.

Hazards and Hazardous Materials	Page Number	Summary of Analysis and Conclusions
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard <u>or excessive noise</u> for people residing or working in the project area?	3.8-22 through 3.8-24	See Impact HAZ 3.8-5 of the Final EIR. The DEIR assesses impacts of excessive airport noise in a manner consistent with the CEQA Checklist Updates. The Oxnard Airport is the public airport located nearest to the proposed projects, and the Point Mugu Naval Air Station is the nearest private airstrip to the proposed projects. According to the Ventura County ALUC ACLUP, the proposed projects are not located within a safety zone or height restriction zone for the Point Mugu Naval Air Station. Therefore, due to distance from these airports, construction and operation of the proposed projects would not expose workers to airport-related hazards. A segment of the proposed discharge pipeline to the Calleguas SMP alignment would be located approximately 500 feet south of the Oxnard Airport, and would be located within a portion of the Oxnard Airport Outer Safety Zone and Height Restriction Zone. While utilities are considered an acceptable land use within the Outer Safety Zone, construction of the segment of pipeline in the airport vicinity could expose workers to airport-related hazards. However, FAA regulations require submittal of a Form 7460 with construction information that allows the FAA to determine whether the construction activities occurring adjacent to a public airport would be a hazard. Therefore, construction of the segment of the proposed discharge pipeline to the Calleguas SMP alignment would not proceed without a determination from FAA that no airport-related hazards would result.
g) Expose people or structures, <u>either directly or indirectly</u> , to a significant risk of loss, injury, or death involving wildland fires, <u>including where wildlands are adjacent to urbanized</u>	3.8-25 through 3.8-26	See Impact HAZ 3.8-7 of the Final EIR. The DEIR assesses wildfire impacts in a manner consistent with the CEQA Checklist Updates. According to CAL FIRE's VHFHSZ map for Ventura County, the proposed project is not located within a VHFHSZ (CAL FIRE 2010). In addition, all construction must comply

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~~areas or where residences are
intertixed with wildlands?~~

with fire protection and prevention requirements specified by the CCR and Cal/OSHA. During operation, the project would not substantially add to the fire risk in the project area. Conveyance facilities would operate below ground and would not result in a fire risk. Aboveground structures associated with AWPf and the VWRf upgrades would be constructed in accordance with the California Building Code, California Fire Code, and Ventura County Fire Code. Providing a resilient water supply will support fire suppression needs in the future. Therefore, no impacts would occur related to wildland fires during construction or operation of the proposed project.

Hydrology and Water Quality	Page Number	Summary of Analysis and Conclusions
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	3.9-53 through 3.9-76	<p>See Impact HYDRO 3.9-1 of the Final EIR.</p> <p>The DEIR assesses water quality impacts in a manner consistent with the CEQA Checklist Updates. The proposed projects would be required to comply with the Construction General Permit requiring preparation and implementation of a SWPPP to control runoff from construction work sites. Implementation of BMPs including physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of infiltration swales, protection of stockpiled materials, and a variety of other measures would substantially reduce the potential for impacts to surface water quality from occurring during construction. Construction impacts would be less than significant.</p> <p>As a wastewater treatment facility, the City would be required to obtain coverage under the NPDES General Industrial Stormwater Permit for the AWPf by preparing and implementing a SWPPP. The SWPPP would include BMPs to manage rainwater falling on the AWPf by treating stormwater prior to discharge to the municipal stormwater system. The AWPf also would be required to comply with the Municipal Stormwater Permit and its local MS4 permit development standards, which would require reducing pollutants and runoff flows from new development using BMPs and Low Impact Development (LID)/post-construction standards such as bioswales, infiltration galleries, and other pre-treatment measures.</p> <p>The injection of advanced treated water from the groundwater wells would improve the quality of groundwater and would be a beneficial impact. In addition, the proposed projects would remove TDS from the basin through treatment of lower quality groundwater from existing groundwater extraction wells. Removed salts would be discharged to the ocean via the concentrate discharge system. Water extracted through the ASR wells would consist primarily of the injected water, with potential for some minimal mixing with existing groundwater. Consequently, the extracted water would achieve drinking water standards and could be blended with other sources of groundwater to improve overall delivered water quality. Therefore, the ASR wells would result in a beneficial impact.</p>
b) Substantially decrease, deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? there would	3.9-76 through 3.9-79	<p>See Impact HYDRO 3.9-2 of the Final EIR.</p> <p>The DEIR assesses groundwater impacts in a manner consistent with the CEQA Checklist Updates. The construction of the project components would require the use of water for concrete, dust suppression, and equipment cleaning. Construction would not affect</p>

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<p>be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p>		<p>groundwater supplies because the quantity of water used would be small.</p> <p>Once constructed, the AWPf would result in an increase in new impervious surface at the plant location. However, rainwater falling on the AWPf would be captured and treated on-site pursuant to the General Industrial Stormwater Permit. Once treated in compliance with the General Industrial Stormwater Permit, the rainwater would be routed to on-site infiltration systems (e.g. infiltration swales) or to the storm drain system and returned to the environment, as it is now, resulting in no impact.</p> <p>Once operational, the ASR wells would pump advanced treated water into the aquifer, which would increase water supplies. After the injected water remained in the aquifer for the minimum 2-month retention time, the water would then be extracted. The proposed projects would increase groundwater supplies and improve groundwater quality.</p> <p>If the injected water remains for periods longer than 6 months, resulting in long-term storage of injected water in the Oxnard Plain naturally recharged groundwater could be displaced. As part of the Title 22 Engineering Report, the City would be required to identify and report the proximity of local wells that could be within the proposed projects' zone of influence. To ensure that access to groundwater is maintained for existing and future groundwater pumpers, Mitigation Measures HYDRO-1 would require that the City operate the ASR wells in a manner that prevented excessive lateral spreading that could limit access to groundwater. This mitigation measure would ensure that the project does not impede local access to groundwater in quantities similar to existing conditions. Mitigation Measure HYDRO-1 would ensure that neighboring groundwater pumpers were not significantly affected from excessive drawdown.</p>
<p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river <u>or through the addition of impervious surface</u>, in a manner which would: result in substantial erosion or siltation on- or off-site?</p>	<p>3.9-79 through 3.9-85</p>	<p>See Impact HYDRO 3.9-3 of the Final EIR.</p> <p>The DEIR assesses drainage impacts in a manner consistent with the CEQA Checklist Updates. See below.</p>
<p>i) <u>result in substantial erosion or siltation on- or off-site:</u></p>	<p>3.9-79 through 3.9-82</p>	<p>See Impact HYDRO 3.9-3 of the Final EIR.</p> <p>Construction of the proposed projects would not alter existing drainages that could result in erosion or flooding or exceed the capacity of a drainage system.</p> <p>Once constructed, the AWPf and groundwater wells would result in an alteration of the drainage pattern of the existing land surface. Because the proposed sites are all flat, the impact would be the addition of hardscape that would concentrate the flow of surface water runoff. This concentrated flow could result in substantial drainage issues related to erosion, siltation, flooding, drainage system capacity, or additional sources of polluted runoff. Compliance with MS4 development design would ensure that the new facility does not channelize runoff in a manner that could cause scouring and erosion, and captures and treats water prior to runoff from the facility.</p> <p>Construction of the wildlife/treatment wetlands would provide additional permanently wetted area near the SCRE. Tertiary-treated water would be pumped into the</p>

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			<p>wetlands, where it would flow by gravity to the SCRE. A discharge structure would be constructed to connect the wetlands with the SCRE. The wetlands would not substantially alter the drainage in the area. Currently, the proposed location for the new constructed treatment wetlands is outside of the 100-year floodplain.</p> <p>Furthermore, the new treatment wetlands and reconfigured wildlife ponds would provide additional wet-weather storage capacity compared to existing conditions. Impacts to drainage would be less than significant.</p> <p>Once constructed, the conveyance pipelines would be located underground and the overlying land use restored to its original condition with no change to the pre-existing drainage pattern. Therefore, relative to drainage issues related to erosion, siltation, flooding, or drainage system capacity, the conveyance pipelines would have no impact.</p>
(ii)	<u>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</u>	3.9-79 through 3.9-82	<p>See Impact HYDRO 3.9-3 of the Final EIR.</p> <p>See impact Hydro c-i.</p>
(iii)	<u>create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</u>	3.9-79 through 3.9-82	<p>See Impact HYDRO 3.9-3 of the Final EIR.</p> <p>See impact Hydro c-i.</p>
(iv)	<u>impede or redirect flood flows?</u>	3.9-79 through 3.9-82	<p>See Impact HYDRO 3.9-3 of the Final EIR.</p> <p>See impact Hydro c-i.</p>
d)	<u>In flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation?</u>	3.9-84 through 3.9-85	<p>See Impact HYDRO 3.9-5 of the Final EIR.</p> <p>The DEIR assesses flood hazard impacts in a manner consistent with the CEQA Checklist Updates. The Santa Clara River watershed has a few reservoirs including Piru Reservoir, but they are each designed and managed to avoid risk of seiche waves overtopping the dams. The proposed projects would not increase the risk of seiche waves or increase impacts of flooding. None of the project components are located next to hilly areas that would be subject to mudflows. The AWPf facility, water conveyance system, groundwater wells and VWRf treatment upgrade project components would be located in a tsunami area except for the treatment wetlands. The existing ponds are located along the coast and could be subject to a tsunami in the event of an earthquake. However, in the event of a tsunami, the result would be a short-term inundation of the ponds with seawater. At most, the sides of the ponds might require repair, but the impact from this short-term event would be similar to existing conditions and less than significant. The new treatment wetland would be located just inland and outside of the tsunami hazard zone. the VWRf is located outside of the tsunami hazard zone. Therefore, the proposed projects would not increase the risk of impacts from tsunami. The new outfall and discharge pipeline to the Calleguas Salinity Management Pipeline would be located underground and not be subject to tsunamis.</p>
e)	<u>Conflict with or obstruct implementation of a water quality</u>		<p>The DEIR assesses conflicts with these plans in a manner consistent with the CEQA Checklist Updates. The proposed projects are considered a Groundwater</p>

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control plan or sustainable
groundwater management plan?

Replenishment Reuse Project (GRRP). As defined by 22 CCR Section 60301.390, a GRRP is “a project involving the planned use of recycled municipal wastewater that is operated for the purpose of replenishing a groundwater basin designated in the Water Quality Control Plan for use as a source of municipal and domestic water supply.” Prior to operating a GRRP, the treatment facility is required to site and construct at least two monitoring wells down gradient of the GRRP such that at least one monitoring well is located no less than 2 weeks but no more than 6 months of travel time from the GRRP, and one monitoring well is at least 30 days of travel time upgradient of the nearest drinking water well. GRRP groundwater monitoring well requirements are set forth in 22 CCR Section 60320.226.

Pursuant to 22 CCR Section 60320.226, the project sponsor is required to collect groundwater samples from each aquifer that will receive the GRRP’s recharge water or that is validated as receiving recharge water from the GRRP. In addition, the monitoring wells would provide data on water levels and groundwater mounding as a result of recharge. The City would monitor groundwater levels and recycled water and groundwater quality, as required by the GRRP regulations (22 CCR Section 60320).

The Sustainable Groundwater Management Act (SGMA) of 2014, effective January 1, 2015, gives local agencies the authority to manage groundwater in a sustainable manner and allows for limited state intervention when necessary to protect groundwater resources. The SGMA establishes a definition of sustainable groundwater management, establishes a framework for local agencies to develop plans and implement strategies to sustainably manage groundwater resources, prioritizes basins with the greatest problems (ranked as high and medium priority) and sets a 20-year timeline for implementation. The initial basin prioritization under SGMA uses the prioritization conducted by the California Department of Water Resources (DWR) in 2014 under the California Statewide Groundwater Elevation Monitoring program. The Oxnard Plain Basin is ranked as medium priority. The City of Ventura has created a Groundwater Sustainability Agency (GSA) pursuant to SGMA. SGMA requires the creation of a GSA to develop and implement a Groundwater Sustainability Plan (GSP) that would manage and use groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. As a result, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Land Use and Land Use Planning	Page Number	Summary of Analysis and Conclusions
b) <u>Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance)</u> adopted for the	3.10-26 through 3.10-33	See Impact LU 3.10-2 of the Final EIR. The DEIR assesses conflicts with local plans and policies in a manner consistent with the CEQA Checklist Updates. The proposed AWPf would be consistent with land use plan designations following annexation to the City. Prior to constructing the AWPf on either the Harbor site or the Portola site, the City would annex the property

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purpose of avoiding or mitigating an environmental effect?

from the County. Once annexed, the property would be subject to the City's General Plan and Comprehensive Plan designations.

The Harbor site is located in the coastal zone, and therefore would be subject to the City's Local Coastal Plan (LCP) following annexation. The City's certified LCP is contained in the 1989 Comprehensive Plan Update to the Year 2010 (Comprehensive Plan). The Comprehensive Plan designation is "Commercial Planned-Tourist Oriented," which is not an agricultural or open space designation subject to SOAR.

The Portola site is not located in the coastal zone. Following annexation, it would be subject to the City's current General Plan designation of "Industry." Mitigation Measure AG-1 requires that any loss of state-designated Prime Farmland or Farmland of Local Importance be compensated in perpetuity with the purchase of property and placement of an irreversible agricultural easement. The Draft EIR concludes that the irreversible preservation of compensatory agricultural land would ensure impacts of agricultural conversion would be less than significant.

Noise	Page Number	Summary of Analysis and Conclusions
a) <u>Exposure of persons to or generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</u>	3.13-15 through 3.13-27	<p>See Impact NOISE 3.13-3 and 3.13-4 of the Final EIR.</p> <p>The DEIR assesses noise impacts in a manner consistent with the CEQA Checklist Updates. Construction noise could impact sensitive receptors during construction resulting in noise impacts to sensitive receptors. Implementation of Mitigation Measures NOISE-1 and NOISE-2 would lessen construction noise and ensure that impacts at sensitive receptors would be minimized. Mitigation Measure NOISE-1 requires that construction equipment be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices. Mitigation Measure NOISE-2 requires that the City provide a qualified "Noise Disturbance Coordinator" to respond to local complaints, should they arise. Therefore, off-site construction traffic noise impacts would be less than significant.</p> <p>The operation of mechanical equipment typical for developments like the AWP and groundwater wells, such as air conditioners, fans, and related equipment, may generate audible noise levels. Mechanical equipment for the facility would be located on rooftops or within buildings and would be shielded from nearby land uses to attenuate noise and avoid conflicts with adjacent uses. In addition, all mechanical equipment would be designed with appropriate noise control devices, such as sound attenuators, acoustics louvers, or sound screen/parapet walls, to comply with noise limitation requirements provided in Section 10.650.130 of the City of Ventura. The City would comply with the requirement to install mechanical equipment that would generate noise levels below this threshold, consistent with applicable regulatory requirements. As a result of these design criteria, noise impacts from operations would be less than significant.</p> <p>The HDD operations for the outfall may require 24-hour construction for several weeks. 24-hour operations may be required because once the pipe pullback begins, the operation must be continuous until it is complete in order</p>

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			to avoid a potential collapse in the previously bored hole. Construction of the new outfall pipelines would exceed City nighttime noise standards. Implementation of Mitigation Measures NOISE-1 through NOISE-4 would lessen the impacts of construction. Effective noise barriers, generator housings, and mufflers could reduce noise levels by up to a combined 16 dBA and reducing outfall construction noise levels to 69 dBA. However, since noise levels are still greater than 45 dBA during nighttime hours and relocation of affected residents is voluntary, the impact would be considered significant and unavoidable.
b)	Exposure of persons to or g Generation of excessive groundborne vibration or groundborne noise levels?	3.13-28 through 3.13-31	See Impact NOISE 3.13-2 of the Final EIR. The DEIR assesses vibration impacts in a manner consistent with the CEQA Checklist Updates. Construction of the proposed projects would include activities such as demolition, site preparation, grading and paving, which would have the potential to generate low levels of groundborne vibration. Persons residing and working in areas near the construction sites could be exposed to some degree of groundborne vibration or groundborne noise levels related to construction activities. To reduce the potential human annoyance impact, the implementation of Mitigation Measure NOISE-1 would be required. This measure requires that operation of large construction equipment, such as a large bulldozer, shall be prohibited within 45 feet of the existing residential structures. Instead, small rubber tired construction equipment not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations. The use of smaller construction equipment would result in vibration levels of 71 VdB at the residential buildings along the pipeline construction. This vibration level would not exceed the vibration impact threshold for human annoyance of 72 VdB. Therefore, with implementation of Mitigation Measure NOISE-5, construction vibration impacts that could cause human annoyance would be reduced to a less than significant level.
ce)	For a project located within <u>the vicinity of a private airstrip or</u> an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	3.13-33	See Impact NOISE 3.13-5 of the Final EIR. The DEIR assesses airport conflicts in a manner consistent with the CEQA Checklist Updates. The project site is not located within an airport land use plan and it is not within two miles of a public airport or public use airport. In addition, the project site is not located within the vicinity of a private airstrip. The nearest airport is the Oxnard Airport, located approximately a mile east of the SMP alignment which would be completely underground. Therefore, the project would not expose people residing or working in the project area to excessive noise levels. No impact would occur.
Population and Housing		Page Number	Summary of Analysis and Conclusions
a)	Induce substantial <u>unplanned</u> population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	3.14-7 and 5-7 through 5-8	See Impact POP 3.14-1 and Chapter 5 Growth Inducing of the Final EIR. The DEIR assesses growth impacts in a manner consistent with the CEQA Checklist Updates. Implementation of the proposed projects would not directly induce growth by developing housing or providing substantial permanent employment. Construction activities would create some short-term construction employment opportunities over 15 years from 2020 to 2035; each component would require approximately 10 to 20 construction workers, depending

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			<p>on the facility. Construction workers would be drawn from the local and regional work force. The city's existing housing stock would be sufficient to house temporary construction workers, if needed, in addition to local hotel establishments. On a long-term basis, approximately 20 new employees would be required to operate the AWWP and conduct routine maintenance on the remaining facilities. The operation of the proposed project would be accommodated by the existing work force within the city and surrounding unincorporated areas of the county.</p> <p>The City's adopted General Plan guides the type, location, and level of land use and development planned for the city. The proposed projects would accommodate the growth provided for by the City's General Plan, which was the basis of the 2015 UWMP. The environmental impacts of this growth were addressed in the <i>City of Ventura 2005 General Plan Final Environmental Impact Report</i> (General Plan Final EIR). Because the proposed projects will not promote growth beyond the growth permitted by the General Plan and evaluated by the General Plan Final EIR, they are not growth-inducing.</p> <p>In addition, SCAG, the regional authority charged with providing a framework for coordination of orderly regional growth and development, has prepared the 2016 RTP/SCS, which serves as a long-term planning and management plan for the regional transportation system, providing mitigation measures to offset the impacts of growth projected in the region. The 2016 RTP/SCS was prepared in coordination with the City and has also accounted for any indirect growth associated with the development of the proposed projects. The proposed projects would provide future water system infrastructure within the city, which would support planned population growth that has been identified for the service area. Thus, implementation of the proposed projects would not create a new or expanded water supply that could create an indirect growth-inducement potential.</p>
b)	Displace substantial numbers of existing <u>people or</u> housing, necessitating the construction of replacement housing elsewhere?	3.14-8	<p>See Impact POP 3.14-2 of the Final EIR.</p> <p>The DEIR assesses housing impacts in a manner consistent with the CEQA Checklist Updates. The proposed Ventura Water Supply Projects are water infrastructure projects. None of the projects include the demolition but may require relocation of housing. The proposed projects would result in a temporary increase in construction workers and approximately 20 new full-time employees, and would not create a significant demand for new housing.</p> <p>On March 21, 2006 the City Planning Commission adopted Resolution No. 8216, including Categorical Use Permit (CUP)-1202 and Coastal Development Permit (CDP)-510. This action allowed the City Community Services Department to issue a Facility Use Permit to the Turning Point Foundation to operate a temporary shelter campground (RiverHaven community) for a maximum of 25 homeless persons to assist residents in finding long-term housing and employment on an approximate $\frac{3}{4}$-acre portion of a 104-acre City-owned parcel. The RiverHaven community is currently located within an area that may be used for the new treatment wetland. As a result, the community would be relocated as a result of the project. The displacement of the RiverHaven community would result in a significant impact. However, with the implementation of Mitigation Measure LU-1 requiring the City to coordinate with Turning Point Foundation to identifying a satisfactory</p>

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relocation site for the community would reduce impacts to less than significant (see Section 3.10 Land Use). Therefore, with the implementation of the mitigation there would be a less than significant impact related to displacement of existing housing necessitating the construction of replacement housing.

Transportation	Page Number	Summary of Analysis and Conclusions
<p>a) Conflict with a program n-applicable plan, ordinance or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</p>	3.17-12 through 3.17-22	<p>See Impact TRAF 3.17-1 of the Final EIR.</p> <p>The DEIR assesses conflicts with local policies and programs in a manner consistent with the CEQA Checklist Updates. Construction of the proposed project components would temporarily generate additional truck and vehicle trips within Ventura and the regional circulation system, the increase in traffic volumes would be minimal and return to pre-construction conditions once construction is complete. Construction access to the sites would occur primarily on residential and arterial roadways, which are not heavily traveled on a daily basis. Additionally, while local drivers could experience increased travel times if they were traveling behind a heavy truck due to slower movement and turning radii compared to passenger vehicles, these delays would be intermittent throughout the day and would be scheduled outside of peak traffic hours, as feasible. Further, all construction trucks traveling on Caltrans facilities would be required to comply with CVC, Division 15, Chapters 1 through 5 and California Street and Highway Code Sections 660–711, as applicable, to minimize impacts to roadway operations. However, since the construction of the Phase 1 facilities would overlap, construction could impact the existing performance of the surrounding circulation system. Nevertheless, the implementation of Mitigation Measure TRAF-1, which would require the preparation and implementation of a Traffic Control Plan, would reduce impacts to the local and regional circulation systems to less than significant levels.</p> <p>After construction is completed, it is anticipated that the AWPf would require approximately 20 new full-time employees to operate the facility. Operational traffic would be generated by worker commutes and supply/chemical deliveries, which would generate approximately 40 worker trip and 7 truck trips daily. The number of vehicle and truck trips generated during operation would be minimal and would not cause existing roadway levels of operation to decrease. Therefore, impacts to the existing performance of the surrounding circulation system during operation of the proposed project would be less than significant.</p>
<p>b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)? Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</p>		<p>The DEIR assesses traffic impacts in a manner consistent with the CEQA Checklist Updates. In accordance with Senate Bill (SB) 743, the new CEQA Guidelines section 15064.3, subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. These revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts are primarily focused on projects within transit priority areas, and shifts the focus from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks, and promotion of a mix of land uses. Vehicle miles traveled, or VMT, is a measure of the total number of miles driven to or from a development and is sometimes expressed as an average per trip or per person. The newly adopted guidance provides that a lead agency may elect to be governed by the provisions</p>

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			<p>of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide. Section 15064.3 of the CEQA Guidelines suggests that the analysis of VMT impacts applies mainly to land use and transportation projects. Furthermore, projects that generate or attract fewer than 110 operational trips per day would generally be exempt from further consideration with respect to VMT and impacts are assumed to be less than significant¹. Per this guidance, since the proposed project is neither a land use nor a transportation project, and would generate very few operational trips, it can be assumed to have a less than significant impact with respect to VMT.</p>
cd)	Substantially increase hazards due to a <u>geometric</u> design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	3.17-24	<p>See Impact TRAF 3.17-4 of the Final EIR.</p> <p>The DEIR assesses traffic impacts in a manner consistent with the CEQA Checklist Updates. Construction of the Ventura Water Supply Projects components would not include the construction of a new roadway or intersection, which could be determined to be a hazardous design feature. All pipelines would be constructed within the existing road rights-of-way, where feasible. The aboveground component would not include any new entrance driveways that would create a design hazard to the local circulation system. No impact would occur.</p> <p>Operation of the proposed projects would operate water infrastructure within the cities of Ventura, Oxnard, and Port Hueneme and in areas of unincorporated Ventura County, where the type of water infrastructure would be similar in nature to existing water infrastructure within these jurisdictions and would not be considered an incompatible use. Further, operation of the proposed projects would not operate any new intersections or roadways and as such would not result in a hazardous design feature. No impact would occur.</p> <p>Similar to the Phase 1 components, construction of the AWPf expansion project and desalination treatment facilities would not include the construction of a new roadway or intersection, which could be determined to be a hazardous design feature. All pipelines would be constructed within the existing road rights-of-way, where feasible. The aboveground component would be located within the AWPf and would not create a design hazard to the local circulation system. No impact would occur.</p> <p>Operation of the program-level components would not create any new intersections or roadways and as such would not result in a hazardous design feature. Impacts during operation of the program-level components would be less than significant.</p>

Tribal Cultural Resources		Page Number	Summary of Analysis and Conclusions
a)	<u>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074</u>	3.18-5 through 3.18-7	<p>See Impact CUL 3.18-1.</p> <p>The DEIR assesses tribal cultural resources in a manner consistent with the CEQA Checklist Updates. See below.</p>

¹ CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, Section 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

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as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | |
|---------|---|-----------------------|---|
| a) i.) | Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | 3.18-5 through 3.18-7 | See Impact CUL 3.18-1.

The SLF search conducted by the NAHC indicates that no Native American cultural resources are known to be located within the proposed project. The AB 52 meetings held on February 8 and March 23, 2018, between the City and tribal representatives Julie Lynn Tumamait-Stenslie and Patrick Tumamait of the Barbareño/Ventureño Band of Mission Indians involved discussions about the archaeological sensitivity of the proposed project vicinity; however, did not result in the identification of the presence of tribal cultural resources as defined in PRC Section 21074 within the proposed project. |
| b) ii.) | A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | 3.18-5 through 3.18-7 | See Impact CUL 3.18-1.

See Impact Tribal Cultural Resources a-i |

Utilities and Service Systems	Page Number	Summary of Analysis and Conclusions
a) Require or result in the <u>relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities</u> , the construction of which could cause significant environmental effects?	3.19-20 through 3.19-21	See Impact UTIL 3.19-2 and 3.19-3 of the Final EIR. The DEIR assesses utility capacity impacts in a manner consistent with the CEQA Checklist Updates. The proposed AWPf would be a new treatment facility created to treat tertiary-treated water from the VVRF to exceed Title 22 compliance criteria. The advanced treated product water would be blended with and distributed throughout the city's drinking water system. The concentrate generated during the treatment process would be conveyed to either the ocean outfall or the discharge pipeline to the Calleguas SMP. As a result, the proposed AWPf would not require the expansion or construction of a new wastewater treatment facility; The proposed water conveyance system, groundwater aquifer storage and extraction wells, natural treatment wetlands, and concentrate discharge facility would each be a component of the water supply project. The proposed project is an expansion of an existing wastewater treatment facility, the VVRF. The proposed project would assist Ventura Water in meeting projected water demands for its service area through advance treatment of tertiary flows from the VVRF. The proposed project components would not generate additional wastewater requiring additional facilities or expansion of electric power, natural gas or telecommunication facilities. Impacts would be less than significant.
b) Have sufficient water supplies available to serve the project <u>and reasonably foreseeable future development during normal, dry and</u>	3.19-24 through 3.19-25	See Impact UTIL 3.19-4 of the Final EIR. The DEIR assesses utility capacity impacts in a manner consistent with the CEQA Checklist Updates. The

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<p>multiple dry years? from existing entitlements and resources, or are new or expanded entitlements needed?</p>		<p>construction of the Ventura Water Supply Projects would require minimal amounts of water for activities such as dust control, concrete mixing, well drilling, and sanitary purposes. Construction water would either be accessed via a local water line or trucked in from another local area supplied by the city. The construction demand would be minimal and accommodated by existing supplies. Therefore, impacts related to sufficient water supplies during construction would be considered less than significant.</p> <p>Operation of the proposed AWPf would require a minimal amount of water for landscaping and onsite sanitation for workers. The proposed AWPf is a new treatment facility that would treat tertiary-treated water from the VVRF to exceed Title 22 compliance criteria. The advanced treated product water would then be distributed in the city's drinking water system. The project is a water supply project designed to supplement future water supply for the City.</p>
<p>df) i <u>Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</u></p>	<p>3.19-28 through 3.19-30</p>	<p>See Impact UTIL 3.19-6 of the Final EIR.</p> <p>The DEIR assesses utility capacity impacts in a manner consistent with the CEQA Checklist Updates. The waste generated during construction of the proposed project would mainly consist of general construction debris, building material wrapping and worker personal waste. This construction waste generated would require disposal at nearby landfill. Pursuant to the City's Construction and Demolition Debris Program, the proposed project would develop a WMP that describes the project's waste management and ensures it is carried out. The WMP would also demonstrate a minimum of 65 percent diversion of construction building materials and demolition debris from landfills through reuse or recycling per CAL Green requirements. Information provided in the WMP would include how the waste would be managed, hauler identification, and anticipated material wastes. Construction waste would likely be disposed of at the Toland Road Landfill, located approximately 5 miles northeast of the project area. This landfill can handle 1,500 tons of solid waste per day, which is beyond the expected amount of waste that would be generated by the project during construction. Furthermore, the landfill has substantial remaining capacity of 10,571,820 cubic yards. Therefore, construction-related impacts to the landfill would be considered less than significant.</p> <p>Operation of the proposed project would generate concentrate that would be either conveyed to the ocean outfall or to the Calleguas SMP. The proposed AWPf would not increase the amount of debris or trash generated in the region. The project would not exceed landfill capacity or change regional reuse opportunities.</p>
<p>eg) <u>Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</u></p>	<p>3.19-30</p>	<p>See Impact UTIL 3.19-7 of the Final EIR.</p> <p>The DEIR assesses solid waste management in a manner consistent with the CEQA Checklist Updates. The proposed project would comply with all City's Construction and Demolition Debris Program during construction of the proposed structures as described above. In addition, the proposed projects would be required to comply with the California Integrated Waste Management Act of 1989, requiring diversion of solid waste from landfills through reuse and recycling. The proposed projects would comply with all local, state and federal regulations related to solids waste. No impact would occur.</p>

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Wildfire	Page Number	Summary of Analysis and Conclusions
a) <u>Substantially impair an adopted emergency response plan or emergency evacuation plan?</u>	3.8-25 through 3.8-26	See Impact HAZ 3.8-7 of the Final EIR. The DEIR assesses wildfire in a manner consistent with the CEQA Checklist Updates. According to CAL FIRE's VHFHSZ map for Ventura County, the proposed project is not located within a VHFHSZ (CAL FIRE 2010). In addition, all construction must comply with fire protection and prevention requirements specified by the CCR and Cal/OSHA. During operation, the project would not substantially add to the fire risk in the project area. Conveyance facilities would operate below ground and would not result in a fire risk. Aboveground structures associated with AWPf and the VWRf upgrades would be constructed in accordance with the California Building Code, California Fire Code, and Ventura County Fire Code. Therefore, no impacts would occur related to wildland fires during construction or operation of the proposed project.
b) <u>Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</u>	3.8-25 through 3.8-26	See Impact HAZ 3.8-7 of the Final EIR. See Wildfire a) above.
c) <u>Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</u>	3.8-25 through 3.8-26	See Impact HAZ 3.8-7 of the Final EIR. See Wildfire a) above.
d) <u>Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</u>	3.8-25 through 3.8-26	See Impact HAZ 3.8-7 and GEO 3.6-4 of the Final EIR. See Wildfire a) above. The proposed projects would be installed in areas that are relatively flat and surrounded by development or agricultural land. In addition, a portion of the proposed projects, including groundwater wells and conveyance pipelines, would be installed belowground, with the existing grade restored following their installation. Therefore, these facilities would not be exposed to the adverse risks of landslides or flooding as a result post fire damage.

9.4 Benefits of the Proposed Projects

Chapter 193, Statutes of 2018, amended CEQA, includes the following provision in Public Resources Code Section 21082.4 (emphasis added):

In describing and evaluating a project in an environmental review document prepared pursuant to this division, the lead agency may consider specific **economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of a proposed project and the negative impacts of denying the project.**

Pursuant to this new provision of CEQA, the City has prepared the following statement summarizing certain regionwide environmental benefits of the proposed projects.

Environmental Benefits

The best available science, comprising more than 15 years of data collection, study, and analysis, concludes that reduced discharges to the Santa Clara River Estuary (SCRE) associated with the proposed projects would benefit sensitive native and listed species that occupy the SCRE, including southern California steelhead, California tidewater goby, western snowy plover, and California least tern, by improving the quality of their habitats within the SCRE and its vicinity. In addition, the reduced discharges associated with the proposed projects will increase and improve habitat for the southwestern willow flycatcher, which has not been observed within the SCRE, but for which critical habitat has been designated in the vicinity of the SCRE. The objective of the proposed projects is to implement a project that diverts the *Maximum Ecologically Protective Diversion Volume* in order to assure that the *Continued Discharge Level* provides enhancement of the water quality and beneficial uses of the SCRE as required by state water quality control policies adopted pursuant to the federal Clean Water Act and the California Porter Cologne Water Quality Control Act, including the Enclosed Bays and Estuaries Policy and Recycled Water Policy. The proposed projects thus are beneficial use, water quality and habitat enhancement projects developed to provide environmental benefits to the SCRE that improve its watershed. The environmental benefits predicted by the best available scientific information to result from discharge reductions associated with the projects include the following.

First, the reduction in discharge from the Ventura Wastewater Reclamation Facility (VWRF) would reduce unseasonal berm breaches and create hydrologic and berm formation and breaching conditions more similar to historic, natural conditions. These more “natural” conditions provide numerous benefits to native and listed aquatic species, including:

- Increasing the length of time that juvenile steelhead can rear within the estuary, with less risk of being swept to sea at a small size. This opportunity to increase in size before ocean entry would make them more likely to survive in the ocean.
- Increasing nesting habitat and reducing stranding of nests for the least tern and snowy plover. Open beach habitat area is likely to increase with lower water levels in the estuary, and the reduction in unseasonal breaches would reduce the potential for nests to be washed away.
- Creating less hospitable conditions for invasive species. Discharge of freshwater from the VWRF dampens the natural variations in salinity that normally prevent exotic invasive species (such as carp and arundo) from outcompeting and displacing native tidewater goby and steelhead, and native vegetation conducive to support of native sensitive species. The proposed projects would result in conditions that more closely resemble natural variations in salinity.

Second, the reduction in discharge would improve water quality. Current VWRF discharges include dissolved nutrients. While the nutrient concentrations comply with VWRF NPDES discharge limitations, the high volume of discharge under existing conditions contributes nutrient loads to the SCRE. These nutrient loads associated with current discharges from the VWRF may contribute to excessive algal growth, including growth of potentially toxic algae types, and may lead to lower dissolved oxygen concentrations, that may result in an unacceptable risk of catastrophic hypoxic events to aquatic organisms in the SCRE when the berm is closed. The

DEIR concludes, based on best available science, that reduction of nutrient loads to the SCRE would benefit water quality within the SCRE, and all life stages of the goby, steelhead migration, and steelhead juveniles and rearing conditions.

In addition to the foregoing benefits, the best available scientific information indicates that the changes to a more “natural” hydrology, increased salinity, and reductions in nutrient load would also improve the availability of burrow substrate for the goby and improve the diversity of appropriate benthic macroinvertebrate and other food sources within the SCRE for the least tern, goby, and steelhead.

Denying the proposed projects would have the negative impact of maintaining the status quo with respect to discharges to the SCRE, an undesirable condition that would preclude predicted benefits to SCRE habitat and the listed and native sensitive species using them. If all tertiary-treated wastewater from the VWRP continues to discharge to the SCRE, native sensitive species would continue to struggle against unseasonal breaches, unnatural salinity levels that favor invasive species, and higher nutrient loads that contribute to excessive algal growth and periods of very low dissolved oxygen.

Denying the proposed projects would also create a risk that the City would be in violation of legal obligations imposed by the Enclosed Bays and Estuaries Policy and the Recycled Water Policy. The City is required to implement the proposed discharge reductions to enhance SCRE habitat types and SCRE beneficial uses to comply with the State Water Resources Control Board’s Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Enclosed Bays and Estuaries Policy). The purpose of the Enclosed Bays and Estuaries Policy is “to provide water quality principles and guidelines to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries.” It provides that the discharge of municipal wastewaters to enclosed estuaries, such as SCRE, shall be phased out at the earliest practicable date, unless the discharge enhances the quality of receiving waters. The City also could be in violation of its obligations under the *Tertiary Treated Flows Consent Decree and Stipulated Dismissal with the Wishtoyo Foundation Ventura Coastkeeper, Heal the Bay*, filed with the U.S. Central California District Court February 3, 2012, executed among the City, the Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay.

Other Benefits

The proposed projects also have the benefit of providing a reliable, drought-resistant, more resilient local water supply source, which is particularly important as climate change and environmental constraints limit existing surface and groundwater supplies available to the City for use. The EIR analysis demonstrates that the proposed projects would augment the City's water supply at the lowest fiscal and environmental cost, compared to a range of feasible alternatives. It would also improve groundwater quality and water quality within the City's water supply system.

The City’s 2015 Urban Water Management Plan (UWMP), which identifies water supplies needed to meet existing and future water demands in normal and dry years, concludes that the City’s existing water supplies may be insufficient to meet future dry year demands. The UWMP concluded that a total of 5,398 acre-feet per year (AFY) of additional supplies (potable reuse and

desalination) are needed between 2030 and 2035 to meet projected dry-year demands. If the proposed projects are not approved, the foreseeable future would include water rationing during drought conditions and/or restrictions on economic growth within the City due to unavailability of water supply. Up to 50 percent demand reduction would be mandatory if no other water supplies are provided.

Desalination is the only other new water supply that could augment the City's water supply enough to meet future needs. To meet foreseeable water demands during drought years, the City would need to develop an ocean desalination project to produce 4.8 million gallons per day (MGD) (5,400 AFY) and 1.8 MGD (2,000 AFY) of groundwater desalting. The new outfall and discharge would need to be compliant with the new Ocean Plan Amendment standards for ocean water desalination discharges, resulting in considerable permitting delay potential. Because this water supply solution likely would not be constructed before 2035, when the UWMP found that significant water shortages would occur, this alternative would require the interim implementation of water rationing.

The proposed projects would also improve drinking water quality by producing treated water to blend with current groundwater supplies. Water from groundwater wells contains higher levels of dissolved solids and minerals than surface waters, such as Lake Casitas or the Ventura River. While the City's treated groundwater meets all health requirements, its mineralized content results in deposits on plumbing fixtures and less aesthetically pleasing water quality (Ventura Water 2017).

To explain the groundwater quality issue in more technical terms, the City's potable water supply that originates from its groundwater wells does not currently meet secondary maximum contaminant limits (MCLs) for total dissolved solids (TDS) and sulfate concentrations. The California Division of Drinking Water has required the City to improve mineral water quality in the groundwater supply. The AWPf would be designed to include additional treatment capacity to desalt and treat an additional 1.2 MGD (1,400 AFY) of groundwater from the Oxnard Plain Basin during Phase 1. The City has calculated that the addition of this purified groundwater would provide sufficient blending with existing groundwater supplies to improve the potable water supply, with the objective of meeting the secondary MCLs.

If the proposed projects are not implemented, no existing high-quality potable water supply would be available to improve the water quality of groundwater supplies. Another option would be to build a desalination plant, but construction would require a lengthy permit process and likely would not be completed for several decades. The proposed projects provide a more immediate solution to the mineralized content of groundwater supplies.

No other water supply options exist for the City that are less expensive to implement than the proposed projects. The Master Response on Project Cost, contained in Chapter 10, includes a matrix that summarizes capital costs and operational costs for two different alternatives that would address state law mandates to reduce discharge to the SCRE and meet water supply needs. As shown in the matrix, the proposed projects are the most cost effective alternative. Construction of a pipeline to convey tertiary-treated water to Oxnard would initially have a smaller capital

expense, but would not provide water supply benefits. The construction of an ocean desalination facility would present a large capital expenditure and annual operations and maintenance that would exceed the costs of Phase 1 of the proposed projects. The Master Response on Project Cost also discusses the No Project Alternative. If the City cannot provide the water needed to meet the needs of planned future growth, it would need to implement water rationing, would not be able to improve water quality, and would continue to discharge tertiary-treated water into the SCRE, contrary to the Consent Decree and in violation of the Enclosed Bays and Estuaries Policy and the Recycled Water Policy. While the costs of the No Project Alternative are difficult to quantify, they include significant short- and long-term public and private costs.

CHAPTER 10

Responses to Comments

The comment letters received during the public review period for the Draft EIR (DEIR) are included in Chapter 10. In this chapter, the City of San Buenaventura (Ventura, or City) provides individual responses to the bracketed comments in each letter. In some instances, in response to the comment, the City has made additions or deletions to the text of DEIR; additions are included as underlined text and deletions as ~~stricken text~~.

Responses in this chapter are organized into sections beginning with the City's Master Responses to reoccurring DEIR concerns included in comment letters, followed by the City's responses to comment letters received from federal agencies, state agencies, and local agencies. The final section includes the City's responses to local individuals who submitted comment letters during the public comment period or who submitted comment cards during the public meeting held for the DEIR.

10.1 Master Responses

This section provides comprehensive discussions on a set of recurring themes identified by commenters on the DEIR. The Master Responses focus on responding to project costs, impacts to rates, water quality and public health, and the State Water Interconnect Project concerns.

Project Cost

Many comments from local citizens expressed concerns about the cost of the projects and asked whether there may be less expensive ways of achieving National Pollutant Discharge Elimination System (NPDES) permit compliance and increased water supply. This Master Response addresses these concerns.

CEQA states that "The purpose of an environmental impact report is to identify the significant effects on the environment of a project."¹ Consequently, this Environmental Impact Report (EIR) focuses on the proposed projects' impacts on the physical environment. When substantial evidence shows that social and economic impacts *would cause physical impacts* on the

¹ Public Resources Code, Section 21002.1(c).

environment, such impacts must be considered.² Costs can also be considered to determine that a project alternative is infeasible or if one alternative is preferable to others.³

The City requested Carollo Engineers to prepare an updated preliminary cost estimate for the projects. As shown in the September 12, 2019, memo by Carollo Engineers, included as Appendix E, the most recent capital cost estimate for the Phase 1 projects is \$190 million to \$206 million, excluding AWP land acquisition costs, with an estimated annual operations and maintenance cost of \$5.6 million per year beginning in 2025, increasing to \$6.7 million per year after 2030. This cost incorporates the measures needed to meet requirements to reduce discharges to the Santa Clara River Estuary (SCRE) and to create and serve a new local water supply to Ventura Water customers to meet future dry-year demands.

Table 10-1 below summarizes and compares capital costs and operational costs for the proposed projects, and another alternative studied in the EIR and frequently commented on, which would address mandates to reduce discharge to the SCRE and meet water supply needs. As shown in the matrix, the proposed project is the most cost effective alternative meeting the project objectives. Construction of a pipeline to convey tertiary-treated water to Oxnard would initially have a smaller capital expense, but would not provide water supply benefits unless a desalination facility is also constructed. The construction of an ocean desalination facility would present a large capital expenditure and annual operations and maintenance (O&M) that would exceed the costs of Phase 1 of the proposed projects. As set forth in the Carollo technical memorandum, no other water supply options exist for the City that are less expensive to implement.

TABLE 10-1
SUMMARY OF THE CAPITAL COSTS AND OPERATIONAL COSTS OF THE PROJECTS

Alternative	Discharge Diversion	Water Supply	Total Construction Cost	Annual O&M Costs
Proposed Project	No additional cost (part of the proposed projects)	Potable Reuse \$190-206M	\$190-206M	\$6.7M
Send Effluent to Oxnard	Pipeline to Oxnard \$61M	Ocean Desalination \$250M	\$322M	\$0.4M – Pipeline \$10M – Desalination \$10.4M – Total

The No Project Alternative would also impose significant costs, both public and private, on the City and its residents. As the EIR states on page 2-39:

This [the No Project] alternative would not result in the benefits to the ecology of the SCRE that the proposed project would provide. The City would be in violation of the Consent Decree and could also be in violation of the CWA, depending on the Regional

² Public Resources Code, Section 21080(e)(2) states: “Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment.” See also Pub. Resources Code, Section 21082.2(c).

³ Public Resources Code, Sections 21002, 21002.1(c), 21061.1, 21081(a)(3), and 21081(b).

Board's orders in the new NPDES Permit. The City would have no recycled water diverted for water supply. With no new water supply projects, the City would be unable to eliminate the supply deficits identified in Table 1-4 and Table 1-5 and could not adequately supply water to its residents and customers during dry years and drought conditions. Under this alternative, the City would be required to ration future water supplies. In addition, the City would continue to fail to meet the secondary MCLs for drinking water quality on its groundwater supplies.

Potential public costs would include the costs of litigation for failure to comply with the Consent Decree and for new violations of the federal Clean Water Act and the Porter Cologne Water Quality Control Act; the potential costs of penalties for violations of the Consent Decree, the Clean Water Act and Porter Cologne, as well as the VWRf NPDES Permit if the Regional Board's orders in the new VWRf NPDES permit cannot be met. Additional costs include the potential cost of penalties for failing to meet secondary MCLs; and the social and economic costs to the City of having insufficient water supply to satisfy demand associated with expected demographic and continued economic growth within the City, and well as costs of implementing and enforcing a water rationing program.

The most immediate cost of violating the Consent Decree likely would be the initiation of lawsuits by the parties to the Consent Decree. In addition, the City would not simply be free of its obligations to protect the SCRE under state and federal law if it violated the Consent Decree. As a result, additional litigation claims for new violations of the federal Clean Water Act and Porter Cologne are likely. The parties to the Consent Decree would likely sue, both to enforce the Consent Decree and to implement the underlying obligations under state and federal law. This litigation would also lead to delay in construction of discharge diversion and water supply facilities that would cause the City's cost of compliance to increase exponentially, and the City would incur substantial legal fees, court costs (including, potentially, attorneys' fees payable to the City's opponents) and state and federal penalties. If the City willfully disobeyed the Consent Decree, it could even be subject to contempt proceedings and court fines.

The discharge reduction that would be achieved by the proposed projects is not solely a response to the Consent Decree, but are independently required under Porter Cologne, and therefore are, by law, also part of the Regional Water Quality Control Board's NPDES permit evaluation. The Regional Board specifically required the City to conduct in-depth studies to help determine how much of the discharge could be phased out over time, as required by the Enclosed Bays and Estuary Policy and the Recycled Water Policy, while still protecting SCRE sensitive species, habitat types, and water quality, as a condition of its 2002 and 2008 NPDES permits. See, EIR, pp. 1-7 – 1-9. In addition, the 2013 NPDES permit, Regional Board Order R4-2013-0174, for VWRf discharges required the City to prepare additional studies, including the Phase 3 Estuary Study for the same purpose. The Regional Board further addressed the relevance of the information required by the Consent Decree to the 2013 VWRf NPDES permit requirements (EIR, p. 1-9). If the City were to fail to reduce discharge to the SCRE, in violation of the Enclosed Bays and Estuary Policy and the Recycled Water Policy, the requirements of which must be addressed in its renewed VWRf NPDES permit (anticipated to be issued in late 2019), the City could be subject to enforcement actions and third party citizen suits, including claims for

monetary penalties, attorneys' fees, and litigation costs. Failure to comply with secondary MCLs similarly could result in similar enforcement actions and third party citizen suits.

As the EIR states, the No Project Alternative would also require the City to impose water rationing and turn away new economic development opportunities. The mandatory water restrictions that the state imposed during the 2015 drought may provide some guidance as to the water rationing costs, both public and private, that the No Project Alternative would involve. The state instructed water authorities to raise rates on heavy water users, to reward conservers and punish wasters. Punitive measures, such as fines, could be imposed. The likelihood of reduced economic opportunities, based on the City's inability to permit new businesses, homes, and other economic ventures, would be both a public and private cost.

These public and private costs are more difficult to quantify than the costs of constructing the proposed projects. In particular, a determination by the City not to comply with the Consent Decree, state and federal law, and/or NPDES would be a fundamental assault on the rule of law. If the City fails to protect the ecology of the SCRE, costs to the species that rely on the SCRE, including endangered and threatened species, are also difficult to quantify. For all of these reasons, the No Project Alternative would cost the City and its residents more -- in short-term economic costs, medium-term legal and regulatory costs, long-term damage to the economy, and potentially permanent costs to species and their habitats -- than the proposed projects.

To the extent that any costs of the proposed projects or the Alternatives could result in physical impacts on the environment, the EIR analyzes those impacts. CEQA only requires the analysis of the physical impacts to the environment that are anticipated to result from imposition of economic and social costs.

Impact on Rates

Several comments were received regarding the potential effect of the proposed projects on water rates. The City of Ventura has not finalized its funding portfolio for the projects, but financing methods may include any combination of low interest loans, grant funding, and traditional financing through bonds or capital loans, repaid through the existing Estuary Protection Fund as well as future rates and fees. Once financed, it is anticipated the City's utility rates would be increased to pay for the projects, but rate increases are needed to pay for any project that provides a new local source of water supply and that diverts VWRP discharges from the SCRE.

There are many steps the City has already taken to raising funds for the proposed projects, in order to minimize the effects of construction costs on future customer utility rates. Following the signing of the Consent Decree in 2012, the City instituted an additional rate for the "Estuary Protection Fund" to raise \$55 million to be spent on developing the best approach to diverting discharge from the SCRE. Revenues collected from the Estuary Protection Fund charge are kept in a separate reserve and used for Estuary Protection related planning studies and facilities through the financing of bonds that would be issued (in the future) to build the project facilities. The City has so far collected \$9.494 million for this intended purpose, which is available to devote to implementation of the proposed projects.

In 2016, the City adopted a Water Rights Dedication and Water Resources Net Zero Ordinance which establishes the cost basis for the one-time net zero fee. The fee was initially set at \$26,457 per acre-foot of additional demand, and is currently \$28,853 per acre-foot of additional demand. The basis of the net zero fee is that the City's water supplies are being used at or near full capacity. Therefore, new or intensified developments need to provide supplemental water resources proportional to the new demand created by the development. The Net Zero program has generated \$2.463 million of revenue to be applied to projects to augment the City's water supply. The City also included the elements of a project to augment water supplies in the Capital Improvement Programs that were used as the basis for rate studies in 2014 and 2015. The reserve created by these fees, and the funds associated with these designated capital expenditure budget line items are available to devote to implementation of the proposed projects.

In addition, the City has actively pursued opportunities to leverage local dollars for water supply diversion and SCRE protection with grant funds. The City received planning grants in the amount of \$225,000 that allowed the City to be placed on a fundable list for construction grants. In 2018, the City competed for and was awarded \$2.46 million from the US Bureau of Reclamation Title XVI program. The City is eligible to receive up to \$20 million from the Bureau. All of these sources of funding will be considered in a new rate analysis that is expected to be completed in 2020 to establish new rates once a water supply and discharge diversion project is approved.

Water and wastewater rates are derived based on several factors including but not limited to the following: City administration, Ventura Water staff salaries and benefits, operations including utilities and chemicals, water purchases/extraction rates, maintenance of existing facilities and systems, capital improvement projects (replacement, upgrades and new), litigation costs, consultant costs and regulatory requirements. Most of these factors mentioned above continue to increase each year and it can be expected that rates will increase due to these increases. The proposed projects' costs will be refined as we move forward and will be updated in the City's Capital Improvement Plan. The refined estimated costs along with the rest of the City's water and wastewater capital improvement projects costs will affect rates, but it is not anticipated that current rates will double due to the costs of the proposed projects as has been asserted by some commenters.

Water Quality and Public Health

Several comments were received raising concerns on the potential impacts of potable reuse on water quality and public health. This Master Response addresses the issue.

California's Strict Requirements to Protect Drinking Water Quality

The California Division of Drinking Water (DDW) currently regulates the use and treatment of recycled water. Regulations in Title 22 of the California Code of Regulations impose strict treatment, monitoring, and retention time requirements for injection of treated wastewater into a groundwater aquifer. This type of project falls under the category of Indirect Potable Reuse (IPR).

In general terms, groundwater recharge regulations for recycled water focus on protecting public health from risks associated with pathogens and chemicals. The groundwater recharge criteria for potable reuse include:

- Pathogens - 12-log removal for virus, 10-log removal of Giardia, 10-log removal of Cryptosporidium (point of raw wastewater to the point of finished water for drinking)
- Total Organic Carbon - Maximum 0.25 mg/L in 95% of samples within first 20 weeks. Maximum 0.5 mg/L in 20-week running average
- Dioxane - 0.5-log Reduction (point of raw wastewater to the point of finished water for drinking)
- Total nitrogen - 10 mg/L

For a groundwater injection application, the above requirements dictate the treatment process train for purifying water prior to injection for IPR. Full Advanced Treatment (FAT) for potable reuse in California includes microfiltration or ultrafiltration (MF/UF), reverse osmosis (RO), and an ultraviolet light advanced oxidation process (UV AOP). This standard potable reuse treatment train will be employed for VenturaWaterPure and provides a multiple-barrier approach for the removal of pathogens and chemicals. In addition, the City proposes to add an additional “environmental buffer” to the treatment train, consistent with Title 22, which requires that the treated water be stored underground for a minimum of 2 months to benefit from soil aquifer treatment that may assist in achieving effective removal of any pathogens that may survive the treatment process.

The pathogen reduction requirements are based on goals for pathogen concentrations that have been accepted by regulators responsible for health and safety, as well as the water treatment industry. DDW has implemented regulations that impose strict controls on potable reuse treatment processes including conservative pathogen removal requirements and environmental buffers to protect public health and the quality of the water supplies. Application of these permit requirements provides regulatory control over potable water treatment standards in California.

Successful Potable Reuse Projects in California

Indirect potable water reuse projects have been successfully implemented in California and nationally using a broad range of treatment and monitoring technology to be protective of public health. As mentioned before, injection of treated wastewater into a groundwater aquifer falls under the category of IPR.

For example, the Orange County Water District (OCWD) Groundwater Replenishment System (GWRS) currently recharges 100 million gallons per day (mgd) of highly treated wastewater into the primary local drinking water source for the northern portion of the County. The GWRS has been in operation for over 30 years.

Another example of a Southern California IPR project is the Water Replenishment District (WRD) of Southern California. WRD and the Los Angeles County Sanitation Districts are partners in the recharge of tertiary recycled water (secondary treated effluent that is then filtered

and disinfected) into the local groundwater basin. Over the last 30+ years, more than 1.45 million acre-feet of reclaimed water has been placed into spreading basins and percolated down into the aquifer, later to be extracted for potable water use.

Both of these large-scale Southern California projects include robust monitoring plans to monitor water quality in the basin to ensure the community's access to safe drinking water. These projects have continued to protect public health over their years of operation, and there have not been any public health issues or disease outbreaks attributed to these projects. Furthermore, the California Medical Association came out in 2012 in support of potable reuse and encouraged efforts to expand its use.

The future of potable reuse will include opportunity to supply advanced treated water in a more direct distribution, referred to as Direct Potable Reuse (DPR). The treatment processes, technologies and monitoring regime for health and safety are the same as IPR, with slight differences in how the water is stored and delivered. With DPR, an engineered storage buffer would take the place of the environmental storage buffer such as a groundwater basin. The evaluation and feasibility of DPR in the state of California has been performed and DPR health and safety regulations are being formulated by regulators now, in order to meet a legislatively mandated 2023 deadline for adoption of the regulations to facilitate and govern DPR in California.

Demonstration Facility

In 2015/2016, Ventura Water operated a VenturaWaterPure demonstration facility that was designed with treatment process trains like those described above, incorporating multiple barriers against both pathogens and trace pollutants. These processes met or exceeded the treatment required by regulations governing IPR via groundwater injection. The approximate 20 gallons per minute (gpm) process train took tertiary-treated, sand-filtered, undisinfected water from the Ventura Water Reclamation Facility (VWRF) and provided treatment through ultrafiltration (UF), reverse osmosis (RO), and an ultraviolet light (UV) advanced oxidation process (AOP). In addition, pasteurization was included in the treatment train for a portion of the testing period. Pasteurization is not included in the proposed projects because it does not add any additional approved log reduction for pathogens or bacteria that are not provided by other processes, such as barrier filtration with granular activated carbon provides. Also, pasteurization did not augment the destruction of chemicals any more than that accomplished by ozone/biofiltration.

The primary purpose of the demonstration facility was to document the effectiveness of the proposed treatment processes on VWRF tertiary treated water through extensive water quality testing. The performance of each treatment process was documented and compared against drinking water treatment industry standards and expectations. The final water quality was also compared with the DDW's regulations for IPR, with the focus on pathogen and chemical concentrations in the finished water. The water quality results met all DDW standards for chemical and pathogenic pollutants. The facility met the water treatment goals of 12-log removal for virus, 10-log removal of Giardia, and 10-log removal of Cryptosporidium. It also met drinking water maximum contaminant levels (MCLs) and reduced/removed trace pollutants.

The demonstration facility documented that a proposed IPR project would meet or exceed all DDW health and safety regulations for IPR. The proposed AWPf would use the same technology as the demonstration facility and would be expected to have the same results: meeting or exceeding all DDW regulations protecting health and safety of consumers. The 2018 VenturaWaterPure Potable Water Reuse Demonstration Project Summary Report can be found on the Ventura Water's web site, <https://ca-ventura.civicplus.com/1081/6635/Library-of-Reports?activeLiveTab=widgets> and is incorporated herein by reference.

VenturaWaterPure

The VenturaWaterPure project would construct a new Advanced Water Purification Facility (AWPF) designed to treat water to quality criteria that are more stringent than the Groundwater Recharge Reuse Regulations (Title 22 of the California Code of Regulations) applicable to IPR prior to injection into groundwater. The proposed treatment processes include an equalization/storage basin, ozone/biofiltration, BAC filters, UF, RO, UV, and AOP for IPR. These advanced treatment processes are described more fully in Table 2-3, on Draft EIR (DEIR) pages 2-12 through 2-122, and shown in Figure 2-3, on page 2-8.

Since regulations providing a clearly defined approval process for DPR have not been adopted yet in California, the proposed project would construct the IPR project first, relying on groundwater injection as the most practical way of creating additional water supply to accommodate projected demand, particularly in dry years, and to achieve discharge diversion schedule requirements that will be included in the upcoming NPDES permit renewal. The proposed project would include construction of the AWPf, groundwater injection and extraction wells, conveyance pipelines, and a concentrate discharge system. The highly treated water produced by the AWPf would be injected into the aquifer for a minimum of 2 months, as required by the regulations as a final environmental health and safety buffer, then extracted again to augment City supplies. DPR could be implemented in the future once regulations have been established.

The new water supply, whether produced by IPR or DPR technologies, would be required by law to comply with robust public health standards imposed by the DDW before it could be introduced into the City's supply. The treatment technology for IPR is proven to be effective, as demonstrated in other large-scale projects in the region as well as through the results of the demonstration facility conducted specifically for Ventura. As a condition of the permit to operate the projects, monitoring data would be collected and submitted to the DDW on a regular basis.

State Water Project Interconnection

Several comments refer to, and include materials relating to, a separate project also under consideration by the City: the State Water Project (SWP) Interconnection. The SWP Interconnection would enable delivery of SWP water that the City has rights to, but has never taken delivery of, by wheeling water through the Metropolitan Water District of Southern California and Calleguas Municipal Water District (Calleguas) water systems to the City. The interconnection would be a pipeline, approximately 7 miles in length, used to transport water between Calleguas' and the City's distribution systems. The pipeline facilities would also

facilitate direct delivery of SWP water to United Water Conservation District (United) and direct or in-lieu delivery of SWP water to Casitas Municipal Water District (Casitas). In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of Calleguas' imported water supplies. SWP Interconnection Project, Final EIR, p. 1-1. See also pages 6-3 – 6-4 of the DEIR.

The objectives of the SWP Interconnection are different from the objectives of the proposed projects. The SWP Interconnection project objectives are:

- Provide a near-term water supply source for the City to enhance supply reliability.
- Improve City water quality.
- Provide a backup supply for the City's other potential, long-term water supply options.
- Allow the City, Casitas and United to receive their SWP entitlements.
- Enable the City to deliver water to Calleguas during an imported water supply outage.

(SWP Interconnection Project, Final EIR, pp. 1-1 through 1-2.)

The SWP Interconnection would make up for recent and future anticipated losses in annual yield from Lake Casitas, the Ventura River, and groundwater. The SWP Interconnection would not provide additional water supply to augment existing supply, it would only provide replacement water to make up for losses in existing supply. The SWP, a regional water supply source, would compensate for lost local supplies but would not result in the City having a greater annual volume of supply than it has historically had.

The objectives of the proposed projects, as set forth on page ES-4, are:

- Augment local water supply in an environmentally responsible and cost-efficient manner.
- Provide a drought- and disaster-resilient water supply.
- Protect, maintain, and improve ecological resources and related beneficial uses of the SCRE and its watershed.
- Improve municipal supply groundwater quality within the service area.
- Maintain compliance with the City of Ventura's VWRF NPDES permit.

The SWP Interconnection project would not provide new local water supply to augment (rather than replace) existing supplies, and it also would not help to protect the ecology of the SCRE or maintain compliance with the City's NPDES permit. In addition, the SWP Interconnection project would not provide a drought-resilient water supply. Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support long-term resource planning and ensure adequate water supplies are available to meet existing and future water demand. (DEIR, page 5-2). The City's 2015 UWMP determined that the stable, reliable water supply augmentation that the proposed projects would supply is needed, whether or not the SWP Interconnection project is approved.

As explained in the DEIR at page 1-19:

The State Water Project (SWP) water supplied through the Calleguas system would be subject to the SWP water allocation, updated each year depending on the hydrology in the state. Some years the full entitlement may be available, while other years less water would be available. The California Department of Water Resources (DWR) indicates that, over the long term, an average of approximately 60 percent of water entitlements may be available to the State Water Contractors. However, during times of drought, deliveries have dropped to as low as 5 percent. In addition, water may be available during certain parts of the year but not others, making it an unreliable source. The City of Ventura does not have storage opportunities to store water in aboveground or underground reservoirs when it is available. As a result, the SWP interconnection is being pursued in parallel with the Ventura Water Supply Projects to augment water supplies when available, but the interconnection is not considered a reliable, consistent water supply.

During the development of feasible alternatives to the proposed projects that would meet most of the projects' objectives, the SWP Interconnection was evaluated as a possible alternative. For the reasons described above, it was determined that the SWP Interconnection would not feasibly obtain project objectives because it is not a reliable, drought-resilient water supply that consistently augments (rather than replacing diminishing) local supply sources, while protecting the ecology of the SCORE. DEIR, p. 6-4. Therefore, the SWP Interconnection was not included in the range of reasonable alternatives considered in the EIR.

Neither project is an alternative to the other, and neither project depends on approval of the other. Either project could proceed independently of the other. Consequently, the EIR for the proposed projects considers the SWP Interconnection project in its analysis of cumulative impacts (see Table 4-2, DEIR page 4-5), and in the evaluation of the potential for growth inducement (see DEIR page 5-4), but the SWP Interconnection is neither part of nor an alternative to the proposed projects.

10.2 Federal Agency Responses

The following comment letters were received from federal agencies on the Ventura Water Supply Projects Draft Environmental Impact Report (DEIR). The comment letters are grouped together and are followed by all responses as indicated in Table 10-2.

TABLE 10-2
LIST OF DEIR COMMENT LETTERS: FEDERAL AGENCY

Letter Code	Commenting Party	Letter Page Number	Response Page Number
F1	USFWS	10.2-2	10.2-8
F2	NOAA	10.2-7	10.2-18

From: Chan, Kendra <kendra_chan@fws.gov>
Sent: Wednesday, April 10, 2019 10:28 AM
To: Dorrington, Gina
Cc: Christopher Diel; Chris Dellith
Subject: Comments on Ventura Water Supply Projects Draft EIR
Attachments: Local, RWQCB, SCRE Special Study Phase 3 comment letter, 2019-CPA-0011 FINAL.pdf

Dear Ms. Dorrington,

We have reviewed the Draft Environmental Impact Report for the Ventura Water Supply Projects. We would like to bring your attention to the comment letter we sent to the Los Angeles Regional Water Quality Control Board back in December regarding the Special Study Phase Three Assessment for the Ventura Water Reclamation Facility.

F1-1

It is our understanding that there are scenarios where it may be necessary to release discharge that exceeds the proposed CDL, for example, for maintenance or in emergency situations during heavy rainfall. We believe that there may be some situations in which flow in excess of the maximum CDL could be detrimental to listed species. For example, if western snowy plovers or California least terns are nesting on/near a sand berm, an increase in discharge could sweep nests out to the ocean. Similarly, tidewater gobies often use side channels as a refuge during high flow conditions; excess discharge from the outlet channel of the water treatment plant may be detrimental to the tidewater goby.

F1-2

Could you please clarify if the City have a plan to address these concerns and potential affects to listed species due to higher discharges in these limited circumstances?

Lastly, we recommend that the adaptive management plan takes into account a comprehensive list of elements to minimize uncertainties in predicting changes to the designated critical habitat for the tidewater goby and western snowy plover, as listed in the attached comment letter.

F1-3

Please reach out if you have any questions about these comments.

Thanks,
Kendra

In reply refer to:
08EVEN00-2019-CPA-0011
81440-2008-B-0020

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Kendra Chan
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service | Ventura Fish and Wildlife Office
2493 Portola Road, Suite B | Ventura, CA 93003
(805) 677-3304 | kendra_chan@fws.gov



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
08EVEN00-2019-CPA-0011

December 7, 2018

Cris Morris, P.E., Chief
Watershed Regulatory Section
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, California 90013

Subject: City of Ventura's Special Study-Phase Three Assessment; Nutrient, Dissolved Oxygen, and Toxicity Study; and Science Review Panel Recommendations for the Ventura Water Reclamation Facility

Dear Ms. Morris:

We have reviewed your request, dated November 2, 2018, and received in our office on November 5, 2018, to provide comments regarding: 1) the minimum daily discharge of tertiary treated water into the Santa Clara Estuary to be deemed as a beneficial use; 2) any additional conditions necessary to protect native aquatic resources during the maximum daily discharges; and 3) any monitoring of the estuary not already proposed by the City of Ventura (City).

The mission of the U.S. Fish and Wildlife Service (Service) is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. To assist in meeting this mandate, the Service provides comments on public notices issued for projects that may have an effect on those resources, especially federally-listed plants and wildlife. The Service's responsibilities also include administering the Endangered Species Act of 1973, as amended (Act). Section 9 of the Act prohibits the taking of any federally listed endangered or threatened wildlife species. "Take" is defined at Section 3(19) of the Act to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The Act provides for civil and criminal penalties for the unlawful taking of listed wildlife species. Such taking may be authorized by the Service in two ways: through interagency consultation for projects with Federal involvement pursuant to section 7, or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act.

The area under review supports the following federally listed species as well as designated critical habitats:

Common Name	Scientific Name	Threatened or Endangered
Tidewater goby	<i>Eucyclogobius newberryi</i>	Endangered
California least tern	<i>Sterna antillarum browni</i>	Endangered
Western snowy plover	<i>Charadrius nivosus nivosus</i>	Threatened

F1-4

Cris Morris

2

Critical Habitat

Tidewater goby (VEN-2)

Western snowy plover (CA-38)

F1-4

The federally endangered southern steelhead (*Oncorhynchus mykiss*) is also known to occur within the study area; however, the National Marine Fisheries Service (copied) and the California Department of Fish and Wildlife (copied) are responsible for this species and we will not address it again in this letter.

We understand that the City seeks to construct and implement a recycled water system for its Ventura Water Reclamation Facility located at the Santa Clara River estuary that can retain and treat as much effluent as possible while conforming to the State Water Resource Control Board's Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Estuary Policy). The Estuary Policy states that discharge of municipal wastewaters and industrial process waters to enclosed bays and estuaries is prohibited unless the Regional Water Quality Control Board (Board) determines that the wastewater would be treated and discharged in a consistent manner such that it would enhance the quality of the estuary to a level that would not be achieved if not for the discharge. Currently, the City has the capacity to discharge up to 9 million gallons per day (MGD) of secondary treated effluent to the estuary. Based on the results of the subject studies and recommendations from the three-person Science Review Panel, the City wishes to reduce the amount of discharge to a rolling annual average and monthly average of 0.5 MGD to 1.9 MGD.

We offer the following responses with regards to the Board's three specific requests as they relate to the aforementioned federally listed species for which the Service is responsible:

- 1) Does the subject study support the conclusion that there are conditions when no discharge or when 0.5 MGD of discharge is needed to enhance beneficial uses during conditions when the estuary is closed? And during most dry weather months is a higher discharge between 0.5 and 1.9 MGD necessary to enhance the beneficial uses?

The subject studies indicates that with no discharge the estuary would have, under closed sand berm conditions, approximately 41 acres of open water, and with a discharge of 0.5 MGD the estuary would have approximately 49 acres of open water. Additionally, the studies also suggest that under closed sand berm conditions during dry-weather months a higher discharge of 1.9 MGD would result in approximately 86 acres of open water. The recovery plan for the tidewater goby states that the most stable or largest populations of tidewater gobies tend to be in localities (i.e., estuaries and lagoons) of intermediate sizes, 5 to 125 acres, which have remained relatively unaffected. (Service 2005). Under all three scenarios for discharge (e.g., no discharge, 0.5 MGD, or 1.9 MGD) it appears based on the subject studies a range of 41 to 86 acres of open water would be maintained, which is within the intermediate size range described in the recovery plan. Furthermore, tidewater gobies tend to be more abundant in waters 20 to 40 inches deep and within 100 feet of the shore.

F1-5

The Service considers any reduction of nutrient loading from artificial sources (i.e., effluent discharge or run-off from other human sources) into the estuary beneficial for the federally listed species for which the Service is responsible. By reducing nutrient loading, periods of unsuitable

Cris Morris

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dissolved oxygen should also be reduced providing better conditions for tidewater goby and California least tern's prey (e.g., topsmelt (*Atherinops affinis*), California killifish (*Fundulus paripinnis*)).

F1-5

- 2) Do the subject studies and the Science Review Panel identify additional conditions, if any, which must be met to protect aquatic life at high flows when the estuary is open to the ocean?

We understand the City is proposing to release discharge exceeding the closed sand-berm maximum flow requirement (i.e., 0.5 MGD or 1.9 MGD). Tidewater gobies will use side-channels and other similar features as refuge under high flow conditions (e.g., rain events where the lagoon or estuary is open to the ocean). One such side channel in the Santa Clara River is the outlet channel from the treatment plant. Should tidewater gobies start using (or continue to use) the outlet channel under the closed-berm maximum flow requirement then any release exceeding the closed-berm maximum flow requirement could be detrimental to tidewater gobies. This condition does not appear to be addressed by the subject studies and the Science Review Panel.

F1-6

There is much uncertainty and many variables to consider under this proposal. For instance, as the climate changes this region will likely see out-of-season rain events, which could breach the sand berm (i.e., the trigger for additional effluent releases). If this happens during the nesting seasons for the western snowy plover and California least tern (March through September), which have been known to nest on the sand berm, additional flows from the treatment plant could expand the breach and cause any nests on the sand berm to be swept into the ocean. As such, the City should develop protocols and specific criteria that ensures its actions do not result in take of federally listed species. For example, careful monitoring of western snowy plover and California least tern nesting locations could inform operators as whether they should release additional flows or not. If nests are detected on the sand berm then there should be no additional releases of effluent.

- 3) Identify any monitoring that should be included in an adaptive management plan to protect the beneficial uses of the estuary.

We recommend that the Board condition its permit so that the City develop a scientifically-based adaptive management plan to minimize uncertainties in predicting changes in the conservation value of designated critical habitat for the tidewater goby and the western snowy plover. The adaptive management plan should consider the following elements, which may inform the discharge schedule and any future changes in discharge made during the lifetime of the proposed water-recycling facility: (1) modified water management practices of United Water Conservation District that result in changes to river hydrology, affecting water quality and water-surface level predictions; (2) altered conditions associated with proposed restoration actions in the river and estuary related to McGrath State Park; (3) rates of estuary filling (e.g., water-surface elevations relative to tides and wave action), stratification and stage, including changes to the bathymetry of the estuary following large storm events, and changes to the beach dynamics associated with dredge spoil placement; (4) accurately quantify the contribution of groundwater discharge to overall nutrient input to the estuary; (5) accurately quantify the effect of groundwater extraction on direct groundwater discharge to the estuary; (6) accurately quantify water quality conditions (e.g., stratification, temperature and salinity profiles, at surface and bottom; dissolved oxygen at

F1-7

Cris Morris

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bottom on a longitudinal profile) associated with changing patterns of discharge from both the Santa Clara River and the proposed water-recycling facility, particularly: frequency, extent and duration of hypoxic episodes, algal blooms, primary production, and cyanotoxin; (7) accurately quantify the role and relative importance of wave overwash in terms of inputs to the estuary; (8) characterize habitat distribution and type, including optimal depths for tidewater goby and foraging California least tern; (9) invasive species monitoring that may have an effect on tidewater goby and California least tern prey species and habitat features; (10) generate ecological triggers to initiate additional analysis or studies to detect if failure to meet performance standards is related changes in current discharge; (12) nesting surveys by qualified biologists for western snowy plover and California least tern on the sand berm; and (13) monitoring California least tern foraging behavior as conditions change.

F1-7

We appreciate the opportunity to comment on the proposed project, and look forward to working with you to find ways to minimize and avoid impacts to listed species. If you have any questions, please contact Chris Dellith of our staff at (805) 677-3308, or by electronic mail at chris_dellith@fws.gov.

F1-8

Sincerely,



Jenny Marek
Deputy Field Supervisor

cc:

Brittany Struck, National Marine Fisheries Service
Erinn Wilson, California Department of Fish and Wildlife

From: Brittany Struck - NOAA Federal <Brittany.Struck@noaa.gov>
Sent: Monday, April 22, 2019 5:20 PM
To: Dorrington, Gina
Cc: Erickson, Elizabeth@Waterboards; chris_dellith@fws.gov; Wilson, Erinn@Wildlife; antal.j.szijj@usace.army.mil; dmcpherson@usbr.gov; Daniel Cozad; Tom Barnes (TBarnes@ESASSOC.COM)
Subject: Re: Comment Letter Ventura EIR

Thanks, Elizabeth!

Gina, my comments are focused on the language in the DEIR concerning recovery plans and consultations under the ESA. See below for my comments. We won't be sending official correspondence to the City. My role is to advise the City at any time I see necessary through technical assistance as the project develops. Technical assistance can take many forms; one form would be comments in an email such as this.

F2-1

Page 1-11, add NEW text: NMFS published a Recovery Plan for endangered Southern California steelhead in January 2012. As required by Section 4(f) of the Endangered Species Act, the recovery plan delineates reasonable actions that are believed to be required to recover and/or provide future protections for endangered Southern California steelhead.

F2-2

Page 3.4 – 61 (third paragraph); also see Page 3.4-66 (fourth paragraph): Per my Feb. 11, 2019, call with Daniel Cozad, the City plans to seek USBR funding, which may trigger the USBR to request ESA Section 7 consultation with NMFS. This needs to be more apparent in the final EIR. The City need only explain that the project may affect the species and its designated critical habitat; the mention of "take" isn't necessary in these two particular paragraphs for the final EIR. To clarify for the reader, the USBR is required to submit a Biological Assessment to the Services (USFWS and NMFS) when the USBR determines the funding action may affect listed species or designated critical habitat. Further, biological assessments must be prepared for "major construction activities." See 50 CFR §402.02. The outcome of this biological assessment determines whether formal consultation is necessary [50 CFR §402.02, 50 CFR §402.12]. Ultimately, the project will affect designated critical habitat on which the species depends, thus the project may affect listed species regardless if impacts are direct or indirect. NMFS is called to analyze all effects to the species and its critical habitat. The physical and biological features of critical habitat provide important ecological functions to sustain growth and survival of the species, and are necessary to secure the viability and support recovery of the species.

F2-3

Please forward along my comments to anyone you think needs to see them. My email distribution list does not match Elizabeth's email distribution list.

F2-4

Thanks,
 Brittany

On Mon, Apr 22, 2019 at 4:07 PM Erickson, Elizabeth@Waterboards
 <Elizabeth.Erickson@waterboards.ca.gov> wrote:

Attached please find correspondence from the Los Angeles Regional Water Quality Control Board (Regional Water Board).

The Regional Board Watershed Regulatory Section sends our correspondence with PDF format through email. You will not receive a hard copy unless you are the addressee of the correspondence or you do not have an email address. If you are no longer a responsible party, nor interested in receiving correspondence regarding the subject facility, please kindly reply to this email and we'll remove you from the cc list.

The attached document is in Adobe Acrobat PDF format. You can obtain an Acrobat Reader free of charge at <http://www.adobe.com/products/acrobat/readstep2.html>.

Elizabeth Erickson

Regional Water Quality Control Board Los Angeles

NPDES Municipal Permitting

Engineering Geologist

213 576 6665

Elizabeth.Erickson@waterboards.ca.gov

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Brittany Struck

Natural Resource Management Specialist

*U.S. Department of Commerce
NOAA Fisheries West Coast Region
501 West Ocean Blvd., Suite 4200
Long Beach, CA 90802*

*Office: 562-432-3905
Fax: 562-980-4027
Cell: 214-505-9547
brittany.struck@noaa.gov*



"We cannot solve our problems with the same thinking we used when we created them."
- Albert Einstein

United States Fish and Wildlife Service

Response F1-1

The referenced letter from the U.S. Fish and Wildlife Service (USFWS) to the Los Angeles Regional Water Quality Control Board is attached to the DEIR comment letter from USFWS. Responses F1-4 through F1-7 address the attachment.

Response F1-2

Please see Response F1-6, which addresses the elements referenced by this paragraph.

Response F1-3

Please see Response F1-7, which addresses the elements referenced by this paragraph.

Response F1-4

The comment describes the project, summarizes authority relevant to USFWS review, and identifies federally listed endangered and threatened species and critical habitat in the project area.

The comment incorrectly describes the City's proposed closed-berm discharge regime. The City proposes that the Ventura Wastewater Reclamation Facility (VWRF) discharges would be reduced: (a) as a part of Phase 1a to an average annual discharge of 1.9 million gallons per day (MGD) during closed-berm conditions, calculated on the basis of a water year (October 1 to September 30); and (b) as a part of Phase 1b during closed-berm conditions to an average annual discharge of 0–0.5 MGD, calculated on the basis of a water year (October 1 to September 30), consistent with the recommendations of the Scientific Review Panel (SRP) and the Technical Review Team (TRT).

The following footnote has been added to the Environmental Impact Report (EIR) on page 2-4 following the first reference to the abbreviation "CDL." ¹

¹All references to "discharges" and "discharge levels" in the EIR and these responses refer to average annual discharge levels during closed-berm conditions, calculated based on a water year (Oct. 1 to Sept. 30), unless open-berm conditions are specifically mentioned, in which case discharge levels refer to average annual discharge levels during the steelhead migratory period when the berm has been opened due to high flows in the Santa Clara River.

Response F1-5

The comment is consistent with the conclusions provided in Section 3.4.8 of the DEIR, based on the modeling results, data and information in the Phase 3 Santa Clara River Estuary (SCRE) Report (City of Ventura Special Studies – Phase 3: Assessment of the Physical and Biological Conditions of the Santa Clara River Estuary, Ventura County, California, February 2018

[hereinafter “Phase 3 Report” or “Stillwater Sciences 2018”]), and conclusions of the SRP and TRT, finding that the reduction of open water to 41 acres resulting from zero discharge scenario would maintain habitat sufficient to support aquatic listed and native species, including goby and steelhead, while providing for nutrient load reductions and other habitat benefits for listed species. As noted in the comment, the Tidewater Goby Recovery Plan identifies suitable acreages for lagoons that range from 5 to 125 acres. The DEIR concludes, based on the best available science, that despite reductions in the area of open water habitat that would result, the discharge reductions benefit native aquatic species, including federally listed species, and would improve primary constituent elements (also known as primary physical or biological features) of their critical habitats within the estuary by:

- Reducing potential for discharges to interfere with lagoon closure during declining river flows in the spring as the steelhead migration period is closing, which improves low-velocity habitat for goby and conditions for young-of-the-year juvenile steelhead (SRP Technical Memorandum (June 25, 2018) [hereinafter “SRP Final Report” or “SRP, 2018”], pp. 11–12, pp. 24–26; Stillwater Sciences, 2018, p. 249):
- Creating a hydrologic regime that more closely mimics historical and natural conditions within the watershed, while taking into account historical anthropogenic modifications to the watershed, and the current hydrological conditions within the watershed (SRP, 2018, pp. 14–15; TRT Comments on the Final Phase 3 Report, March 9, 2018 (TRT, March 2018), Attachment 1 (Dec. 8, 2017), pp. 10–11).
- Retaining predicted depths of at least 4.5 feet within open water areas, which are sufficient for goby and juvenile steelhead cover, while limiting open water areas that are too shallow when closed-berm discharges exceed 0.5 MGD to provide good habitat (SRP, 2018, pp. 21–26; TRT, March 2018, Attachment 1, pp. 4–5; Stillwater Sciences, 2018, p. 157, p. 162).
- Improving water quality within the estuary for all life stages of the goby, steelhead migration, and steelhead juveniles and rearing, particularly with respect to nutrient loads and related dissolved oxygen (DO) insufficiency, and adverse swings in pH (SRP, 2018, pp. 15–16; TRT Comments on SRP Report on Phase III Report, June 26, 2018 (TRT, June 2018), p. 2); Stillwater Sciences, 2018, pp. 242–243).
- Based on improvements in water quality, improving food sources for aquatic and native species (including the least tern, the goby, and the steelhead) (SRP, 2018, p. 16; TRT, June, 2018, p. 2; Stillwater Sciences, 2018, Section 5.6.2.4, p. 280).
- Improving salinity conditions and slowing freshening within the SCRE consistent with the needs of native estuarine species, including those of all goby life stages, juvenile steelhead, and steelhead rearing (SRP, 2018, pp. 24–26; Stillwater Sciences, 2018, p. 252).
- Improving opportunity for seasonally appropriate wave overwash into the SCRE (SRP, 2018, pp. 10–13).
- Improving availability of burrowing substrate for the goby (SRP 2018, p. 11, 20; Stillwater Sciences, 2018, p. 269; TRT, March 2018, p. 5).
- Reducing competition and predation from non-native species (SRP 2018, p. 11).
- Reducing or ultimately eliminating the impetus for unseasonal breaching of the lagoon berm, which presents mortality risk to goby and juvenile steelhead using the estuary

during dry weather, closed-berm conditions (SRP, 2018, p. 10; Stillwater Sciences 2018, p. 271).

Response F1-6

The comment raises two concerns regarding the open-berm discharge regime proposed for the project based on the recommendations of the SRP, with concurrence of the TRT: (1) open-berm discharges in excess of the closed-berm Continued Discharge Level (CDL)¹ could be detrimental to tidewater gobies by sweeping them out of the SCRE; and (2) out-of-season rain events, which may become more typical due to climate changes in the region, may result in breaching the sand berm during the nesting seasons for the snowy plover and the least tern, and additional flows during such conditions could be detrimental to those species.

As noted in the DEIR (p. 2-7), equalization storage of 4.5 million gallons (MG) would be installed at the Advanced Water Purification Facility (AWPF) to accommodate high inflows through the VWRP during periods when the SCRE berm has not breached. Discharges in excess of the CDL would be permitted only when the berm is open during the winter steelhead migratory period. As additional emergency capacity redundancy, the ocean outfall is being sized to accommodate peak flows from the VWRP if storage is unavailable. These engineered solutions would ensure that the facility is designed to comply with the SRP and TRT recommendations regarding discharges, as well as the Enclosed Bays and Estuaries Policy promulgated pursuant to state law, i.e., the Porter-Cologne Water Quality Control Act.

The CDLs for Phases 1a and 1b are set forth in Table ES-1 (DEIR, p. ES-3). As stated in the DEIR, the proposed discharge regime would reduce discharges to the SCRE during closed-berm conditions to:

- An average annual CDL of 1.9 MGD in Phase 1a
- An average annual CDL of 0 to 0.5 MGD by 2030 in Phase 1b, subject to the Monitoring, Assessment, and Adaptive Management Program (MAAMP) (BIO-6)
- An average annual CDL of 0 MGD in Phase 2

Post-Project Reductions in Open-Berm Discharges. Discharges of tertiary flow to the SCRE exceeding the CDL would be permitted only when the berm is open during the steelhead migratory period due to high Santa Clara River flows, as recommended by the SRP (SRP 2018, pp. 10, 26), subject most importantly to continuous open- and closed-berm condition diversion and reduction of discharges by a total of 6 MGD (after completion of Phase 1). Discharges in excess of the CDL would also be limited by:

- Implementation as part of the proposed projects of 4.5 MG of storage capacity for tertiary treated flows.

¹ All references to “Continued Discharge Level” or “CDL” in the EIR and the responses refer to average annual discharges during closed-berm conditions, calculated on the basis of a water year (Oct. 1 to Sept. 30).

- Maintenance in the post-project condition of the wildlife/water quality retention ponds, and current discharge pipes and outfall structures that are sized and designed to provide for controlled releases of tertiary-treated flow from the system to the SCRE.

The result of the addition of storage and continued use of retention ponds, existing discharge pipes and outfall structures would be that post-project open-berm discharges of tertiary-treated water would be both less than the discharges currently released by the VWRP during existing conditions and better controlled as compared to the existing condition considered in the Phase 3 Report (Stillwater Sciences 2018).

Moreover, open-berm discharges that exceed the closed-berm CDL are proposed to be limited to specific circumstances, i.e., circumstances where the discharges are necessary to create or maintain maximum storage capacity within the system for purposes such as: conducting critical health and safety maintenance or repair activities necessary to protect the environment and/or the public; protecting the VWRP and/or AWP system operations and treatment processes, particularly during exceptional or multiple rain events, prevention of spills and/or bypass, and/or drawing down stored flows to ensure sufficient storage capacity during closed-berm conditions.

Further, open-berm discharges would occur after the berm is breached as confirmed by visual monitoring and water levels in the lagoon have already declined as a result. The addition of flow from the VWRP would not re-fill the SCRE lagoon since the berm is already breached. As a result, it is anticipated that any nests along the edge of the lagoon would not be in danger of inundation during these special circumstance discharges.

The proposed open-berm discharge regime has been developed to reduce open-berm discharges to a level that is less than that occurring under existing conditions, while still providing for safe, environmentally protective operation of the VWRP and AWP treatment plants, particularly during precipitation events.

Negligible Effects of Open-Berm Discharges. The proposed discharge regime is also designed to comply with recommendations of all of the scientific reports prepared to analyze the impacts of discharges to the beneficial uses and ecology of the SCRE, including its native species and habitats, and particularly its listed species and their habitats. All three scientific reports conclude that open-berm discharges greater than the closed-berm CDL will not detrimentally impact the listed species occupying the SCRE, including the snowy plover and least tern, their nests, or the tidewater goby (SRP 2018, p. 26; TRT, Attachment 1 (Dec. 2017), p. 16; Phase 3 Report 2018, p. 304).

As stated most succinctly in the SRP Report, based on the SRP's review and analysis of data, information and conclusions set forth in the Phase 3 Report (2018), the TRT Report and other studies and information:

“Additional VWRP discharges during this period [winter] have little influence on the estuary” (SRP 2018, p. 13).

“Higher discharges above 0.5 MGD would be acceptable during winter storm flow conditions, and are only acceptable when surface discharges from the Santa Clara River breach the berm to the ocean” (SRP 2018, p. 10).

“During winter months when the Santa Clara River is openly flowing through the estuary into the ocean, higher VWRP discharges such as the volume being currently discharged [up to an average annual discharge of 9 MGD] and would not be expected to adversely affect beneficial uses” (SRP 2018, p. 26).

The SRP reached these conclusions based on a variety of considerations, including these excerpts from the SRP Final Report:

- The Phase 3 Report (Stillwater Sciences, 2018) comparison and conclusions regarding relative flows from the lower Santa Clara River and current VWRP discharges indicate that daily mean flows for the Santa Clara River averaged 150 cfs, and peaked in wet weather at 640 cfs. In contrast, the Phase 3 Report (Stillwater Sciences, 2018) estimates that under current VWRP discharge levels, discharges to the SCRE have averaged around 8 cfs and peaked at about 15 cfs during wet weather conditions. Based on this information, on average, even during existing, high discharge conditions, VWRP discharges comprise only about 1/10th of SCR flows during wet weather months within the lower Santa Clara River watershed (Phase 3 Report, 2018), *cf.* Figure 30-89 and Figure 3.14; Section 3.3.3-1 and 3.3.3.2; pp. 53-56). Accordingly, even current much higher than proposed VWRP discharges effects on listed species are considered minimal as compared to Santa Clara River flows in wet weather months. (*Id*)
- Subsequent flow analysis confirm this conclusion of the Phase 3 Report, 2018, though the estimates of flow are more conservative. More recent flow analysis prepared by Risk Sciences indicate that flows in the river during the winter months (December through March) when the berm is open averaged approximately 413 cfs, using historical flow data from October 2007 through December 2016 (Risk Sciences 2019). In contrast, to that average river flow, the average flow volume of wastewater treated at the discharged from the VWRP during this period averaged less than 10 cfs (6.5 MGD). The proposed projects would divert most of the average annual discharge to the AWP. Even on the very rare occasion where 100 percent of the VWRP tertiary-treated flow would need to be discharged to the SCRE during open-berm conditions for health and safety related reasons, the volume of water flowing through the SCRE would increase by less than 3 percent as a result of such extraordinary discharges, and the high level VWRP discharges would only be expected to persist for a matter of 2 to 3 days. Given the small percentage and short duration of flow through the SCRE that would consist of tertiary-treated water as compared to Santa Clara River Water, the tertiary-treated flows would not pose any risk to the sand berm, which must already be open before additional effluent can be discharged, nests or goby refugia. Accordingly, proposed VWRP discharges during open-berm conditions, particularly as compared to Santa Clara River flows in wet weather months, are not expected to adversely affect listed species. See Risk Sciences Technical Memorandum and supporting data is included as Appendix F to the Final EIR.
- The effects of discharges on listed species during open-berm conditions after implementation of discharge reductions are expected to be reduced to the level of negligible (SRP, 2018, p. 13; TRT, March 2018, p. 16).
- Increased wet weather discharges are an improvement over the existing condition for listed species and their habitats because they are consistent with a regime that promotes a

more “natural” estuary hydrology (SRP, 2018, p. 14; pp. 15–18; TRT, June 2018, p. 1; TRT, March 2018, p. 1, 16).

- In general, reducing discharges from current conditions, which under the proposed discharge regime occurs in both open and closed-berm conditions, may slightly increase availability of nesting habitat for the snowy plover and least tern. Overall, reduced water levels are expected to improve nesting conditions for snowy plover because areas suitable for nesting will no longer be inundated under closed-berm conditions as they are currently by higher VWRP discharge levels. In addition, discharges will only exceed the CDL during scour events due to high river flows, which flows are important to creation of foredune and open beach nesting habitat for least tern and snowy plover because they scour and suppress growth of terrestrial vegetation (Phase 3 Report, 2018, Sections 3.7.2.1, p. 169; 3.7.2.2, p. 173; 5.5.6.1, p. 244; DEIR, pp. 3.4-53 - 3.4-54).
- Seasonal breaches and open-berm flows are unlikely to affect bird nesting, which is initiated in the spring and peaks in the April/May timeframe, because nesting can only take place in the berm area after the berm has closed sufficiently due to dissipation of River flows (SRP, 2018, p. 23).

The DEIR reflects this information. With respect to the western snowy plover, the DEIR states (pp. 3.4-53 and 3.4-54):

Nesting habitat is generally farther from the water’s edge and is less affected by high water. However, plover nests may be inundated at extremely high water in the lagoon. Reduced discharge to 0 –0.5 MGD . . . may reduce the likelihood of nest flooding by maintaining a lower, stable water surface elevation through the nesting period. Both the western snowy plover and the California least tern would also benefit from reduced VWRP discharge, since artificial breaches during the summer may impact existing nesting and foraging habitat for the plover. Minimizing disturbance to the estuary and beach after nesting is initiated in spring would benefit western snowy plover.

The projects increase beach habitat for western snowy plover. As a result, the projects would not adversely affect western snowy plover (DEIR, p. 3.4-54).

With respect to the tidewater goby, DEIR Table 3.4-7 notes that tidewater goby utilize sheltered areas of the lagoon, including edge habitat. Edge habitat areas include the effluent channel. This channel would continue to be accessible to aquatic wildlife through Phase 1b of the projects (Phase 3 Report 2018, Section 3.6.3.2, pp. 150–151). Data indicate that tidewater goby have sufficient refuge from high river flows during open mouth conditions (Phase 3 Report 2018, Section 3.6.4.2, p. 161) in the existing condition, and VWRP flows under reduced discharge flows are expected to have negligible effects on the availability of refuge areas during high flow conditions (TRT March 2018, p. 16).

As the DEIR notes, “[m]ajor threats to goby in the SCRE include dispersal due to storm flows [and] dewatering of nests due to unauthorized breaches” (p. 3.4-52). Early life stages (egg, spawning, and early larval and juvenile life stages) are susceptible to transport out of the estuary and exposure to high salinities during artificial breaches (DEIR, p. 3.4-53). Any increased discharge above the CDLs would not affect these early life stages, because the discharges would occur only during the winter months. Winter and spring are the dispersive life stage for adults,

when natural breaching would occur. Any discharge above the CDLs would occur only during a natural breach.

For both the snowy plover and the tidewater goby, the main risk of the existing discharge into the SCRE is artificial berm breaching during dry weather conditions when flows in the Santa Clara River are not sufficient to open the berm naturally (DEIR, p. 3.4-29). Compared to existing conditions, the projects would reduce the risk to both species resulting from artificial breaches. Any winter discharge above the CDL would not result in a risk of artificial berm breaching, because it would only take place when the berm is already open due to flow from the Santa Clara River.

In short, during historical “natural” conditions and in the existing condition, the entire estuary is subject to the effects of high Santa Clara River flows out to sea. During these periods, even currently much higher effluent discharges comprise a very small flow volume in comparison to Santa Clara River flows, and merely mimic and do not have significant impacts on either the nests of listed birds or on the side channels or other refuge areas used by the goby. Open-berm discharges in the post-project condition would be lower than under existing conditions.

Project elements that will further address uncertainties associated with open-berm discharges and provide additional assurances that open-berm discharges will not adversely affect listed species include:

- Mitigation Measure BIO-5 (DEIR, p. 3.4-62) requires condition assessment monitoring that would document conditions in the lagoon, including nesting areas and goby refuge areas during open-berm conditions. The results of this monitoring would be used to create an even more detailed understanding of current open-berm conditions for listed species during high flow scenarios, and would be used to inform the MAAMP (BIO-6) to inform and guide discharges during Phase 1b.
- BIO-6 requires the City to: (1) evaluate and confirm post-discharge diversion SCRE habitat values and conditions for SCRE listed species, (2) submit annual monitoring reports to USFWS and other resource agencies, (3) consult with the agencies to evaluate the data and trends shown in the monitoring data, and (4) to the extent indicated by the data, implement the actions specified in the MAAMP. These measures provide for monitoring during the implementation of Phase 1b discharge reductions, during both closed- and open-berm conditions, to verify the projected beneficial impacts on listed species and critical habitats.

Response F1-7

All scientific evidence in the record supports the conclusion that the reduction of discharges to an average annual CDL of 1.9 MGD in closed-berm conditions, as proposed in Phase 1a, would benefit the beneficial uses and ecology of the SCRE, particularly the listed species and their habitats (Stillwater Sciences 2018, pp. 304 - 305; SRP 2018, p. 10; TRT, June 2018, p.2). The preponderance of available scientific information, including the SRP Report (2018) and the TRT Report (June 2018), further supports the reduction of discharges to an average annual CDL of 0 to 0.5 MGD, as proposed in Phase 1b, to benefit the beneficial uses and ecology of the SCRE, particularly the listed species and their habitats (TRT June 2018, p. 1; SRP 2018, p. 18).

As discussed in the DEIR (pp. 3.4-51 – 3.4-60), to address the requests by responsible agencies for a margin of safety in implementing Phase 1b diversions that reduce the CDL to 0 to 0.5 MGD, and to address the recommendations of all three scientific reports to develop and implement an adaptive management plan to confirm anticipated effects of implementing discharge reductions, the City has developed: (a) Mitigation Measure BIO-5, to collect additional information to better inform and allow preparation of an appropriate adaptive management plan, and (b) Mitigation Measure BIO-6, which requires the development and implementation of the recommended adaptive management plan to confirm that discharge reductions benefit—and do not adversely impact the ecology—listed species and critical habitats of the SCRE. BIO-5 and BIO-6 address the relevant measures recommended in this comment letter, which the City received in December 2018, as follows.

- (1) United Water Conservation District watershed management modifications likely would improve the condition of the lagoon through increased environmental flows. The monitoring and management requirements of the MAAMP would address these future conditions.
- (2) Restoration activities in McGrath State Park are considered as a cumulative project in the DEIR (Table 4-2, p. 4-6). The projects would reduce the size of the lagoon and reduce inundation into the park area, which would: (a) benefit future activities within the State Park, the objective of which is to enhance naturally occurring habitat types, including saltwater marsh, freshwater marsh, and riparian habitat types, and (b) minimize potential for stranding fish in shallow edge areas created at the limits of inundation associated with high VWRP discharge scenarios, which under current conditions may increase risk of mortality for those species using those edges of the lagoon (SRP 2018, p. 22, 23).
- (3) Mitigation Measures BIO-5 and BIO-6 require additional water depth measurements and visual observations of estuary stage, berm condition, and estuary morphology, which can then be compared to the Phase 3 Report water balance modeling assumptions and predictions. In addition, the mitigation measures require continued receiving water quality monitoring. Water quality monitoring would include regular measurements for temperature, salinity, dissolved oxygen (DO), and nutrients collected vertically where feasible (based on the limitations imposed on in situ monitoring by estuary accessibility, shallow depths, and high Santa Clara River flows in wet weather conditions), and horizontally to further inform nutrient, temperature, salinity, and DO occurrences in relationship to discharge levels. These measurements will also improve our understanding of any water quality related stratification and spatial patterns within the estuary. The more robust data collected under these monitoring plans would be compared to past monitoring results and assumptions and results of the Phase 3 Report models to clarify and confirm the rates of estuary filling (e.g., water-surface elevations relative to discharges and other water inputs), the effects of tides and wave action on the SCRE, estuary water quality salinity conditions, the presence of nutrients, algal blooms, DO, and stratification, and major changes to the bathymetry of the estuary and breaching dynamics, if any.

Regarding the effects of future sand nourishment on the beach from dredge spoils, the projects would not adversely affect berm breaching dynamics by promoting unseasonal breaching or reducing breaching frequency during the winter. The dynamics of the river flows and ocean energy would continue to result in closed-berm conditions during the dry season with open-berm conditions responding to weather events and instream flow.

See citations on p. 10-6 to 10-7 of this Response, including citations to the SRP Report, TRT Reports, Phase 3 Study, and DEIR.

- (4) Mitigation Measures BIO-5 (monitoring plan) and BIO-6 (MAAMP) require collection and analysis of lagoon receiving water quality data, including data related to nutrients, DO, and algal conditions. Limited groundwater quality monitoring at existing monitoring locations would also be conducted. By analyzing this monitoring data and comparing the data to past monitoring data, and the assumptions and predictions of the Phase 3 Report, the conclusions of the TRT Report (June 2018) and SRP Report, the effect of reduced discharges versus groundwater water quality inputs on nutrient loads, DO, and algal conditions within the SCRE will be measured. It should be noted that it is likely not feasible to better determine or predict groundwater exfiltration rates by monitoring because sources of perched groundwater to the SCRE are ubiquitous.
- (5) Mitigation Measures BIO-5 and BIO-6 require collection and analysis of lagoon receiving water quality data, including data related to nutrients, DO, and algal conditions. As a result, nutrient loads, DO, and algal conditions within the SCRE would be directly measured. Groundwater extraction in the region constantly varies and groundwater level changes are an effect of the environment on the SCRE, rather than an effect of the proposed projects. As noted in the comment letter, a primary benefit of the projects would be the reduction in nutrient loading into the SCRE. Changes in groundwater infiltration would be captured by water quality monitoring of the SCRE and limited groundwater quality monitoring at existing locations.
- (6) As noted above, Mitigation Measures BIO-5 and BIO-6 require the City to conduct further monitoring, analysis, and comparison of VWRf discharge and SCRE receiving water quality data to water quality model assumptions and predictions for reduced discharge scenarios. This comparison would provide robust information regarding: nutrient, temperature, salinity, and DO occurrences; the relationship of receiving water conditions and reduced discharge levels, evaluated under the MAAMP; an improved understanding of stratification and spatial patterns within the estuary; and an improved understanding of the duration of hypoxic episodes, algal blooms, and the occurrence and potential for production of cyanotoxins.
- (7) Mitigation Measures BIO-5 and BIO-6 require the City to measure receiving water salinity, which captures the primary effect of saltwater overwashing most important to the listed species and their habitats (SRP 2018, pp. 18–19). The Phase 3 Report (Stillwater Sciences 2018) modeled anticipated wave overwash as a part of the overall water balance model, to inform the water quality model and better predict the impact of reduced discharges on salinity conditions for native species, including the listed species (Section 4.1.9, pp. 202–203). Both the TRT and the SRP performed critiques of this model, and adjusted it qualitatively to reflect considerations regarding wave run-up, water elevations, tidal elevations, and seasonal changes in wave direction. The result was a determination, based in part on adjusted Phase 3 water balance modeling predictions that Phase 1a and particularly Phase 1b discharge reductions are expected to produce more opportunity for increased salinity within the SCRE. This increase in salinity would benefit listed species and critical habitat and disfavor non-native species. This anticipated benefit would be measured and confirmed directly by salinity monitoring in the SCRE pursuant to BIO-5 and BIO-6, and management measures will be identified in the MAAMP if direct monitoring does not confirm the currently anticipated benefits to listed species and habitats predicted by the TRT Report (June 2018) and the SRP Report (2018). In light of BIO-5 and BIO-6, additional wave and overwash modeling is unnecessary.

- (8) Mitigation Measure BIO-6 requires the City to characterize habitat distribution and type, to conduct aquatic species surveys and bird and nesting surveys, and to develop acreage and qualitative associations (habitat types) within the SCRE. These results will be compared to monitoring data collected to date, as augmented under BIO-5, and will be evaluated in light of the predictions of the SRP Report (2018) and TRT Report (June 2018) to confirm that Phase 1b discharge reductions result in the expected changes in habitat types to more natural ecological functions and values, as anticipated by the best available scientific information and conclusions. In the event that beneficial changes do not occur as anticipated, measures in the MAAMP will be implemented to avoid and minimize take of listed species; measures may include not implementing Phase 1b discharge reductions.
- (9) Mitigation Measure BIO-6 addresses invasive species by requiring the City to conduct aquatic species surveys, bird and nesting surveys, and acreage and qualitative associations (habitat types) with the SCRE and its vicinity, and to distinguish between native and non-native listed species. These results would be compared to monitoring data collected to date, as augmented by data collected under BIO-5, and would be evaluated in light of the predictions of the SRP Report (2018) and TRT Report (June 2018) to confirm that Phase 1b discharge reductions favor native species, including the listed species. In the event that discharge reductions are shown by monitoring data to favor non-native species, measures in the MAAMP will be implemented to avoid and minimize take of listed species; measures may include invasive-species elimination or control.
- (10) Mitigation Measure BIO-6 requires the City to identify specified measures in the MAAMP that would be implemented in the event that average annual discharge reductions during Phase 1b would result in conditions contrary to those predicted by the existing, best available science and agency permits or authorizations.
- (11) As noted above, Mitigation Measures BIO-5 and BIO-6 require nesting surveys for western snowy plover and California least tern within the SCRE and its vicinity (not just on the sand berm).
- (12) As noted above, Mitigation Measure BIO-6 requires surveys of foraging behavior within the SCRE and its vicinity.

Response F1-8

Comment noted. The City appreciates the advice, input, and continued participation of the USFWS with respect to the appropriate discharge regime that will be most beneficial to the listed species occupying the SCRE, and their critical habitats.

National Marine Fisheries Service Comment Letter

Response F2-1

The comment describes National Marine Fisheries' role and focus.

Response F2-2

In response to the comment, the following text has been added to page 1-11:

NMFS published a Recovery Plan for endangered Southern California steelhead in January 2012. As required by Section 4(f) of the Endangered Species Act, the recovery plan delineates reasonable actions that are believed to be required to recover and/or provide future protections for endangered Southern California steelhead.

Response F2-3

In response to the comment, the following text has been added to the third paragraph of page 3.4-61:

As part of the permitting process, the City will consult with the CDFW, USFWS, and NMFS to evaluate whether the proposed project will require formal consultation under the federal and state Endangered Species Acts. The City will be accessing funding from the United States Bureau of Reclamation (USBR), which will act as the federal lead agency if formal consultations with federal permitting agencies are necessary. Although no direct impacts to listed species would occur, reduced open water conditions could adversely affect result in potential take of a critical habitat or listed species. Therefore, the ~~City~~ USBR is required to prepare a Biological Assessment for submittal to USFWS and NMFS under Section 7 of the Endangered Species Act. USBR will call upon NMFS to analyze all effects to the species and its critical habitat as described in the biological assessment and determine whether formal consultation is necessary, and if any measures are necessary to prevent jeopardy to steelhead.

Response F2-4

The comment authorizes distribution of the National Marine Fisheries Service's letter.

10.3 State Agency Responses

The following comment letters were received from state agencies on the Ventura Water Supply Projects Draft Environmental Impact Report (DEIR). The comment letters are grouped together and are followed by all responses as indicated in Table 10-3.

TABLE 10-3
LIST OF DEIR COMMENT LETTERS: STATE AGENCY

Letter Code	Commenting Party	Letter Page Number	Response Page Number
S1	California State Parks	10.3-2	10.3-47
S2	California State Transportation Agency	10.3-3	10.3-47
S3	California State Parks	10.3-4	10.3-48
S4	California Coastal Commission	10.3-6	10.3-48
S5	California State Lands Commission	10.3-8	10.3-57
S6	California Department of Fish and Wildlife	10.3-24	10.3-77
S7	Los Angeles Regional Water Quality Control Board	10.3-41	10.3-143
S8	Los Angeles Regional Water Quality Control Board	10.3-45	10.3-148

From: Dore, Thomas@Parks <Thomas.Dore@parks.ca.gov>
Sent: Tuesday, April 9, 2019 3:06 PM
To: Dorrington, Gina
Subject: State Park address

Hi Gina,

Could you please change the contact name for all State Park correspondence to **Dena Bellman**?

S1-1

Thank you.

Tom

Tom Dore

Associate Parks & Recreation Specialist
California State Parks, Channel Coast District
901 San Pedro St.
Ventura, CA 93001
805)585-1851 offc
805)207-9468 cell

DEPARTMENT OF TRANSPORTATION

DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0673
FAX (213) 897-1337
www.dot.ca.gov



Making Conservation
a California Way of Life.

April 19, 2019

Ms. Gina Dorrington
City of San Buenaventura (Ventura)
1400 Spinnaker Drive
Ventura, CA 93001

RE: Ventura Water Supply Project
Draft Environmental Impact Report (DEIR)
SCH#2017111004
GTS #07-VEN-2017-00251
Vic. VEN/ Various locations

Dear Ms. Dorrington:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the above-referenced project. The proposed project is to protect the ecology of the Santa Clara River Estuary, develop additional water supply sources to meet water demands for planned future growth, and enhance supply reliability even in drought years.

The nearest State facility to the proposed project is SR-126 and US-101. Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.

S2-1

As a reminder, any transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. Caltrans recommends that large size truck trips be limited to off-peak commute periods

In addition, any work performed within the State Right-of-Way will need an encroachment permit. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

S2-2

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that project needs to be designed to discharge clean run-off water, and storm water run-off is not permitted to discharge onto State highway facilities.

S2-3

If you have any questions or concerns, please contact project coordinator, Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov and refer to GTS#07-VEN-2017-00251.

Sincerely,


MIYA EDMONSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse



DEPARTMENT OF PARKS AND RECREATION

Lisa Ann L. Mangat, Director

Channel Coast District
911 San Pedro Street
Ventura, Ca. 93001

April 19, 2019

Ms. Gina Dorrington
City of Ventura
501 Poli Street, Room 120
Ventura, CA 93002-0099

Project: Ventura Water Supply Projects EIR

Subject: Comments on Draft Environmental Impact Report

The California Department of Parks and Recreation (DPR) appreciates the notification and opportunity to review the Notice of Availability (NOA) and the Draft Environmental Impact Report (DEIR) for the Ventura Water Supply Projects.

S3-1

DPR supports local planning efforts that respect the DPR mission to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation; and are consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety.

DPR through its Channel Coast District are the land managers for the McGrath State Beach Campground and Santa Clara River Estuary, these properties are adjacent to the Ventura Wastewater Reclamation Facility (VWRF), and are the recipient of the tertiary treated water. As described in the NOA DEIR, this input has an increasingly negative effect on these State lands and the public's access to them. We are highly encouraged by this proposed project and look forward to working with the City to accomplish these goals.

In evaluating the project, DPR supports the Advanced Water Purification Facility (AWPF) to be located further inland at one of the two proposed sites on Transport Street or Portola Road. The aesthetic impact of this coastal area would be harmed by adding yet another facility in this proximity. These locations would also locate the AWPF closer to the well sites.

S3-2

In the spirit of the City of Ventura's vision to seek sustainability by promoting ecological health, economic vitality, and social well-being for current and future generations and actively participate in regional economic development efforts; DPR has initiated a project significantly updating and renovating McGrath State Beach Campground. It is our intention to revitalize this park and ignite the economic impact.

S3-3

Please feel free to contact me with any inquiries at (805) 331-3955 or Dena.Bellman@Parks.Ca.Gov.

Best regards,



Dena Bellman, Planning Chief
California State Parks
Channel Coast District

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST DISTRICT OFFICE
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800



April 22, 2019

Gina Dorrington
City of Ventura
501 Poli Street, Room 120
Ventura, CA 93002

RE: Draft Environmental Impact Report for Ventura Water Supply Project

Dear Ms. Dorrington,

Coastal Commission staff has reviewed the Draft Environmental Impact Report (EIR) for the Ventura Water Supply Project and would like to provide the following comments for your consideration. The City of Ventura (City) is proposing to divert tertiary-treated water, which currently flows into the Santa Clara River Estuary (SCRE), to a new advanced water purification facility for additional treatment and eventual return to the potable water supply. The project is proposed to protect the ecology of the SCRE, develop additional water supply sources to meet water demands for planned future growth, and enhance supply reliability in drought years. Commission staff met with City staff to discuss the Draft EIR on April 15, 2019, and this letter summarizes many of the issues raised at that meeting.

S4-1

The project proposal includes three possible sites for construction of a new advanced water purification facility. One of those sites, referred to as the Harbor Boulevard site, is within the Coastal Zone. In its current state, the Harbor Boulevard site is disturbed with non-native grass and weed species spread intermittently throughout the 10-acre property. No wildlife or sensitive plant communities were observed at the site during the biological survey conducted in August 2018. The project proposal also includes the construction of new treatment wetlands on a 36-acre parcel immediately east of the Harbor Boulevard site. Approximately 13.42 acres of this parcel is disturbed, while the remaining 22.67 acres is dominated by a chamise chaparral vegetation community. The Biological Technical Report of the Draft EIR does not document any wildlife observed at the parcel during the biological survey conducted in February 2018, but notes that the area contains suitable habitat for several special-status species. The current disturbed state of these parcels is used as the baseline for the environmental mitigation measures proposed in the Draft EIR. However, the draft EIR should include an analysis of all existing disturbance to ensure that it either received authorization through a valid Coastal Development Permit, or that the development was carried out prior to the effective date of the Coastal Act, January 1, 1977, in conformity with all applicable local laws in effect at the time. Based upon the results of this analysis, an evaluation of additional project impacts, alternatives, and mitigation measures may be required.

S4-2

The Harbor Boulevard parcel is currently within the County of Ventura's LCP jurisdiction, and has a land use designation of Open Space. However, because this parcel is also located within the City's sphere of influence, the City's Land Use Map has pre-designated this site as Planned

S4-3

Commercial – Tourist Oriented. If the parcel were selected as the site for the advanced water purification facility, it would need to be annexed by the City, and an LCP amendment would need to be certified by the Commission to update the City's land use and zoning maps to officially designate this parcel.

↑
S4-3

The project proposal also includes the construction of a new 12-30 inch concentrate outfall that would empty into the ocean 2,000-4,000 feet offshore. This outfall would be located just north of Ventura Harbor, and the landward end of the outfall pipeline would be located in Marina Park. A portion is within the Commission's retained permit jurisdiction, so this outfall would require a Commission-issued CDP. The Biological Technical Report of the Draft EIR touches briefly on the outfall, but does not thoroughly examine its potential impacts to coastal resources and wildlife, both in the water and on land. Therefore, Commission staff recommends that a more detailed analysis of the potential impacts of the new outfall be conducted before a CDP application is submitted, in compliance with Coastal Act Sections 30230, 30231, and 30240.

↑
S4-4

Thank you for your consideration of these comments. Please contact me with any further questions at (805) 585-1800.

Sincerely,


Carolyn Groves
Coastal Program Analyst

STATE OF CALIFORNIA

GAVIN NEWSOM, Governor

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



Established in 1938

JENNIFER LUCCHESI, Executive Officer
(916) 574-1800 Fax (916) 574-1810
California Relay Service TDD Phone 1-800-735-2929
from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1890

April 22, 2019

File Ref: SCH #2017111004

Gina Dorrington
City of Ventura
510 Poli Street, Room 120
Ventura, CA 93002-0099

VIA REGULAR & ELECTRONIC MAIL (gdorrington@venturawater.net)

Subject: Draft Environmental Impact Report (EIR) for the Ventura Water Supply Projects, Ventura County

Dear Ms. Dorrington:

The California State Lands Commission (Commission) staff has reviewed the subject Draft EIR for the Ventura Water Supply Projects (Project), which is being prepared by the City of San Buenaventura (City). The City, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission will act as a responsible agency.

S5-1

Commission Jurisdiction and Public Trust Lands

Please see the attached letter, previously submitted for the Notice of Preparation, regarding the Commission's potential jurisdiction and its responsibilities under the Public Trust.

Project Description

The City proposes to construct and implement a full-scale Advanced Water Purification Facility (AWPF) and a potential seawater desalination facility to meet the City's objectives and needs as follows:

S5-2

- Compliance with the February 3, 2012, Consent Decree that requires identification of the maximum amount of treated effluent that can be diverted to

Gina Dorrington

Page 2

April 22, 2018

the Santa Clara River Estuary while still protecting the ecology and listed species therein

- Improvement of surface water and groundwater quality in the City's service area
- Augmentation of local water supply in an environmentally responsible and cost-efficient manner

S5-2

From the Project Description, Commission staff understands that the Draft EIR includes both project-level and programmatic analysis. Water supply augmentation activities analyzed at a program level of review would be reviewed subsequently at a Project level. The following components have potential to affect State sovereign land.

- Project-Level Analysis (Phase 1): Concentrate Discharge Facility: The brine concentrate from the treated wastewater would be conveyed to: either 1) the existing Calleguas Salinity Management Pipeline (SMP) to be discharged through their outfall, or 2) a new outfall pipeline which would be constructed north of the Ventura Harbor.
- Programmatic Analysis (Phase 2): Desalination Facility Intake System: The proposed seawater desalination facility would be designed to deliver up to 2.7 million gallons per day (MGD) of potable water. This facility would require a subsurface intake system (slant well, subsurface intake gallery, etc.) or a surface intake system (wedgewire screen filtration).

The Draft EIR appears to identify Alternative 4, with 100 percent of wastewater diversion for treatment, as the Environmentally Superior Alternative among the alternatives evaluated, and concludes that the proposed Project is the overall Environmentally Superior Alternative due to the ecological enhancement provided to the Santa Clara River Estuary.

Environmental Review

Commission staff requests that the City consider the following comments on the Draft EIR, to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the EIR to support a future lease approval for the Project.

S5-3

General Comments

1. 2019 CEQA Amendments: New amendments to the CEQA Guidelines went into effect on December 28, 2018, which included amendments to the Appendix G Environmental Checklist (<http://opr.ca.gov/ceqa/updates/guidelines/>). Amendments to the Environmental Checklist included additions of new affected resource sections and considerable changes and additions to existing resource sections. The Draft EIR does not appear to use or consider the current Environmental Checklist for assessment of affected resources. In accordance with CEQA Guidelines section 15007, subdivision (c), documents circulated for public review after December 28, 2018, are subject to the revised Guidelines, and so the EIR should be updated to

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include analysis covering the new or modified resource impacts. Without this information, CEQA responsible agencies, including the Commission, could require subsequent environmental review.

↑ S5-3

Project Description

2. New Ocean Outfall: The Project Description does not provide enough information regarding the feasibility of vibratory pile-driving for outfall/diffuser installation, construction methods and associated impacts from laying the outfall pipeline on the seafloor, and the maximum length of pipeline and associated riprap armoring that would create permanent seafloor disturbance. This information would be needed to ensure an accurate and consistent Project Description required by State CEQA Guidelines, section 15124, subdivision (c). Without this information, CEQA responsible agencies may need further CEQA review or action.

↑ S5-4

For example, the Project Description first notes on page 2-13 that the outfall pipeline will be installed with horizontal directional drilling (HDD) from an onshore location, emerging on the ocean floor 2,000 to 4,000 feet offshore. However, the document does not specify the worst-case scenario for seafloor impacts. If the diffuser must be placed at a minimum of 50 feet below the water surface and the HDD emerges 2,000 feet offshore, then the EIR must provide the bathymetric data at the proposed outfall location and determine, in the Project Description, the worst-case scenario for the maximum amount of pipeline that would need to be placed on the seafloor. The document could then appropriately analyze impacts associated with anchoring, construction footprints, and areas of temporary and permanent sediment and benthic community disturbance.

↑ S5-5

In addition, page 2-50 states that approximately 150,000 cubic yards of sediment could be dredged, but it is unclear whether that comprises only the area dredged for the HDD exit hole and the outfall diffuser¹, or whether seafloor dredging to level the pipeline is included. The construction activities associated with the offshore diffuser are only briefly mentioned; it is not until page 3.9-59 (Section 3.9, Hydrology and Water Quality) where the seafloor activities are first discussed.

↑ S5-6

Finally, Table 2-6 does not clearly identify whether the "Excavating/Trenching" for the new outfall facility includes the dredging that would need to occur offshore. Please have the EIR clarify whether the 1,900 truck trips that are included in the construction assumptions for HDD/Outfall Installation include trips to bring riprap armoring as well as trips needed for onshore sediment disposal (if the City is unable to side-cast the dredged sediments). If not already included, the offshore dredging, impact pile-driving, and onshore sediment activities should also be incorporated into Table 2-6.

↑ S5-7

3. Outfall Diffuser Maintenance: The Draft EIR notes on page 2-59 that the diffuser would be cleaned by divers using hand-held tools. The document does not,

↓ S5-8

¹ Figure 2-18 appears to show the diffuser assembly below the seafloor.

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however, clarify the frequency of these maintenance trips or appear to include them in the operational impacts analyses in Chapter 3. Please have the document consistently include these activities and evaluate the associated potential aesthetics, air quality, marine biological resource, and greenhouse gas impacts.

S5-8

4. Calleguas SMP Outfall: Page 2-13 notes that the concentrate from the AWPf could be sent to the existing Calleguas SMP ocean outfall, but that this activity is subject to the pipeline's availability and the water district's approval. The EIR fails to provide information relating to the current discharge volumes, overall outfall capacity, and diffuser configuration and does not disclose whether any offshore modifications would be needed to accommodate the increase in volume and/or salinity from the AWPf's discharge for Phase I activities. Choosing this option may require an amendment to the existing Calleguas Municipal Water District lease.

S5-9

Commission staff again request, from the December 1, 2017 comment letter, to have the EIR provide additional details of, and maps showing, the Calleguas Municipal Water District's existing SMP ocean outfall. Figure 2-2 only shows the proposed onshore pipeline connection to the Calleguas SMP, and does not show the location of the SMP outfall.

S5-10

5. Construction Staging Areas: Please include the offshore construction areas in Table 2-7 with a figure showing the maximum possible offshore construction footprint and impact area.

S5-11

Aesthetics

6. Offshore Vessels: Commission staff note that the ocean outfall is being evaluated as part of Phase 1 activities, and therefore must be analyzed as part of the Project-level Draft EIR. However, the document fails to include offshore impacts in several resource analyses. For example, page 3.1-18 (Section 3.1, Aesthetics) discusses potential impacts to scenic views from the onshore HDD drilling, but does not include offshore impacts from the vessels anchored in the ocean. Page 3.1-31 analyzes light and glare impacts, but does not discuss nighttime vessel lighting, which could occur as described on page 2-40.

S5-12

Air Quality

7. Significance Determination: The Draft EIR concludes that Impact AQ 3.3-2 is less than significant with mitigation, and the City uses Appendix G criteria to determine that the impact would be potentially significant if it would violate an air quality standard or contribute to an existing air quality violation. However, the analysis for Phase 1 does not clearly state that any of the associated construction activities will result in a potentially significant impact, and therefore it is unclear why Mitigation Measures AQ-1 and AQ-2 are applied. Please have the EIR include a significance determination for Impact AQ 3.3-2, and clearly state whether Mitigation Measures AQ-1 and AQ-2 are mitigating a potentially significant impact.

S5-13

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8. Phase 2 Construction – Outfall: Please ensure that Table 3.3-13 includes the short-term emissions associated with constructing a new outfall. If the City decides to transport the AWPf concentrate to the Calleguas SMP outfall for Phase 1, then the Project would need to construct the new outfall pipeline and diffuser if desalination is selected in Phase 2.

S5-14

Cultural and Tribal Cultural Resources

9. Unanticipated Discovery: Commission staff recommend that the EIR evaluate all offshore ground disturbing activities that extend more than 3 feet below the ground surface. In particular, please evaluate dredging for the HDD exit and pipeline placement, outfall modifications, and pile driving as having the potential to cause adverse direct and indirect impacts to presently unidentified cultural resources, including Tribal cultural resources. Without this information, the Commission may need to undertake further environmental review to ensure all potential impacts are evaluated. In particular, the Draft EIR determines that impacts to Tribal cultural resources are less than significant, requiring no mitigation. Commission staff strongly recommend that Impact CUL 3.18-1 include both a discussion regarding potential impacts to unanticipated offshore Tribal cultural resources and include mitigation measure CUL-5.

The Draft EIR also includes development of an Anchoring Plan in Mitigation Measure HAZ-1, which will presumably involve geophysical surveys to identify areas of hard and soft substrate (also used to determine whether vibratory pile driving is feasible). Therefore, Commission staff recommends that mitigation measure CUL-4 include language requiring that a qualified maritime archaeologist participate in the development and implementation of the geophysical surveys for offshore activities, identify any cultural resources found, and prepare a summary report to be submitted to the City and Commission staff.

S5-15

Please also note that any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant. Because of this possibility, please add the following language to Mitigation Measure CUL-5, "In the event cultural resources are discovered during any offshore construction activities, Project personnel shall halt all activities in the immediate area and notify both the California State Lands Commission and a qualified archaeologist to determine the appropriate course of action."

10. Deferred Studies and Analysis: Mitigation Measure CUL-6 inappropriately defers studies and analysis regarding the outfall pipeline. While the desalination facility intake system analysis may be evaluated at a programmatic level, the Draft EIR presents the new outfall pipeline as a Phase 1 activity, and therefore the cultural resource impact analysis must be present in the document to avoid subsequent environmental review. The EIR should include the cultural resource assessment for the offshore discharge pipeline area as well as any identified cultural or tribal cultural resources, determine the impact's significance, and provide feasible mitigation measures to reduce the impact.

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|---|--|--|
| <p>11. <u>Title to Resources</u>: The Draft EIR should mention that the title to all 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 Commission (Pub. Resources Code, § 6313). Commission staff requests that the City consult with Staff Attorney Jamie Garrett should any cultural resources on state lands be discovered during construction of the proposed Project. In addition, Commission staff requests that the following statement be included in the EIR's Mitigation and Monitoring Plan, "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."</p> | <div style="border-left: 1px solid black; height: 100px; margin: 0 auto; width: 2px;"></div> | <p>S5-16</p> <hr style="width: 100%;"/> <p>S5-17</p> |
|---|--|--|

Marine Biological Resources

- | | | |
|--|--|--------------|
| <p>12. <u>Pile Driving for Diffuser</u>: The Draft EIR explains on page 3.11-48 that, "since it is unknown at this time whether anchor piles will be required for the construction of the outfall nor what kind of anchor piling design would be required (i.e. the quantity of anchor piles needed, the diameter and composition of anchor piles, pile spacing, or the type of pile driving equipment...)," the potential impacts associated with underwater noise cannot be estimated. The document improperly defers the Project-level review needed for the Phase 1 component (the potential outfall pipeline), therefore CEQA responsible agencies would need to conduct additional environmental review and provide a subsequent document to address gaps in the analysis.</p> | <div style="border-left: 1px solid black; height: 100px; margin: 0 auto; width: 2px;"></div> | <p>S5-18</p> |
|--|--|--------------|

<p>Page 3.11-47 states that the careful design and selection of materials, equipment, and schedule in a "pile driving plan" can reduce the potential underwater acoustic impacts to less than significant, but fails to provide data and designs to demonstrate that the worst-case scenario would still result in a less-than-significant impact with mitigation incorporated. Absent a geotechnical survey to determine the nature of the seafloor, the City appears unable to select a pile driving method (impact versus vibratory). Therefore, the EIR must fully analyze impact pile driving for the Phase 1 outfall diffuser as the worst-case scenario. This includes providing the cumulative sound exposure level (SEL) for impact pile driving, which is absent from the Draft EIR. Cumulative SEL must be analyzed, because acoustic thresholds for impulsive sounds are presented as dual metric acoustic thresholds using cumulative SEL and peak SPL, and the National Marine Fisheries Service (NMFS) considers the onset of Level A harassment to have occurred when either of the two metrics is exceeded. The associated distance to the permanent threshold shift must be included in the EIR, and the City must then determine whether that component of Impact MARINE 3.11-1 can be feasibly mitigated.²</p>	<div style="border-left: 1px solid black; height: 100px; margin: 0 auto; width: 2px;"></div>	<p>S5-19</p>
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² Commission staff note that the Final Supplemental Environmental Impact Report for the Seawater Desalination Project at Huntington Beach (October 2017) concluded the cumulative SEL for impact pile-driving resulted in a distance threshold of 1,520 meters (approximately 5,000 feet) for high-frequency cetaceans. The document concluded that residual impacts, after feasible mitigation, remained significant and unavoidable.

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Mitigation Measure MARINE-2 requires a completed underwater acoustic analysis once the type of pile and pile driving method are finalized. This information would then be evaluated to determine whether a sound attenuation reduction and monitoring plan is required. The NMFS-approved plan found in Mitigation Measure MARINE-2 provides buffer distances of 500 meters. This distance, however, is apparently not found anywhere else in the Draft EIR and is thus not adequately supported. The Caltrans 2015, NOAA 2016, and NMFS 2016 worksheets provide an accurate underwater acoustics analysis, and therefore the buffer should be derived from those calculations.

S5-20

13. Offshore Demolition: The Draft EIR does not mention offshore demolition of structures until page 3.11-46, where it is briefly included in one sentence. Please have the EIR clarify when there would be demolition occurring offshore, the associated impacts with any best management practices to minimize debris, and the resulting significance determination.

S5-21

Thank you for the opportunity to comment on the Draft EIR for the Project. As a responsible and trustee agency, the Commission will need to rely on the certified EIR for the issuance of any amended or new lease as specified above and, therefore, we request that you consider our comments prior to certification of the EIR.

S5-22

Please send copies of future Project-related documents, including electronic copies of the Final EIR, Mitigation Monitoring and Reporting Program, Notice of Determination, CEQA Findings and, if applicable, Statement of Overriding Considerations when they become available. Please refer questions concerning environmental review to Alexandra Borack, Senior Environmental Scientist, at (916) 574-2399 or Alexandra.Borack@slc.ca.gov. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Staff Attorney Jamie Garrett, at (916) 574-0398 or Jamie.Garrett@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Mr. Kelly Connor, Public Land Management Specialist, at (916) 574-0343 or Kelly.Connor@slc.ca.gov.

Sincerely,



on behalf of

Eric Gillies, Acting Chief
Division of Environmental Planning
and Management

Attachment: Commission Comment Letter on NOP

cc: Office of Planning and Research
K. Connor, Commission
A. Borack, Commission
A. Kershen, Commission



STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



Established in 1938

JENNIFER LUCCHESI, Executive Officer
(916) 574-1800 Fax (916) 574-1810
California Relay Service TDD Phone 1-800-735-2929
from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1890
Contact FAX: (916) 574-1885

December 1, 2017

File Ref: SCH # 2017111004

Gina Dorrington
City of Ventura
510 Poli Street, Room 120
Ventura, CA 93002-0099
gdorrington@venturawater.net

Subject: Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the Ventura Water Supply Projects, Ventura County

Dear Ms. Dorrington:

The California State Lands Commission (Commission) staff has reviewed the subject NOP for a Draft EIR for the Ventura Water Supply Projects (Project), which is being prepared by the City of Ventura (City). The City, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on sovereign land, the Commission will act as a responsible agency. Commission staff requests that the City consult with us on preparation of the Draft EIR as required by CEQA section 21153, subdivision (a), and the State CEQA Guidelines section 15086, subdivisions (a)(1) and (a)(2).

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat

preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low-water mark and a Public Trust easement landward to the ordinary high-water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

After reviewing the information contained in the NOP, staff has concluded that this Project will extend onto the Pacific Ocean, which is State owned sovereign land. The Project includes an advanced water purification facility (AWPF) that will require construction of a new brine discharge pipeline. The City proposes two alternatives for the pipeline terminus; a new ocean outfall to be constructed near the City, or use of Calleguas Municipal Water District's existing Salinity Management Pipeline (SMP) ocean outfall. If the City selects the new ocean outfall alternative, then any placement of an outfall that extends westward into the Pacific Ocean, including the outfall structure and any associated pipelines, will require a lease from the Commission. If the City decides to use Calleguas Municipal Water District's existing SMP ocean outfall, then a lease will not be required for the onshore portion of the pipeline extension, which would cross the Santa Clara River at a location between Rancho San Miguel and Rancho Rio de Santa Clara, and is outside the Commission's jurisdiction; however, if the existing SMP ocean outfall is currently under lease, a lease amendment may be required. Please contact Kelly Connor, Public Land Management Specialist (see contact information below) once the brine discharge alternative has been selected, to confirm whether any Project components will require a lease or lease amendment.

The Project also includes a seawater desalination facility, which would be co-located with the AWPF. While the conveyance pipeline locations would be similar to those analyzed for the AWPF, the seawater desalination facility would also require an intake structure, either subsurface or a wedgewire screen manifold pursuant to the Ocean Plan, and intake pipelines which would run above or below the Pacific Ocean seafloor. In addition, the NOP is not clear whether the brine discharge outfall for the AWPF would also be able to release the brine generated from the discharge facility. Any placement of intake and outfall structures and pipelines in the Pacific Ocean at the Project location will require a lease from the Commission.

Project Description

The City proposes to construct and implement a full-scale AWPF, and construct both a pipeline to access imported water and a seawater desalination facility. The Project would meet the City's objectives and needs as follows:

- Compliance with the March 30, 2012, Consent Decree that requires identification of the maximum amount of treated effluent that can be diverted to the Santa Clara River Estuary while still protecting the ecology and listed species therein
- Improvement of surface water and groundwater quality in the City's service area
- Augmentation of local water supply in an environmentally responsible and cost-efficient manner

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From the NOP, Commission staff understands that the Project would include the following components:

- VenturaWaterPure Project: This component would include the AWPf with its associated conveyance system, a groundwater injection and extraction system, a concentrate discharge facility, and freshwater treatment wetlands.
- State Water Interconnection: This component would include a potential connection from the City's water service area to the existing Calleguas potable water system.
- Ocean Desalination: The proposed seawater desalination facility would be designed to deliver up to 2.7 million gallons per day (MGD) of potable water, and would require an intake and outfall system.

Environmental Review

Commission staff requests that the City consider the following comments when preparing the Draft EIR.

General Comments

1. Programmatic Document: Because the EIR is proposed as both a programmatic and a project-level document, the Commission expects the State Water Interconnection and Ocean Desalination Project components will be presented as a series of distinct, but related sequential activities (i.e., the City's "separate but coordinated" CEQA review for the State Water Interconnection Project, referenced in the NOP). State CEQA Guidelines section 15168, subdivision (c)(5) states that a program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. As such, the program EIR should make an effort to distinguish what activities and their mitigation measures are being analyzed in sufficient detail to be covered under the program EIR without additional project specific environmental review, and what activities will trigger the need for additional environmental analysis (see State CEQA Guidelines, § 15168, subd. (c)). Additionally, please ensure that the Project Description and subsequent environmental analysis continue to clearly distinguish between programmatic analysis and project-level analysis.
2. Project Description: A thorough and complete Project Description should be included in the EIR in order to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives. The Project Description should be as precise as possible in describing the details of all allowable activities (e.g., types of equipment or methods that may be used, maximum area of impact or volume of sediment removed or disturbed, seasonal work windows, locations for material disposal, etc.), as well as the details of the timing and length of activities. Thorough descriptions will facilitate Commission staff's determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work that may be performed, and minimize the potential for subsequent environmental analysis to be required. Please also provide additional details of, and maps showing, the Calleguas Municipal Water District's existing SMP ocean outfall.

3. Seawater Desalination Facility: The NOP indicates that the design details for the seawater desalination facility are in a preliminary stage, and that the EIR will evaluate the proposed water supply project at a "program-level" of detail. Commission staff strongly encourages the City to begin joint coordination and consultation with the California Coastal Commission, Los Angeles Regional Water Quality Control Board (LARWQCB), and Commission staffs as soon as possible to ensure that any subsequent regulatory permits or approvals proceed efficiently and in accordance with the Ocean Plan, in particular the 2015 Desalination Amendment.

Biological Resources

4. Special-Status Species and Habitats: The EIR should disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project area, including special-status wildlife, fish, and plants, and if appropriate, identify feasible mitigation measures to reduce those impacts. The City should conduct queries of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) and U.S. Fish and Wildlife Service's (USFWS) Special Status Species Database to identify any special-status plant or wildlife species that may occur in the Project area. The EIR should also include a discussion of consultation with the CDFW, USFWS, and National Marine Fisheries Service (NMFS), including any recommended mitigation measures, construction work windows, and potentially required permits identified by these agencies.
5. Invasive Species: One of the major stressors in California waterways is introduced species. Therefore, the EIR should consider the Project's potential to encourage the establishment or proliferation of aquatic invasive species (AIS) or other non-indigenous, invasive species including terrestrial plants. For example, construction boats and barges brought in from long stays at distant projects may transport new species to the Project area via hull biofouling, wherein marine and aquatic organisms attach to and accumulate on the hull and other submerged parts of a vessel. If the analysis in the EIR finds potentially significant AIS impacts, possible mitigation could include contracting vessels and barges from nearby, or requiring contractors to perform a certain degree of hull-cleaning. The CDFW's Invasive Species Program could assist with this analysis as well as with the development of appropriate mitigation (information at www.dfg.ca.gov/invasives/).

In addition, in light of the recent decline of native pelagic organisms and in order to protect at-risk fish species, the EIR should examine if any elements of the Project would favor non-native fisheries within the Pacific Ocean.

6. Construction Noise: The EIR should also evaluate noise and vibration impacts on fish and birds from in-water construction and dredging activities, and any restoration activities in the water or for land-side supporting structures. Activities of concern include, but are not limited to, pile driving, dredging, welding, installation of subsurface or seabed pipelines, etc. Mitigation measures could include species-specific work windows as defined by CDFW, USFWS, and NMFS. Again, staff recommends early consultation with these agencies to minimize the impacts of the Project on sensitive species.

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Climate Change

7. Greenhouse Gas (GHG): A GHG emissions analysis consistent with the California Global Warming Solutions Act (Assembly Bill [AB] 32) and required by the State CEQA Guidelines should be included in the EIR. This analysis should identify a threshold for significance for GHG emissions, calculate the level of GHGs that will be emitted as a result of construction and ultimate build-out of the Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures that would reduce them to the extent feasible. Please include a full evaluation of all the equipment that could be used for any aspect of construction activities, including marine vessels required for offshore work. Commission staff recommends that the City contact the Ventura County Air Pollution Control District (APCD) to discuss appropriate air impact analysis models for identifying the impacts of the proposed Project.

The NOP notes that long-term operations of the Project components will result in increased energy usage. Please include an analysis of the indirect GHG emissions associated with the AWPf and seawater desalination facility operations.

8. Sea-Level Rise: A tremendous amount of State-owned lands and resources under the Commission's jurisdiction will be impacted by rising sea levels. With this in mind, the City should consider discussing in the EIR the effects of sea-level rise on all resource categories potentially affected by the proposed Project. Because of their nature and location, these lands and resources are already vulnerable to a range of natural events, such as storms and extreme high tides. Note that the State of California released the final "Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy" (Safeguarding Plan) on July 31, 2014, to provide policy guidance for state decision-makers as part of continuing efforts to prepare for climate risks. The Safeguarding Plan sets forth "actions needed" to safeguard ocean and coastal ecosystems and resources as part of its policy recommendations for state decision-makers.

In addition, Governor Brown issued Executive Order B-30-15 in April 2015, which directs state government to fully implement the Safeguarding Plan and factor in climate change preparedness in planning and decision making. Please note that when considering lease applications, Commission staff will:

- Request information from applicants concerning the potential effects of sea-level rise on their proposed projects
- If applicable, require applicants to indicate how they plan to address sea-level rise and what adaptation strategies are planned during the projected life of their projects
- Where appropriate, recommend project modifications that would eliminate or reduce potentially adverse impacts from sea-level rise, including adverse impacts on public access

Cultural and Tribal Cultural Resources

9. Submerged Resources: The EIR should evaluate potential impacts to submerged cultural resources in the Project area. The Commission maintains a shipwrecks database that can assist with this analysis. Commission staff requests that the City contact Staff Attorney Jamie Garrett (see contact information below) to obtain shipwrecks data from the database and Commission records for the Project site. The database includes known and potential vessels located on the State's tide and submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant. Because of this possibility, please add a mitigation measure requiring that in the event cultural resources are discovered during any construction activities, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.
10. Title to Resources: The EIR should also mention that the title to all 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 California State Lands Commission (Pub. Resources Code, § 6313). Commission staff requests that the City consult with Staff Attorney Jamie Garrett (see contact information below) should any cultural resources on state lands be discovered during construction of the proposed Project.
11. Tribal Resources: The NOP does not indicate whether Tribal cultural resources would be potentially affected and whether the Project would have a potentially significant impact on Tribal resources. Therefore, the NOP does not contain sufficient information as to how the City is complying with Assembly Bill (AB) 52 provisions. These provisions provide procedural and substantive requirements for lead agency consultation with California Native American Tribes, consideration of effects on Tribal cultural resources (as defined in Pub. Resources Code, § 21074), and examples of mitigation measures to avoid or minimize impacts to these resources. Even if no Tribe has submitted a consultation notification request for the Project area covered under the NOP, the City should:
 - Contact the Native American Heritage Commission to obtain a general list of interested Tribes for the Project area
 - Include the results of this inquiry within the Draft EIR
 - Disclose and analyze potentially significant effects to Tribal cultural resources, and avoid impacts where feasible

Since the NOP does not disclose if notification or outreach to interested Tribes has occurred and does not document their response, Commission staff recommends that the City include this information in the Draft EIR in order to maintain a clear record of the City's efforts to comply with AB 52. This information would aid responsible and trustee agencies in their independent review processes and help eliminate potentially duplicative work. Please include information as to whether there are any anticipated or unanticipated submerged Tribal cultural resources in the Project area,

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and provide recommended mitigation measures to reduce or eliminate any potential impacts to those resources.

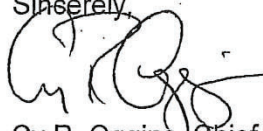
Mitigation and Alternatives

12. Deferred Mitigation: In order to avoid the improper deferral of mitigation, mitigation measures should either be presented as specific, feasible, enforceable obligations, or should be presented as formulas containing "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (State CEQA Guidelines, §15126.4, subd. (a)).
13. Alternatives: In addition to describing mitigation measures that would avoid or reduce the potentially significant impacts of the Project, the City should identify and analyze a range of reasonable alternatives to the proposed Project that would attain most of the Project objectives while avoiding or reducing one or more of the potentially significant impacts (see State CEQA Guidelines, § 15126.6). The NOP indicates that, in January 2018, the City will provide the LARWQCB with a recommended maximum volume of treated effluent to be discharged into the Santa Clara River Estuary. The EIR should analyze this volume and determine its effect on the Project's need for the State Water Interconnection or the Seawater Desalination Facility.

Thank you for the opportunity to comment on the NOP for the Project. As a trustee and responsible agency, Commission staff requests that you consult with us on this Project and keep us advised of changes to the Project Description and all other important developments. Please send additional information on the Project to the Commission staff listed below as the EIR is being prepared.

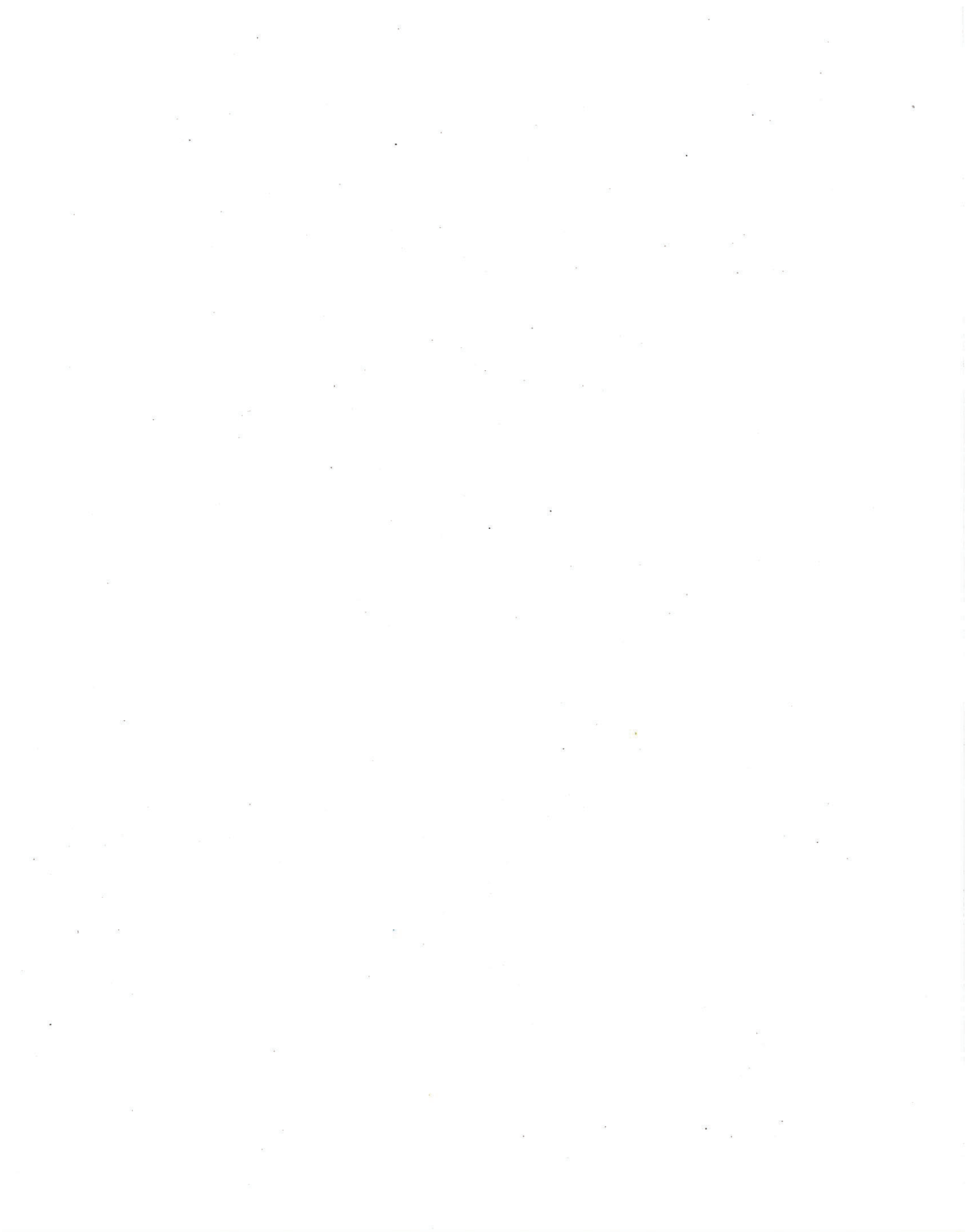
Please refer questions concerning environmental review to Alexandra Borack, Environmental Scientist, at (916) 574-2399 or via e-mail at Alexandra.Borack@slc.ca.gov. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Staff Attorney Jamie Garrett, at (916) 574-0398 or via e-mail at jamie.garrett@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Kelly Connor, Public Land Management Specialist, at (916) 574-0343 or via e-mail at Kelly.Connor@slc.ca.gov.

Sincerely,



Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
A. Borack, CSLC
K. Connor, CSLC
P. Huber, CSLC
J. Garrett, CSLC





State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



April 22, 2019

Ms. Gina Dorrington
City of Ventura
501 Poli Street, Room 120
Ventura, CA 93002-0099
gdorrington@cityofventura.ca.gov

Subject: Comments on the Draft Environmental Impact Report for the Ventura Water Supply Project (SCH# 2017111004), Ventura County

Dear Ms. Dorrington:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) for the Ventura Water Supply Project (Project) prepared pursuant to the California Environmental Quality Act (Public Resources Code 21000 et seq.) and its administrative regulations (CEQA Guidelines)¹ with the City of Ventura acting as lead agency.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code §§ 711.7, subd. (a) & 1802; Pub. Resources Code § 21070; CEQA Guidelines § 15386, subd. (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code § 1802). Similarly, for purposes of CEQA, CDFW is directed to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code § 21069; CEQA Guidelines § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration (LSA) regulatory authority (Fish & G. Code § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code § 2050 et seq.) or the Native Plant

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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Protection Act (NPPA; Fish & Game Code §1900 et seq.), CDFW recommends the project proponent obtain appropriate authorization under the Fish and Game Code.

Proponent: City of Ventura (City)

Project Location: Cities of Ventura, Oxnard and Port Hueneme in Ventura County. The Ventura Wastewater Reclamation Facility (VWRF) currently discharges recycled water into the Santa Clara River Estuary (SCRE), and several pipelines will cross the following drainages: the Santa Clara River, Arundell-Barranca, Brown Barranca, Harmon Barranca, and Bubbling Springs.

Project Description/Objective: The Project objective is to protect the ecology of the SCRE, develop additional water supply sources to meet water demands for planned future growth, and enhance supply reliability including in drought years. The Project would be implemented in two phases. The first phase (Phase 1) would divert 4.7 million gallons per day (MGD) of tertiary treated water to the VenturaWaterPure Project (VenturaWaterPure) for additional treatment and to provide a new potable water supply, with flows continued to protect the ecology of the SCRE. The second phase (Phase 2) would provide additional needed water supply if Phase 1 is insufficient to meet the needs of planned growth.

Based on the Scientific Review Panel (SRP)'s recommendation [supported by the Technical Review Team (TRT)], and feedback from the agencies, the City is proposing additional phasing to the implementation approach that would commit to a Continued Discharge Level (CDL) of 1.9 MGD by the end of 2025, with a planned reduction to a CDL of 0 to 0.5 MGD during closed berm conditions by the end of 2030. The City has calculated that the addition of approximately 1.2 MGD [1,400 acre-feet per year (AFY)] of purified groundwater, in conjunction with the new potable reuse supply, would provide sufficient blending of existing groundwater supplies to improve delivered potable water supply with the objective of meeting the secondary maximum contaminants (MCLs). The amount of desalted groundwater needed to meet objective for Phase 2 would expand to 2,000 AFY.

VenturaWaterPure would include diversion of the VWRF tertiary-treated flows and low-quality groundwater to a new advanced water purification facility (AWPF) to produce highly purified water. The groundwater would be pumped from the Oxnard Plain Basins (Oxnard Basin) and treated at the AWPF, where the water would be used for groundwater augmentation and/or direct potable reuse (DPR). A brief description of the Project's phases and components are provided below:

- Phase 1 - Water Conveyance System: The Project would require the installation of several pipelines to convey source water and product water throughout the new system. The following pipelines would be constructed:
 - A Polyvinyl chloride (PVC) pipeline conveying tertiary-treated water from VWRF to the AWPF. A pump station would be constructed at the VWRF.
 - A PVC pipeline conveying raw groundwater from existing extraction wells at the City Gold Course to the AWPF. While the existing well pumps may be sufficient to convey the water to the AWPF, additional pump stations may be needed.
 - A PVC pipeline conveying purified water from the APWF to groundwater wells in the Oxnard Basin for indirect potable reuse (IPR) project and/or to the Bailey Waste Conditioning Facility (WCF) and/or Saticoy WCF for the DPR project.

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- A PVC pipeline conveying extracted groundwater from the groundwater wells to the Baily WCF for the IPR project.
- A PVC pipeline to return backwash waste or emergency shutdown water between the AWPf and VWRf that is returned to the influence of the VWRf for retreatment.

The pipelines would be constructed within public right-of-way (ROW) where feasible. A new pump station would be constructed at AWPf to pump the water to the groundwater wells.

- Phase 1 - Groundwater Wells: The Project includes the construction of up to six wells within the Oxnard Basin. Up to three wells would be located at Well Site 1 and up to three wells would be located at either Well Site 2 or Well Site 3 (final configuration to be determined by detailed groundwater modeling). Each well would have capacity to inject/extract between 1,250 – 2,750 gallons per minute (depending on the site) of purified water in the Oxnard Basin. The wells in the Oxnard Basin would be constructed in the Oxnard Aquifer within the Upper Aquifer System to a depth of approximately up to 250 feet. Each wellhead would require approximately 1,500 square feet, including room for construction drill rigs and maintenance truck parking. A pump station would also be located at the well sites to deliver the extracted groundwater and/or the DPR water to Bailey WCF.
- Phase 1 - Wildlife/Treatment Wetlands: Part of the Project includes up to 35 acres of wildlife/treatment wetlands that may be constructed east of the VWRf to provide additional treatment to the effluent prior to being discharged to the SCRE.
- Phase 1 - VWRf Treatment Upgrades: The Project includes VWRf treatment upgrades that would be implemented in combination with the modified and/or new wildlife/treatment wetlands to further reduce nitrogen in VWRf effluent discharged from the wildlife/treatment wetlands to the SCRE.
- Phase 1 - Concentrate Discharge Facility: The AWPf treatment process would produce a concentrated effluent that would contain several times the concentration of salts as the influent water. The concentrate would need to be discharged to the ocean in compliance with California Ocean Plan water quality standards for ocean discharge. In addition to handling concentrate, the new outfall options would be designed to accommodate some tertiary treated flows that exceed AWPf capacity during wet weather events or during times of emergency shutdown.
- Phase 2 - Option A (AWPf Expansion): The City would pursue Option A to divert the remaining wastewater flows from the VWRf to the AWPf to reach a CDFL of 0 (zero) during closed berm, dry weather conditions. The wildlife ponds would still be utilized but would operate as terminal wetlands during dry weather months. During winter open sand berm conditions, reflecting the steelhead migratory period, flows in excess of the AWPf facility's capacity would be discharged to the SCRE. This option would require an AWPf expansion to reliably produce up to an additional 1.2 MGD (1,400 AFY) of product water, and an additional 600 AFY of treated groundwater. The combined Phase 1 and Phase 2 project total would result in 6.7 MGD (7,400 AFY) of reliable new water supply. Additional flow routing modifications and/or storage would be required at VWRf site to accommodate a CDL of 0 (zero).
- Phase 2 - Option B (Ocean Water Desalination): If the necessary regulatory approvals do not allow for a consistent, reliable water supply based on the tertiary-treated water, or if the

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supply is insufficient to meet the City's reliable water supply and water quality demands, an ocean desalination treatment facility would be needed. The new ocean desalination treatment facility would be located at the AWPf site and could produce an estimated additional 1.2 MGD (1,400 AFY) of desalinated water.

Five alternatives were selected for detailed analysis. A general description of each alternative to the proposed project is provided below:

- Alternative 1 - No Project: There would be no development of new water supplies to augment the City's water supply portfolio.
- Alternative 2 - Zero Percent Diversion: Tertiary-treated discharge from the VWRf would not be diverted for potable reuse and would continue to flow into a 20-acre system of freshwater wildlife/treatment ponds prior to discharge to SCRE. Under this alternative, the City would seek to construct the ocean desalination facility.
- Alternative 3 - 60 Percent Diversion: This alternative would divert 60 percent of the current flow of VWRf tertiary-treated discharge during dry-weather, closed-berm conditions (currently an average monthly flow of 2.8 MGD) as recommended by the Phase 3 Study (submitted to Regional Water Board on February 20, 2018). Since this volume of water is insufficient to meet water supply demands, this alternative requires construction of ocean water desalination in Phase 1 to meet water supply demands.
- Alternative 4 - 100 Percent Diversion in Phase 1: This alternative would consistently divert the entire current flow of VWRf tertiary-treated discharge during dry-weather, closed-berm conditions (currently an average monthly flow of 4.7 MGD) to the new AWPf for potable reuse. The VWRf would have zero discharge during dry weather, normal operating conditions. Existing wildlife ponds would be retained as endorheic/terminal wetlands during dry-weather flow. This alternative does not require construction of an ocean water desalination facility. Up to 2,000 AFY of groundwater desalting would be implemented similar to the proposed project. This alternative would not provide for a staged implementation approach to 100 percent diversion. Therefore, unlike the proposed Project, this alternative would not incorporate data collection following the reduction to a 1.9 MGD discharge to inform the final flow reduction and ensure that the decreased discharge to the SCRE would not reduce habitat values.
- Alternative 5 - Conveyance of Tertiary Effluent to Oxnard Wastewater Treatment Plant: Tertiary-treated discharge from the VWRf above the amount of the approved CDL (up to 100 percent of VWRf direct discharges) would be conveyed 10 miles to the Oxnard Wastewater Treatment Plant. The effluent would be available to the City of Oxnard to reuse for non-local supply offset or to supplement its supply. The project would not augment water supplies for the City of Ventura. Under this alternative, the City would need to develop an ocean desalination facility to meet future water supply and potable water quality needs.
- Alternative 6 - Rehabilitation of Existing Fairgrounds Outfall: All components of the proposed projects would remain the same, except for the Concentrate Discharge Facility component. There are two potential existing outfalls that are no longer in operation in the proximity of the AWPf sites that could potentially be re-purposed for the concentrate

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discharge. These outfalls served the former Seaside Sewage Treatment Plant, which was owned by the City. Both pipelines come from a single point on the fairgrounds property.

The DEIR identifies Alternative 4 as the environmentally superior alternative (other than No Project Alternative) because it coincides with the SRP/TRT Report conclusions of a range of 0 – 0.5 MGD CDL.

Timeframe: Phase 1 would be achieved in two steps:

- Phase 1A would be implemented by the end of year 2025 with the VWRf committing to a CDL of 1.9 MGD, and 2.8 MGD of minimum VWRf flow diverted to other uses.
- Phase 1B would be implemented by the end of year 2030 with the VWRf committing to a CDL of between 0-0.5 MGD, and 4.2-4.7 MGD of minimum VWRf flow diverted to other uses.

Phase 2 Option A or Option B would be implemented between 2030 and 2035 to meet dry-year demands.

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HISTORY

The City has been working with CDFW, U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and Los Angeles Regional Water Quality Control Board (LARWQCB) to address concerns regarding the potential impacts to biological resources associated with the proposed diversion of tertiary-treated water discharges into SCRE to potable reuse. In coordination with FWS and NMFS, CDFW submitted a letter dated December 13, 2018, to RWQCB to response to a request for information regarding the issuance of the National Pollutant Discharge Elimination System (NPDES) permit for the City's proposed VenturaWaterPure Project and proposed changes to effluent discharges into the SCRE. The RWQCB requested CDFW to provide flow recommendations and monitoring requirements for the reduction in discharge from the VWRf located in the SCRE. CDFW recommended a minimum average annual flow of 1.9 MGD for summertime closed berm conditions.

The City will be required to submit a wastewater change petition to the State Water Resources Control Board to approve the reduction of wastewater associated with the DEIR. CDFW will have the opportunity to protest the petition and propose measures to remedy any unresolved concerns related to potential impacts to biological resources.

Biological Significance

The SCRE provides open water, sand dune, nearshore, riparian, mudflat, and other habitats that support a number of sensitive species (some listed) throughout their life cycles, including the tidewater goby (*Eucyclogobius newberryi*), Southern California steelhead trout (*Oncorhynchus mykiss*), California least tern (*Sterna antillarum browni*), and western snowy plover (*Charadrius nivosus*). SCRE is a core resource area strategically located along the coast that provides food, shelter, stopover, and safety for wildlife. The protection and preservation of the SCRE for the above-named species remains a high priority for CDFW. The Santa Clara River, Arundell-Barranca, Brown Barranca, Harmon Barranca, and Bubbling Springs provide breeding and foraging habitat for local fish and wildlife resources. Sensitive riparian habitat adjacent to the groundwater wells along the Santa Clara River support

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southwestern willow flycatcher (*Empidonax traillii extimus*), and least Bell's vireo (*Vireo bellii pusillus*), yellow warbler (*Setophaga petechia*), and yellow breasted chat (*Icteria virens*). Impacts to California species of special concern (SSC), including yellow warbler, yellow breasted chat, and steelhead, should be considered a significant direct and cumulative adverse effect under CEQA without implementing appropriate avoidance and/or mitigation measures (CEQA Guidelines §§ 15064, 15065, 15125[c] and 15380).

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COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

S6-2

CDFW also recommends the environmental document include measures or revisions (outlined below) in a science-based monitoring program, with adaptive management strategies, as part of the Project's CEQA mitigation, monitoring and reporting program (Public Resources Code, § 21081.6 and CEQA Guidelines, § 15097).

I. Project Description

Comment #1: Minimum Flows Analysis and the Identification of Alternative 4 as the Environmentally Superior Alternative

S6-3

Issue #1: Alternative 4 (100 Percent Diversion). The DEIR identifies Alternative 4 as the environmentally superior alternative, other than No Project Alternative ([CEQA Guidelines § 15126.6 (e)(2)]. Alternative 4 is described as the environmentally superior alternative because it coincides with the SRP/TRT Report conclusions of a range of 0 – 0.5 MGD CDL.

Issue #2: Health of the Entire Estuary. The DEIR focuses on the tidewater goby as the key resident fish species. CDFW is concerned that primarily utilizing the tidewater goby does not fully identify the minimum flow criteria to address steelhead smolt and the health of the whole 160-acre estuary. Habitat diversity should be the primary metric that informs minimum flow discharge to provide for a variety of habitat vegetation types, water temperature, water salinity, and water-column depths to support the variety of existing species.

S6-4

Issue #3: Dry Weather Closed Sand Berm Conditions. The current average annual discharge of 4.7 MGD provides approximately 108 acres of open water. Phase 1A (60 percent diversion) with a flow of 1.9 MGD would result in approximately 86 acres of open water. Phase 1B (90 percent diversion) with a flow of 0.5 MGD would result in 49 acres of open water habitat, Phase 1B (100 percent diversion) with zero discharge would result in 41 acres of open water habitat.

S6-5

Specific Impact: Southern California steelhead trout is the largest species that depends on the SCRE for vital life-history and ecological function and should be at the forefront in the existing and future models. This species utilizes all areas of the estuary including the open water habitat. The SCRE has long been recognized as important rearing habitat for steelhead trout fingerling and smolt until they reach maturity as adults to survive the tough conditions of the Pacific Ocean.

S6-6

Why impact would occur: The SCRE receives groundwater inflow upstream in the Santa Clara River. Water quality conditions in the estuary have the potential to affect juvenile

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steelhead. The SCRE currently has approximately 108 acres of open water which provides a combination of fairly shallow open water and water that is generally deep enough to provide some protection from terrestrial and larger avian predators. The Project proposes to divert current flows that would result in a reduction of open water habitat, and decrease the amount of water that dilutes contaminants from surface runoff and concentrations of nutrients and other contaminants present in the groundwater upwelling such as total dissolved solids, sulfates, manganese (Burton et al. 2011) during dry weather closed berm conditions. Alternative 4, identified in the DEIR as the superior alternative, proposes a 100 percent diversion and would eliminate flows that currently dilute contaminants.

S6-6

Evidence impact would be significant: Habitat conditions in the SCRE could be unsuitable or lethal to any out-migrating juvenile steelhead during closed sand berm conditions due to a decrease in the VWRP discharges.

S6-7

Surface runoff from local urban and agricultural uses located along the Santa Clara River flows into the SCRE. High levels of pesticides can alter benthic macroinvertebrate assemblages and reduce prey availability for steelhead and estuarine species (Grimmado et al. 2009; Anderson et al. 2014). Pesticides may also disrupt olfactory sensory neurons necessary for salmonid species homing and predator avoidance (Anderson et al. 2014).

S6-8

The Stillwater Report (Stillwater, 2018) recommends 1.9 MGD for the Enhancement Discharge Levels, CDL, and Maximum Ecologically Protective Diversion Volume (MEPDV). The 1.9 MGD minimum average flow reflects Alternative 3 (60 Percent Diversion) and would include sufficient contingency to account for the level of uncertainty described in the City's Estuary Studies, Stillwater (2018) report, and unforeseen factors. CDFW believes this flow represents a conservative best estimate to maintain ecological functions, minimize reduction of surface water and habitat for wildlife, and monitor changes to habitat and species in SCRE.

S6-9

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: CDFW recommends a minimum average flow of 1.9 MGD for dry weather closed sand berm conditions to ensure enough open water habitat is present for steelhead and tidewater goby to avoid predation, and water is flowing during dry weather periods to dilute contaminants from surface runoff and groundwater upwelling.

Mitigation Measure #2: CDFW recommends water samples and sediment samples to be collected in the SCRE to analyze toxicity levels for invertebrates.

S6-10

Comment #2: Groundwater Dependent Ecosystems

Issue: CDFW has a vested interest in the sustainable management of groundwater, as many sensitive ecosystems and public trust resources are dependent on groundwater. The Oxnard Basin is a critically overdrafted basin (COB). The final EIR should consider and analyze impacts to groundwater dependent ecosystems (GDEs) in the Project.

S6-11

Specific Impact: The Oxnard Basin is subject to critical conditions of overdraft when continuation of present water management practices could result in significant adverse environmental, social, or economic impacts. For this reason, additional extractions to COBs (depending on the specific reason for its listing) are likely to have adverse impacts.

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Why impact would occur: The Department of Water Resources (DWR)'s Natural Communities Commonly Associated with Groundwater Dataset identifies many potential GDEs in the Project's geographic scope (DWR 2019). The potential GDEs identified in orange in Figure 1 of DWR's dataset likely consists of phreatophytic vegetation, which rely on water supply from the groundwater table.

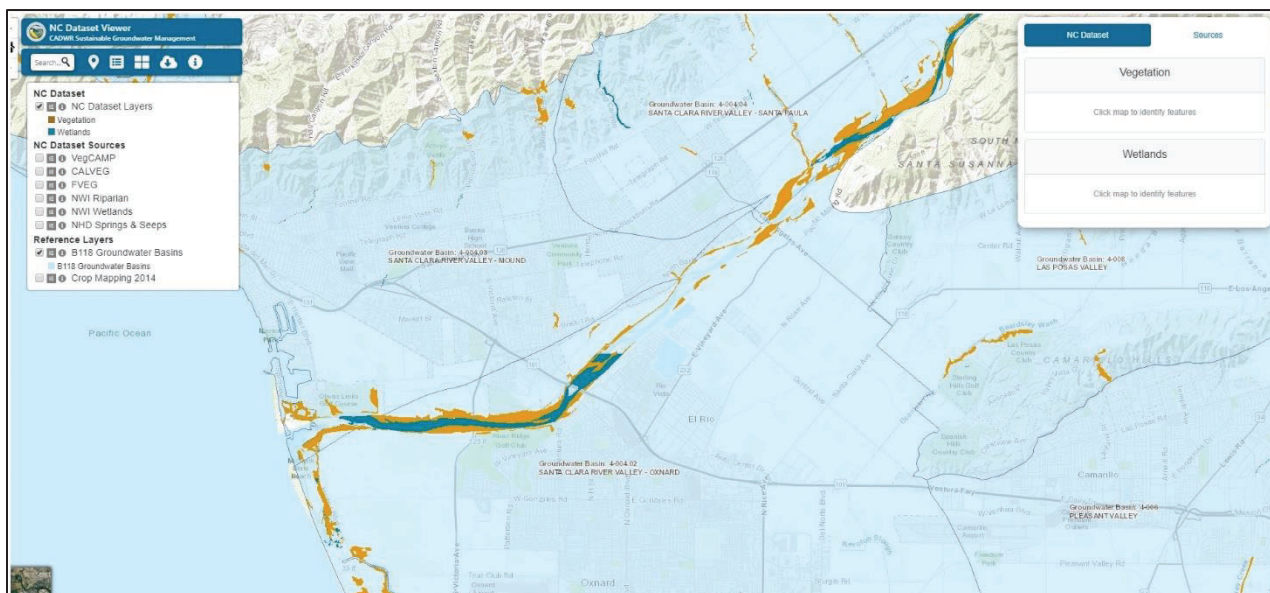
Evidence impact would be significant: Phreatophytic vegetation is a critical contributor to nesting and foraging habitat for a wide range of species and can be affected by depth to groundwater (Naumburg et al. 2005, Froend and Sommer 2010). This sensitivity to groundwater level thresholds means that localized pumping and recharge actions altering groundwater levels, such as those proposed in the Project, can impact the health and extent of phreatophyte vegetation. Both decreasing (drying out) or increasing (drowning) groundwater elevation has the potential to stress phreatophytes depending on the plant species and the groundwater elevation and duration (e.g., short term wetness/dryness versus prolonged wetness/dryness). Proposed groundwater management actions included in the Project should be managed with consideration to impacts to potential GDEs.

S6-13

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: The final EIR should verify the existence of GDE that could be affected by the Project and identify vegetation communities (e.g., species compositions, structural diversity, and integrity) and associated rooting depths/optimal groundwater table elevations. This will allow Project proponents to: 1) determine which proposed phase or alternative is most likely to impact GDEs based on basin hydrology; 2) deploy representative groundwater monitoring stations within GDEs to track groundwater levels and vegetation responses over time; and, 3) establish thresholds/triggers for adaptive management to respond to stressed vegetation as needed. If the Project is expected to result in habitat benefits to GDE's, monitoring should be utilized to track and confirm positive and negative outcomes.

Figure 1: Potential groundwater dependent ecosystems within the Oxnard Basin and the proposed Project areas.



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Comment #3: Groundwater Impact Analysis

Issue #1: The DEIR on page 3.6-9 states, “[a] very significant area in Ventura County is experiencing subsidence, including the project area (County of Ventura 2013). Data suggests that groundwater has been extracted from the aquifers underlying the Oxnard Basin at a rate that exceeds the rate of replenishment, referred to as ‘overdraft’”. An evaluation of subsidence impacts to GDEs from the Project should be included in the EIR.

Issue #2: The DEIR on page 3.9-56 states, “[f]or wells near the coast, groundwater extraction could promote seawater intrusion under certain operating scenarios. Avoiding seawater intrusion would be accomplished through extraction of the injected water within a short time frame to avoid excessive subsurface migration. Similarly, long-term storage of injected water in the Oxnard Basin could displace naturally recharged groundwater”. An evaluation of increase saltwater intrusion or the displacement of naturally recharged groundwater to GDEs from the Project should be included in the EIR.

Specific impact: The DEIR lists on page 3.9-57 specific actions to be implemented if potable wells are found to be adversely affected by the aquifer storage and recovery (ASR) operations through a reduction in water quality or impeding access to groundwater.

Why impact would occur: The Project proposes phases that may increase groundwater production and treatment. Increased groundwater extraction during dry water years can lower groundwater tables. This lowering of the groundwater table can potentially cut phreatophytes off from a water supply causing vegetation stress (and possibly death) depending on vegetation needs and duration of lower quality groundwater levels. Groundwater recharge with treated water may also raise local groundwater table elevations. As increased recharge raises the groundwater table, phreatophyte roots can be ‘drowned’ in fully saturated soil zones causing vegetation stress (and possibly death) depending on vegetation needs and duration of high groundwater levels. Groundwater activities such as pumping, treating, extracting, and recharging within two (2) month intervals may further contribute to possible subsidence.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: The final EIR should address how the groundwater activities such as pumping, treatment, extracting, and recharging within two (2) month intervals may impact GDEs. CDFW also recommends that the City coordinate with the Fox Canyon Groundwater Management Agency to discuss effective/reliable methods to monitor and manage for impacts to GDEs.

Comment # 4: Vegetation and Habitat Communities

Issue: Chapter 3.4.3. of the DEIR identifies within the Project area arroyo willow thickets, mulefat thickets, riverwash herbaceous, coyote brush scrub, giant reed breaks, hardstem bulrush marsh, dune mat, shining willow groves, Pacific silverweed marsh, creeping rye grass turf, and FWS-designated critical habitat (DCH) for southwestern willow flycatcher. These vegetation communities such as the arroyo willow thickets, mulefat thickets, riverwash herbaceous, and FWS- DCH for southwestern willow flycatcher are present in the Santa Clara River adjacent to the proposed groundwater wells, but are not quantified.

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Specific impact: Impacts to specific habitat communities and vegetation adjacent to proposed groundwater wells (see Figure 3.4-1) are not provided (quantified) in the DEIR. All impacts to sensitive habitat communities should be identified, mapped and quantified in the final EIR. Without an impact analysis and proposed avoidance, minimization and mitigation measures, impacts to vegetation and habitat communities should be considered significant and unmitigated under CEQA.

Why impact would occur: Increased groundwater extraction during dry water years can lower groundwater tables, which can potentially cut phreatophytes off from water causing vegetation stress (and possibly death) depending on vegetation needs and duration of lower quality groundwater levels. Groundwater recharge with treated water may also raise local groundwater table elevations, potentially resulting in root “drowning” in fully saturated soil zones causing vegetation stress (and possibly death).

Evidence impact would be significant: The Project area includes sensitive species such as southwestern willow flycatcher, and least Bell’s vireo, yellow warbler, and yellow breasted chat that depend on the sensitive riparian habitat. The DEIR should list specific habitat community acreages, provide the calculations for the potential loss of acreages, and propose avoidance/minimization and mitigation measures. Without this information in the EIR, adverse impacts to these sensitive vegetation and habitat communities should be considered significant and unmitigated under CEQA.

S6-13

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure # 1: CDFW recommends that the City identify the vegetation and habitat communities within the GDEs and conduct floristic-based assessments of special status plants and natural communities following CDFW’s Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (<http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>). Please note, this protocol has been recently updated and the 2018 version referenced here should be used.

Comment #5: Focused Pre-Construction and Post-Construction Aquatic Surveys

Issue: The Project may potentially affect existing aquatic species and/or their habitats.

Specific impact: Project implementation may result in reduced reproductive capacity, population declines, or local extirpation of rare, special-status, or threatened and endangered species.

S6-14

Why impact would occur: Project implementation could substantially reduce aquatic species habitat and/or degrade the quality of habitat, which may cause aquatic populations to drop below self-sustaining levels.

Evidence impact would be significant: CDFW considers adverse impacts to habitat for aquatic species, for the purposes of CEQA, to be significant without mitigation. Project-related impacts to aquatic species and their habitats, supported by current survey results, should be analyzed in the EIR.

Recommended Potentially Feasible Mitigation Measure(s)

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Mitigation Measure #1: CDFW recommends that focused surveys for fish, amphibians, and marine species be conducted with focus on identifying special status species and species abundance. CDFW recommends that aquatic surveys be conducted by a qualified fisheries biologist to identify the fish species and quantify the fish populations that are present within: 1) the areas within the open water habitat of the SCRE; and, 2) upstream of the SCRE adjacent to the proposed groundwater pumping well sites along the Santa Clara River. Focused species-specific surveys should consider seasonal variations and be conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable.

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Comment #6: Focused Pre-Construction and Post-Construction Avian Surveys

Issue: The Project may potentially affect existing avian species and/or their habitats.

Specific impact: Project implementation may result in reduced reproductive capacity, population declines, or local extirpation of rare, special-status, or threatened and endangered species.

S6-15

Why impact would occur: Project implementation could substantially reduce avian species habitat and/or degrade quality of habitat, which may cause avian populations to drop below self-sustaining levels.

Evidence impact would be significant: CDFW considers adverse impacts to habitat for avian species, for the purposes of CEQA, to be significant without mitigation. Project-related impacts to avian species and their habitats, supported by current survey results, should be analyzed in the EIR. As mentioned previously, impacts to avian SSC avian should be considered a significant direct and cumulative adverse effect under CEQA without implementing appropriate avoidance and/or mitigation measures (CEQA Guidelines §§ 15064, 15065, 15125[c] and 15380).

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: CDFW recommends that focused surveys for avian species be conducted with focus on identifying special status species such as California least tern, western snowy plover, southwestern willow flycatcher, least Bell's vireo, yellow warbler, yellow chat, and all raptor species. CDFW recommends that avian surveys be conducted by a qualified ornithologist prior to adoption of the final EIR to identify avian species that are present within: 1) the SCRE; and, 2) upstream of the SCRE adjacent to the proposed groundwater pumping well sites along the Santa Clara River. Focused species-specific surveys should consider seasonal variations and be conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable.

Comment #7: Deferred Mitigation

Issue: The DEIR concludes that the Project would result in a 90-100 percent reduction of VWRP discharges and cause a reduction of open water estuary acreages and mudflat estuary acreages by 55-62 percent. The Project would also reduce the acreage of spawning and rearing habitat for tidewater goby, rearing habitat for subadult steelhead, and foraging habitat for California least tern and western snowy plover.

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Specific Impact: The SCRE currently receives an annual average of 4.7 MGD. The VRWF discharges have altered the baseline hydrograph and have created ecosystem reliance on the discharge flows. Project implementation will result in impacts to the SCRE, sensitive vegetation communities, and listed/sensitive wildlife. This could result in direct mortality, reduced reproductive capacity, population declines, or local extirpation of several sensitive species.

S6-17

Why impact would occur: CDFW considers the Post Construction SCRE Monitoring, Assessment, and Adaptive Management Program (MAAMP) proposed in DEIR to address impacts and mitigation measures as deferred analysis impacts and mitigation to a future date after the Project has already been approved. Without a supporting impact analysis and proposed avoidance, minimization and mitigation measures in the EIR, impacts to vegetation and habitat communities should be considered significant and unmitigated under CEQA.

Evidence Impact would be significant: CEQA Guidelines sections 15070 and 15071 require the EIR to analyze if the Project may have a significant effect on the environment as well as review if the Project will “avoid the effect or mitigate to a point where clearly no significant effects would occur”. In order to analyze if a project may have a significant effect on the environment, Project-related impacts, including survey results for species that occur in the entire Project footprint should be included in the DEIR for public review. This information allows CDFW to comment on alternatives to avoid impacts as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

S6-18

In addition, CEQA Guidelines section 15126.4(a)(1)(B) states “[f]ormulation of mitigation measures should not be deferred until some future time.” CDFW considers the planned preparation of the MAAMP as a deferral of mitigation; therefore, it would not adequately avoid, minimize, or mitigate significant impacts in accordance with CEQA and not be disclosed during the DEIR review process. At a minimum, the EIR should include draft MAAMP for review and comment with the EIR.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends that the final EIR include specific information regarding potential impacts to streambed vegetation communities that may be considered groundwater dependent and could be affected by Project-related changes in the water quality and quantity of groundwater. This information should include the location and acreage of any impacts and proposed avoidance, minimization, and mitigation measures.

S6-19

Mitigation Measure #2: The final EIR should evaluate the Project-related and cumulative effects of upstream water diversions. Such diversions can result in reduced fresh-water contributions upstream and should be factored into determining the appropriate baseline condition for recommendations.

S6-20

Mitigation Measure #3: BIO-5 should be updated to implement a 5-year Pre-Construction SCRE Monitoring Program. The Monitoring Program should include:

- a) Approaches and methods to establish pre-project baseline conditions;
- b) The continuous deployment of four or five datasondes strategically placed within the SCRE to determine real-time, short-term, long-term, and seasonal variation of water

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conditions within the estuary, water levels, temperature, salinity, pH, and dissolved oxygen. Data should be collected hourly, and downloaded every two weeks;

- c) Protocol surveys:
 - i) Water samples within the SCRE;
 - ii) Sediment samples within the SCRE;
 - iii) Surveys to collect data on the horizontal and vertical availability of nearshore and open water habitat to be maintained at a minimum amount of acreage to support adult Southern California steelhead trout;
 - iv) Surveys to collect data on the width of buffer zones for willow riparian and mudflat habitats from roads, bridges, state facilities, and Ventura infrastructure to ensure continued use by wildlife; and,
 - v) Identification and preservation of habitat elements that support special status species (e.g., wrack and dunes for birds and nearshore habitat for fish).

Mitigation Measure #4: BIO-6 should also be updated to include:

- a) Statistics, sampling sizes, surveys, and methods used to detect significant changes and how it will be monitoring and analyzed;
- b) Approaches to establish the proposed timeline and seasonal restrictions for data collection, monitoring, and proposed discharge reductions;
- c) Monitoring of bathymetric or water depth measurements with acreage calculations;
- d) Monitoring of species abundance, and habitat within the estuary (nearshore and open water areas) to document changes in water depth and species/habitat composition). Depth measurements should be conducted no less that weekly at two locations (upper third and lower third) in the open water area;
- e) Seasonal and annual monitoring/quantification of changes in aquatic and terrestrial habitat types/distributions and sensitive species within the SCRE;
- f) The continuous deployment of four or five datasondes strategically placed within the SCRE to determine real-time, short-term, long-term, and seasonal variation of water conditions within the estuary, water levels, temperature, salinity, pH, and dissolved oxygen. Data should be collected hourly, and downloaded every two weeks;
- g) Measurable performance standards to verify sufficient ecological functions for all species;
- h) Identification and analysis of the source of nutrients that exist within the shallow groundwater inflows and discharges from the treatment plant;
- i) Regular sampling of SCRE sediment to monitor toxicity levels for invertebrates (prey for fish species);
- j) Monitoring/control measures for invasive plant, animal, and aquatic species;
- k) Developing all adaptive strategies for effluent discharge based on ecological needs of special status species that occupy SCRE including how to balance the competing needs of special status species. This may include an increase in discharge to dilute contaminants levels to benefit fish species during dry weather conditions, but this increase may breach the sand berm or cause nest failure along the sand berm;
- l) Ecological parameters for the trigger thresholds;
- m) Mechanisms for annual review of the minimum and maximum monthly average flows; and,
- n) Courses of actions, adjustments to the discharge amounts, and mitigation measures to be implemented in the event that thresholds are triggered.

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Mitigation Measure #5: To offset the loss of habitat acreage that supports sensitive species, CDFW recommends the following compensatory mitigation for the City's proposed changes to effluent discharge to the SCRE:

- a) *Arundo* (*Arundo donax*) removal around the periphery and within the SCRE to promote overall increase in habitat quality for nesting birds;
- b) Maintenance of wrack on the sandy beach areas of McGrath State Park for endangered terrestrial bird species;
- c) Installation of new gauges to monitor effluent surface flows (down the Santa Clara River and into the SCRE) and groundwater upwelling (at the mouth of the SCRE) to collect and analyze data on the natural hydrology of SCRE and to inform needs for seasonal effluent discharge; and,
- d) Creation of estuarine open water, freshwater, and mudflat habitat. If on-site mitigation is not feasible or would not be biologically viable and, therefore, would not adequately mitigation the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

S6-21

S6-22

Comment #8: Impacts to Streambed Resources

Issue #1: The final EIR should identify all perennial, intermittent, and ephemeral stream features, and any associated biological resources/habitats present within the entire Project footprint (including access and staging areas). The Project activities are within the bed, bank and channel of two ephemeral streams and the River. The Project may be subject to notification under Fish and Game Code § 1600 et seq. The Brine Discharge Pipeline for the Concentrate Outfall will cross the Arundell-Barranca drainage. The Advanced Treatment Water Pipeline will cross numerous streams such as the Brown Barranca and the Harmon Barranca drainages. The two potential connections for the Callugues Salinity Management Pipeline (SMP) Alignment will cross the Bubbling Springs drainage. Within the Santa Clara River, the Project activities and groundwater pumping from six groundwater wells may have an impact resulting in a measurable or visual change in water surface elevation or a visual reduction in the width of the stream surface flow. The final EIR should analyze all potential temporary, permanent, direct, indirect, and/or cumulative impacts to the above-mentioned stream areas that may occur as a result of the Project.

S6-23

Comment #9: Discharge Location

Issue #1: The current discharge point should be evaluated for relocation further upstream in the estuary (e.g., closer to Victoria Avenue Bridge) to create more "natural" hydrology in the SCRE. The relocated discharge point would move the freshwater input away from the mouth of the estuary, further upstream.

S6-24

Comment #10: Saltwater Intrusion

Issue #1: Saltwater contribution from wave over-wash can significantly contribute to the open water volume and increase the salinity within SCRE. Therefore, saltwater should be further studied and calculated directly into the water balance model. In addition, the City should identify the rate and contributions for filling of the SCRE (e.g., water-surface elevations relative to tides, wave action, stratification, limits of inundation), including changes to the bathymetry of the estuary following large storm events and changes to the beach dynamics associated with

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dredge spoil placement. The City should also evaluate and quantify the contribution of groundwater to nutrient input and water volume in SCRE.

S6-25

Issue #2: The final EIR should consider and address changes to SCRE hydrology, flows from the United Water Conservation District's water management practices, and proposed restoration actions at McGrath State Park.

Comment #11: Impacts to Streambed Resources

Issue #1: The Project may result in potential effects to marine resources from impingement and entrainment by the proposed subsurface intake system such as slant wells, beach wells, or infiltration galleries. CDFW prefers the method of drawing salt water from directionally drilled wells (slant wells) for desalination to avoid fish, fish egg, and larvae entrainment and impingement that would occur when using direct ocean intakes with wire mesh. Impacts to marine organisms other than fish may occur. These impacts to marine organisms should be analyzed in the final EIR. Additionally, long-term monitoring, testing, and fish impact analysis should be conducted if fish screens and direct ocean draw are proposed alternatives.

S6-26

Comment #12: Desalination Brine Discharge and Water Quality

Issue #1: Discharge of brine effluent to the marine environment may cause potential harmful impacts to marine life. Several brine discharges should be analyzed, pilot tested, and chosen based on scientific data indicating it will avoid marine water quality impacts, marine species impacts, or based on data collected to show that impacts will be reduced to below a level of significance. The final EIR should fully describe potential marine environmental effects from each brine effluent discharge alternative. In addition, a detailed monitoring plan is recommended for any alternatives that propose direct ocean discharge of brine waste to ensure that the discharged effluent is fully mixed and is properly diluted for protection of marine resources.

S6-27

Comment #13: General Construction Recommendations

Issue #1: Parking, driving, lay-down, stockpiling, and vehicle and equipment storage should be limited to previously compacted and developed areas and the designated staging area. No off-road vehicle use should be permitted beyond the project site and designated access routes. Disturbances to the adjacent native vegetation should be minimized. Nonnative plants, including noxious weeds (as listed by the California Invasive Plant Council), should be prevented from establishing in temporarily disturbed areas, either by hand-weeding or selective application of herbicide.

S6-28

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address:

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CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife and assessment of CEQA filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the lead agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

S6-30

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR for the Ventura Water Supply Project to assist the City of Ventura in identifying and mitigating Project impacts on biological resources. For any questions regarding this letter and further coordination on these issues, please contact Mary Ngo at (562) 342-2140 and Mary.Ngo@wildlife.ca.gov.

Sincerely,



Ed Pert
Regional Manager

ec: CDFW
Erinn Wilson, EPMI (Los Alamitos)
Randy Rodriguez, SES-Supervisory (Los Alamitos)
Mary Larson, SES-Supervisory (Los Alamitos)
Mary Ngo, SES-Specialist (Los Alamitos)

Chris Dellith, USFWS, Sr. Biologist (Ventura)
Brittany Struck, NMFS, Natural Resource Management Specialist (Long Beach)
Cris Morris, RWQCB, Chief, (Los Angeles)

Office of Planning and Research, State Clearinghouse, Sacramento

REFERENCES

Anderson, B., B. Phillips, J. Hunt, K. Siegler, J. Voorhees, K. Smalling, K. Kuivila, M. Hamilton, J.A. Ranasinghe, R. Rjeerdema 2014. Impacts of pesticides in a Central California Estuary *Environ Monit*, 186:1801-1814.

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GAVIN NEWSOM
GOVERNOR



JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

April 22, 2019

Gina Dorrington
City of Ventura - Ventura Water
501 Poli Street
Ventura, CA 93002-0099

Dear Ms. Dorrington,

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR VENTURA WATER SUPPLY PROJECTS (SCH 2017111004) – CITY OF VENTURA, VENTURA WATER RECLAMATION FACILITY (ORDER NO. R4-2013-0174, NPDES NO. CA0053651, CI NO. 1822)

On March 6, 2019, the City of Ventura (City) released a Draft Environmental Impact Report (EIR), SCH 2017111004, for the Ventura Water Supply Projects. The objectives of the Water Supply Projects are to protect the ecology of the Santa Clara River Estuary (SCRE), develop additional water supply sources to meet water demands for planned future growth, and enhance supply reliability even in drought years. The draft EIR covers the first phase of the Water Supply Projects, which includes diverting the tertiary-treated water to an Advanced Water Purification Facility (AWPF) rather than discharging it to SCRE. The highly purified water will then be used to supplement the potable water supply for the City of Ventura. The Regional Water Board has the following comments on the draft EIR relative to the Water Boards' plans and policies, particularly the Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Estuary Policy), and permitting authorities related to the project.

Background

Currently the Ventura Wastewater Reclamation Facility (VWRF) operates under a National Pollutant Discharge Elimination System (NPDES) permit (Order No. R4-2013-0174; herein Order) and discharges tertiary-treated effluent to three sequential wastewater ponds and then to SCRE. The Estuary Policy, which was adopted by the State Water Board on May 16, 1974 and amended on November 16, 1995 (Resolution No. 95-84), requires the phase out of discharges of municipal wastewaters to enclosed bays and estuaries at the earliest practicable date. An exception to this provision may be granted by the Los Angeles Regional Water Quality Control Board (Regional Water Board) if the quality of the receiving water is enhanced by the discharge. The City has conducted a series of special studies as required by the current Order in order to determine the Continued Discharge Level (CDL) from the VWRF that enhances SCRE, including protecting its ecology. These studies include:

- Phase 3 Estuary Studies
- Nutrient, Dissolved Oxygen and Toxicity Special Study
- Groundwater Special Study

IRMA MUÑOZ, CHAIR | DEBORAH SMITH, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles



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Ms. Gina Dorrington
Ventura Water Supply Projects Draft EIR (March 2019)

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These studies were also conducted to support the requirements in the Consent Decree between the City, Wishtoyo Chumash Foundation (Wishtoyo), Ventura Coastkeeper (VCK) and Heal the Bay to determine the maximum ecologically protective discharge volume of tertiary-treated effluent to SCRE. The data and analysis from the special studies listed above were reviewed by a Technical Review Team (TRT) assembled by Wishtoyo, VCK, and Heal the Bay. A Scientific Review Panel (SRP) was then convened by the City and the Consent Decree parties to determine how much, if any, discharge from the VWRP is needed to protect and sustain the native and endangered species known to use SCRE and/or how much the discharge could be reduced to protect these species and support other beneficial uses of the VWRP effluent.

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The recommended CDLs from each of these reports are:

- Phase 3 Estuary Studies 1.9 MGD
- TRT 0.9 to 1.4 MGD
- SRP 0 to 0.5 MGD

In the draft EIR, the City concurs with the SRP's recommendations concerning the critical SRCE condition, the enhancement levels and the CDL range of 0 to 0.5 MGD. However, due to the concerns expressed by the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) after these agencies' review of the technical documents and the TRT and SRP reports, the City revised its implementation schedule for reducing the VWRP discharge to SCRE. This revised schedule proposes that, during Phase 1a, an average annual CDL of 1.9 MGD to SCRE will be maintained during closed berm conditions by the end of 2025. The revised schedule proposes that, during Phase 1b, the CDL will be progressively reduced to 0 to 0.5 MGD, subject to oversight by USFWS, NMFS and CDFW. The final CDL is expected to be achieved by the year 2030.

Comments

1. Executive Summary, Table ES-1, page ES-3: Based on input from the USFWS, NMFS and CDFW, the phased implementation of Phase 1 is necessary and appropriate to ensure that the quality of the receiving water, and in particular, the ecology of SCRE is not negatively impacted by the VWRP discharge reduction. Monitoring and assessment of the Phase 1a and Phase 1b discharge reductions to SCRE will be necessary. To ensure the necessary monitoring and assessment is conducted, Regional Water Board staff intends to propose a VWRP discharge reduction monitoring and implementation plan as a requirement of the monitoring and reporting program of the VWRP's NPDES permit during the upcoming permit renewal. The monitoring and assessment will also be required for other permits, approvals and regulatory requirements such as through the Water Code Section 1211 Wastewater Change Petition process administered by the State Water Board.
2. Executive Summary, Biological Resources, Mitigation Measure BIO-6, pages ES-21 and 22: The Mitigation Measure BIO-6 includes the preparation of a Post-Construction SCRE Monitoring, Assessment, and Adaptive Management Plan (MAAMP) for Phase 1b. According to the draft EIR, this MAAMP will be prepared in collaboration with CDFW, USFWS and NMFS to ensure that the reduction in Continued Discharge Level (CDL) avoids and minimizes adverse impacts to, and any take of, listed species. To be effective as a means to ensure that listed species are protected while reducing the CDL, the monitoring results and the MAAMP will need to be reviewed on a regular basis to identify when adjustments need to be made to the CDL reduction schedule. The MAAMP should contain triggers that would require adjustment to the CDL and/or a meeting with the resource agencies.
3. Proposed Diversion Volume and Continued Discharge Level, page 2-17: Please delete or revise the last sentence of Section 2.4 to be consistent with the following. Regional Water

S7-2

S7-3

S7-4

- Board staff do not intend to include a compliance schedule in the VWRf's NPDES permit to reduce the VWRf discharge to the SCRE to 0.5 MGD or less. Instead, the Regional Water Board staff intends to address the Phase 1b flow reduction schedule through a discharge reduction monitoring and implementation plan and periodic progress reports submitted to the Regional Water Board as part of the permit-required monitoring and reporting program. The implementation plan would be subject to approval by the Regional Water Board Executive Officer. If and when necessary, the permit could be reopened or reissued to update the average annual discharge from the facility based on implementation of Phases 1a and 1b.
4. Discharge Pipeline to the Calleguas Salinity Management Pipeline, page 2-35: Please address how excess stormwater will be handled if the Calleguas SMP is utilized for the brine and the berm is closed.
5. The draft EIR states that the pipeline would be constructed within public rights-of-way "where feasible" (page 2-35). The inability to gain easements for pipelines has plagued multiple projects in the area and has affected construction schedules. The Regional Water Board recommends that discussions concerning easements concerning private properties for the most viable alternatives be initiated as soon as possible.
6. 2.6 Project Alternatives, Alternative 4: 100 Percent Diversion in Phase 1, page 2-40: Alternative 4 does not address the phased implementation of Phase 1 from a CDL of 1.9 MGD to a CDL of 0.5 to 0 MGD. As discussed earlier, this phased implementation is necessary to assess the impact of the CDL reductions below 1.9 MGD to SCRE. Consider adding an additional alternative or revising Alternative 4 to including this phased implementation during Phase 1 of the project. In either case, the EIR should address how this alternative of phasing implementation of Phase 1 of the project would be more protective of SCRE and its biological resources.
7. 2.6 Project Alternatives, Alternative 6: Rehabilitation of Existing Fairgrounds Outfall, page 2-40: Include information concerning the size and capacity of the outfalls and their suitability for this application.
8. 3.4.8 Impacts and Mitigation Measures, Water Quality, page 3.4-51: The draft EIR states that nutrient loading to SCRE is from the VWRf discharge and groundwater exfiltration. The conclusion from the SRP Report is that the benefits of reduced nutrient loading outweigh the potential benefits of dilution from the VWRf discharge. The reference provided for the SRP Report (Kramer 2018), however, is the draft version. Please update the reference to the final version of the report.
9. Concentrate Discharge Facility, New Outfall Construction
- a. Turbidity, page 3.9-60: Note that a Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements from the Regional Water Board is also required during the excavation of the exit pit.
- b. Dredge-Material Stockpiling, Transport and Disposal, page 3.9-62: Note that the approval process for dredge material disposal includes review and approval by the Contaminated Sediment Task Force and the Southern California Dredged Material Management Team.
10. New Outfall Operation, Table 3.9-10, page 3.9-65: The Calleguas SMP effluent limitations for ammonia in Table 3.9-10 do not coincide with the limitations in Order No. R4-2014-0033-A01. The tentative of the renewed order for the Calleguas SMP is currently available for public review and is expected to be adopted by the Regional Water Board on June 13, 2019. If possible, update the SMP effluent limitations in Table 3.9-10 and the design flow rate noted on page 3.9-67 after permit adoption.

Commenter S7: Los Angeles Regional Water Quality Control Board

Ms. Gina Dorrington
Ventura Water Supply Projects Draft EIR (March 2019)

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April 22, 2019

Thank you for the opportunity to comment on the Ventura Water Supply Projects Draft EIR. If you have any questions or would like to discuss, please contact Cris Morris at (213) 620-2083.

I S7-13

Sincerely,



for Cris Morris, P.E., P.M.P.
Watershed Regulatory Section

cc:

Kurt Souza, Division of Drinking Water
Jeff Densmore, Division of Drinking Water
Elizabeth Sablad and Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR 2-3)
Brittany Struck, NOAA, National Marine Fisheries Service
Chris Dellith, Department of Interior, U.S. Fish and Wildlife Service
Erinn Wilson, California Department of Fish and Wildlife, Region 5
Nat Cox, California State Parks and Recreation
Al Wagner, State Coastal Conservancy
Mary Small, California Coastal Commission, South Coast Region
Jeff Pratt, Ventura County, Department of Environmental Health
Thien Ng, City of Oxnard
Jason Weiner, Ventura Coast Keeper
Geneva Thompson, Wishtoyo Foundation
Annelisa Moe, Heal the Bay
Caryn Mandelbaum, Environment Now
Antal Szijj, U.S. Army Corps of Engineers
Arthur Pugsley, Los Angeles Waterkeeper
Steve Fleischli, Natural Resources Defense Council
Peter Jenkin, Surfrider Foundation
Doug McPherson, US Bureau of Reclamation
Dan Detmer, United Water Conservation District

From: Lim, Jeong-Hee@Waterboards <Jeong-Hee.Lim@waterboards.ca.gov>
Sent: Tuesday, April 23, 2019 10:04 AM
To: Dorrington, Gina
Cc: Morris, Cris@Waterboards
Subject: RE: Consent Decree in 2012 vs. "final Consent Decree in February 2017"

Hi Gina,

Thanks for the document. I would revise the underlined text to provide clarity in the first sentence of page 1-9 where it says "The City settled litigation initiated by Wishtoyo Chumash Foundation/Ventura Coastkeeper (a program of Wishtoyo Foundation) and Heal the Bay (HTB) through the execution of a final Consent Decree in February 2017."

Jeong-Hee

S8-1

From: Dorrington, Gina <gdorrington@cityofventura.ca.gov>
Sent: Monday, April 22, 2019 3:52 PM
To: Lim, Jeong-Hee@Waterboards <Jeong-Hee.Lim@waterboards.ca.gov>
Cc: Tom Barnes <TBarnes@ESASSOC.COM>; Kevin Smith <KSmith@esassoc.com>; Hogan, Miles <mhogan@cityofventura.ca.gov>
Subject: RE: Consent Decree in 2012 vs. "final Consent Decree in February 2017"

Jeong-Hee:

Please find the attached 2017 Memorandum of Agreement. The 2012 document is the Tertiary Treated Flows Consent Decree and Stipulated Dismissal. The 2017 document is the Memorandum of Agreement Implementing the Tertiary Treated Flows Consent Decree and Stipulated Dismissal – it is just an Memorandum of Agreement between the parties, it is not another consent decree.

Respectfully,

Gina Dorrington
Via remote access
Wastewater Utility Manager/Interin Assitant General Manager
Ventura Water
1400 Spinnaker Drive
Ventura, CA 93002
(805) 677-4131
gdorrington@venturawater.net

From: Lim, Jeong-Hee@Waterboards [<mailto:Jeong-Hee.Lim@waterboards.ca.gov>]
Sent: Monday, April 22, 2019 11:59 AM
To: Dorrington, Gina
Subject: Consent Decree in 2012 vs. "final Consent Decree in February 2017"

Hi Gina,

I am trying to clarify a thing on EIR to finish EIR comments. Two Consent Decree are mentioned in the EIR: 2012 and 2017.

Is the February 2017 Consent Decree a kind of amendment to the February 2012 Consent Decree?

Can you please share what agreement or changes were included in the 2017 Consent Decree?

Thanks.

Jeong-Hee Lim, Ph.D., P.E.

Senior Water Resource Control Engineer

Municipal Permitting Unit Chief

Los Angeles Regional Water Quality Control Board

320 W. 4th Street, Suite 200

Los Angeles, CA 90013

Phone: (213) 576-6616

Email: jeong-hee.lim@waterboards.ca.gov

California State Parks, Channel Coast District

Response S1-1

The contact for the California State Parks has been changed from Tom Dore to Dena Bellman.

California Department of Transportation District 7

Response S2-1

The City concurs that the proposed projects are not expected to result in a direct adverse impact on any existing state transportation facilities. With respect to construction activities, Mitigation Measure TRAF-1 requires that a Traffic Control Plan be prepared prior to construction activities to ensure that impacts to traffic are minimized or avoided. The plan would incorporate best practices from the menu of available construction traffic control strategies outlined in the Environmental Impact Report (EIR) to manage any oversized load deliveries needed during construction. This would include a measure to comply with existing California Department of Transportation (Caltrans) permitting requirements and laws mandating flagging, signage and route selection. The plan would designate off-peak hours for oversized deliveries if feasible.

Response S2-2

As noted in Table 2-9 on page 2-60 of the EIR, the City would obtain encroachment permits from local jurisdictions and Caltrans for work in their public rights-of-way, including activities that would result in lane or road closures.

Response S2-3

As noted on page 2-61 of the EIR and described on pages 3.9-42 through 3.9-43, construction activities would be subject to stormwater discharge National Pollutant Discharge Elimination System (NPDES) requirements, including preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), setting forth best management practices (BMPs) and runoff treatment and control measures that will be employed during various phases of construction to prevent construction pollutants from entering surface waters in accordance with the water quality control and treatment standards set forth in the Statewide General Construction NPDES Permit. In addition, as noted on page 3.9-43 of the EIR, the proposed projects would be required to prepare a Stormwater Management Plan (SMP) setting forth BMPs and runoff treatment and control measures that will be implemented as part of the proposed projects to reduce and prevent post-construction pollutants from entering surface waters in accordance with the water quality control and treatment standards set forth in the County of Ventura's Municipal Separate Storm Sewer System (MS4) NPDES Permit. The City would coordinate with Caltrans for work within Caltrans rights of way to ensure the SWPPP and SMPs for facilities in the vicinity of state facilities that control stormwater runoff are installed in the manner required by Caltrans standards.

California Department of Parks and Recreation

Response S3-1

The comment describes the Department of Parks and Recreation's interest in the proposed projects as land manager for properties adjacent to the Santa Clara River Estuary (SCRE).

Response S3-2

The preference for the two inland sites for the Advanced Water Purification Facility (AWPF) is noted. The EIR evaluates the potential land use and aesthetic impacts of the AWPF at each of the three potential sites, including the two preferred by the commenter (Transport Street or Portola Road) and the Harbor Site, which is not preferred by the commenter. The impacts analysis found that construction of a purification plant at any of the three sites would result in less than significant impacts on local aesthetics and land use compatibility. The potential aesthetic impacts of development of the AWPF on each of the three alternative sites are discussed at DEIR pages 3.1-14 through 3.9-15, 3.1-20 through 3.1-21, 3.1-24 through 3.1-25, and 3.1-29. Land use impacts are discussed at pages 3.10-22 through 3.10-23 and 3.10-28. Mitigation Measure AES-2 would require that, on any of the sites, the facility must be designed with architectural features matching the surrounding area and softening the industrial character of the facility. As noted on pages 2-6 and 3.10-8, use of the Harbor site would require annexation into the City and a land use consistency analysis with the LCP that may require a LCP amendment.

Two potential AWPF sites are located in Ventura County, and would require annexation into the City if selected: the Portola Road site and the Harbor Boulevard site. On page 2-60, under the column "Reason for Permit or Approval," the text of the entry for Ventura Local Agency Formation Commission is revised to state as follows:

If selected for the AWPF, Harbor Boulevard or Portola Road site annexation from the unincorporated County to the City

Response S3-3

The comment describes the Department's ambitions for renovating McGrath State Beach Campground.

California Coastal Commission

Response S4-1

The comment describes the project and observes that California Coastal Commission (CCC) staff met with City staff on April 15, 2019.

Response S4-2

The comment discusses potential historical and currently sensitive habitat types that may have existed in the past (constituting a historical "ESHA" or "environmentally sensitive habitat area"), or that may now exist on the Harbor Boulevard AWPF site and on the Harbor Boulevard Treatment Wetlands Site.

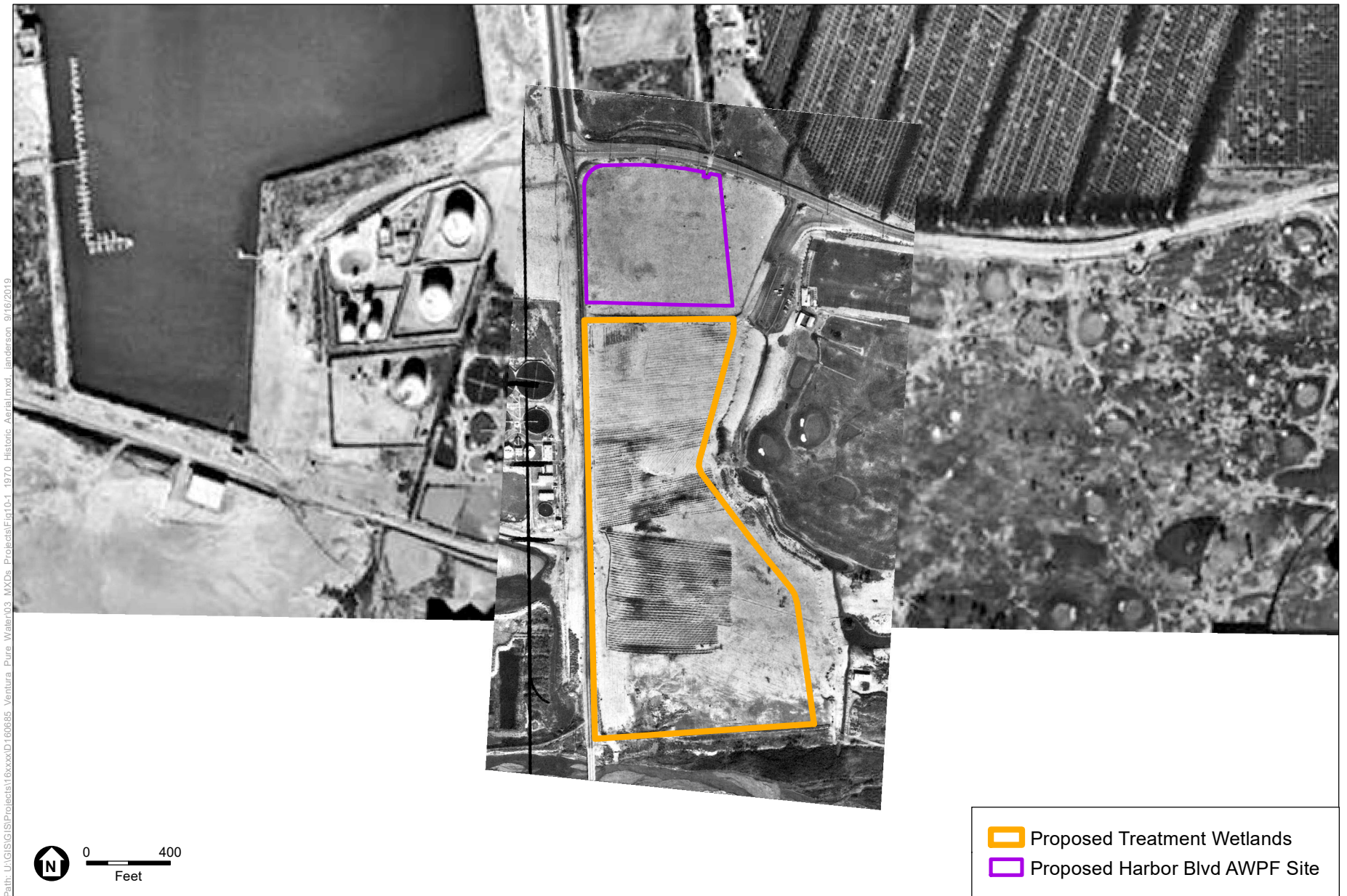
With respect to the potential for the presence of historical ESHAs on the AWPf and Treatment Wetlands Site, both of which are in the Coastal Zone, the City reviewed several aerial photographs of the Harbor Boulevard AWPf site and, in addition, of the Treatment Wetlands Site (which is located in close proximity to the AWPf site). It also consulted with CCC staff regarding prior development applications for the site. The City reviewed photographs to document the condition of these parcels from 1977, at the time the California Coastal Act was enacted. **Figure 10-1** shows that prior to 1970 the two sites were used as deposition areas for sandy material, an activity that left both sites completely devoid of vegetation, prior to the enactment of the Coastal Act. However, subsequent to the deposition activities, and following 1977, some habitat began to emerge on both sites. As shown in **Figure 10-2**, a small area of vegetation had emerged by 1978 on the Harbor Boulevard AWPf site.

Records from CCC proceedings indicate that a prior application for development on the Harbor Boulevard AWPf site¹ recorded that some arroyo willow vegetation was present on the site in 1999. As noted in Figure 10-1, it appears that fill material was indeed placed on the site sometime prior to 1970, 7 years before the Coastal Act was enacted. Replacement of habitat value would not be required for any ESHA eradicated by fill before 1977, but would be required for ESHA that was not eradicated or that developed subsequent to 1977. Arroyo willow vegetation was documented on the Harbor Boulevard AWPf site in 1999.² The vegetation has since been removed. To ensure consistency with the Coastal Act and LCP, compensation for this eradicated, historical ESHA may be necessary.

However, pursuant to the California Environmental Quality Act (CEQA), in the baseline existing condition, the Harbor Boulevard AWPf site does not include sensitive habitat. Therefore, there is no significant adverse impact to sensitive habitat or an ESHA on the AWPf site in the existing condition. In order to use this Harbor Boulevard parcel for the AWPf site, as described on page 3.10-8, the City would annex the parcel into the City and conduct a land use consistency assessment of the site that may result in issuing a Coastal Development Permit (CDP) under the City's Local Coastal Program (LCP), which may require a LCP amendment. The City recognizes that, prior to issuing a CDP for construction of the AWPf at this location, CCC may want to address the small area of historical wetlands that may have existed on the site in or around 1978, but that is not present in the existing condition.

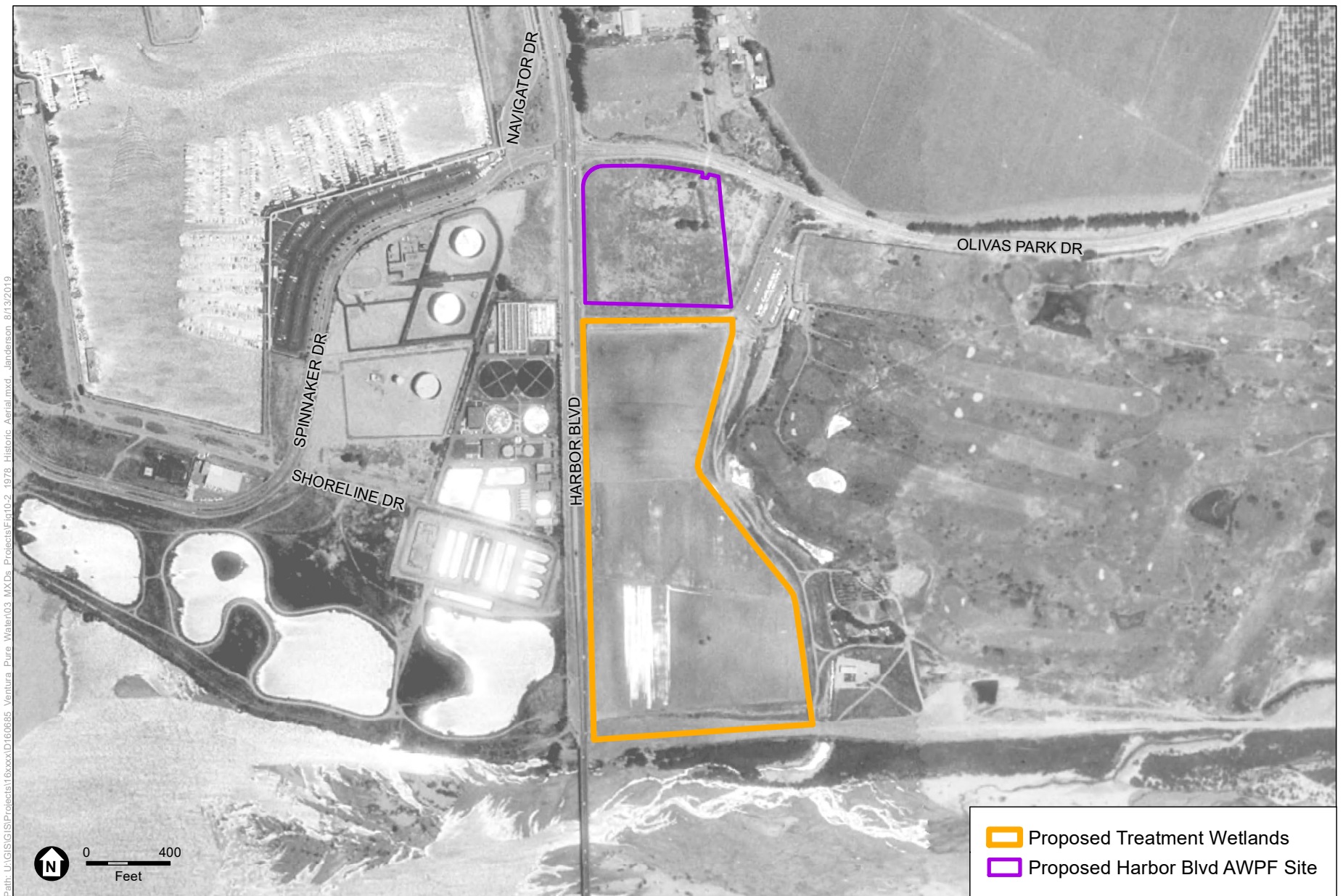
¹ Addenda Staff Recommendation to Agenda Item 13.5, Tuesday, September 10, 2002, County of Ventura, Appeal No. A-4-VNT-02-201 (Shozi)

² Id.



SOURCE:

Ventura Water Supply Projects



SOURCE:

Ventura Water Supply Projects

Figure 10-2
1978 Aerial Photograph of the Proposed Treatment Wetlands and Harbor Blvd Sites

As a result, and in response to this comment, the following new Mitigation Measure BIO-9 has been added to the DEIR:

BIO-9: If the Harbor Site is selected as the location for the AWPF, the City shall comply with all requirements of the California Coastal Act, including compensation for any environmentally sensitive habitat area (ESHA) that has been documented on the Harbor Boulevard site since the enactment of the Coastal Act (1977). Compensation shall include replacement of ESHA at a minimum ratio of 1:1 locally within the coastal zone, or as required by the CCC. The replacement site may be the City-owned property to the south of the Harbor Site or another nearby site.

With respect to the Treatment Wetlands Site, the historical review indicates that after deposition of fill material on the site prior to 1977, some habitat re-emerged beginning in approximately 1978. The EIR concluded that the Natural Treatment Wetlands Site is highly disturbed in the existing condition, and suggests that it does not contain sufficient habitat values to present significant biological values.

However, in response to this comment, an additional review of aerial photos of the site was conducted. That led to a new biological resources survey, which was conducted in April 2019 to confirm the condition of the site. The new survey identified existing areas of arroyo willow habitat within the Treatment Wetlands Site that may be considered County-defined wetland habitat suitable for support of least Bell's vireo, and that may also be considered ESHA. A new technical memorandum has been added as Appendix G summarizing the results of the survey, and the EIR text will be updated as set forth below.

The amount of acreage needed at the Treatment Wetland site to achieve water quality goals of 4 mg/l for Phase 1b would depend on the level of nitrate removal provided in the Ventura Wastewater Reclamation Facility (VWRF) upgrades implemented as part of Phase 1. As a result, as noted on page 2-12 of the Draft EIR (DEIR), the City would achieve the Consent Decree goal of 4 mg/l nitrate through a combination of VWRF upgrades and via constructed natural treatment wetlands to be implemented during Phase 1b. This phasing of the proposed projects provides the opportunity to avoid and minimize impacts to the ESHA identified within the Treatment Wetlands Site in the April 2019 updated survey.

Modifications to the EIR reflecting the potential effects to ESHA on the Treatment Wetland site, and measures to avoid and minimize, then mitigate any remaining significant adverse impact to the ESHA pursuant to both CEQA and the Coastal Act have been implemented as follows:

Page 3.4-2 of the DEIR has been modified as follows:

Wildlife/Treatment Wetlands

Potential New Treatment Wetlands

The proposed site for new natural treatment wetlands is approximately 36.09 acres. The site is bordered by Harbor Boulevard to the west, Olivas Links Golf Course to the east,

disturbed land to the north, and the Santa Clara River to the south. The site includes approximately 10 acres of disturbed habitat is dominated by a chaparral vegetation community including areas of arroyo willow thickets and coyote brush/mulefat thickets that are is generally disturbed by footpaths, and cleared areas. Transitional housing for the RiverHaven community is also located on the site. Due to the level of disturbance and human activity, trash and trampling of vegetation, special-status species are not expected to be present on the disturbed areas of the site.

The site for the potential new treatment wetlands also contains approximately 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. 22.67 acres of chamise chaparral community, mostly located in the center of the site. These Thiscommunities is are characterized by chamise (*Adenostoma fasciculatum*), arroyo willow (*Salix lasiolepis*), saltbush (*Artiplex* spp.), mulefat (*Baccharis salicifolia*), coyote brush (*Baccharis pilularis*), Ceonothus (*Ceonothus* spp.), California buckwheat (*Eriogonum fasciculatum*), wild cucumber (*Marah fabaceus*), white sage (*Salvia apiana*), and California coffeeberry (*Rhamnus californica*). The dune mat habitat is dominated by beach suncup (*Camissoniopsis cheiranthifolia*), silver beach burr (*Ambrosia chamissonis*), red-sand verbenia (*Abronia maritima*), sand aster (*Corethrogyne filaginifolia*), European sea rocket (*Cakile maritima*), and ice plant (*Carpobrotus edulis*). These vegetation communities stand in contrast to those portions of both the northern and southern areas of the site and the edges of the site that are is disturbed (approximately 13.42 acres). These disturbed portions are noticeable as several manmade trails have been created and large areas of vegetation have also been removed.

Page 3.4-64 of the DEIR has been modified as follows:

Wildlife/Treatment Wetlands

...The new treatment wetland would ~~not~~ be located on a site that includes vegetation that could support special-status species, habitat including 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. During surveys conducted in April 2019, least Bell's vireo were heard in the area. It is unclear if the vireo were nesting or passing through. A Technical Memorandum summarizing the results of the April 2019 field survey is included in Appendix G of the Final EIR. The survey concludes that approximately 10 acres of the site contains habitat suitable for least Bell's vireo, and that the vireo may be nesting currently in the area. In addition, approximately 1.74 acres of dune habitat is located in the northeast corner of the site. These areas may also constitute an ESHA under the Coastal Act.

To achieve the water quality goal of 4 mg/l nitrate, the City would employ a combination of upgrades at the VWRP and constructed treatment wetlands, as noted on page 2-12 of the Project Description. The City would first design wetlands to be located in areas that would avoid or minimize impacts to ESHA. The coyote brush/saltbrush areas are not ESHA and do not contain sensitive habitats or support sensitive species. An area of

approximately 10 acres on the southern portion of the site shown in **Figure 3.4-10** does not contain ESHA and could be utilized without affecting any ESHA and may be sufficient to meet the project's tertiary-discharge water quality goals. However, if more than 10 acres of constructed wetlands are needed, these sensitive habitat areas such as arroyo willow may be significantly adversely affected by implementation of natural treatment wetlands on the site. Mitigation Measure BIO-8 would require that any removal of the sensitive habitat areas be compensated by establishments and conservation of similar vegetative communities with similar habitat characteristics suitable for use by least Bell's vireo, either onsite as a part of treatment wetlands design, or offsite within the estuary.

Implementation of **Mitigation Measures BIO-1 through BIO-4 and BIO-8** would ensure that nesting birds are not adversely affected. Impacts would be less than significant.

Mitigation Measures: Implement Mitigation Measures BIO-1 through BIO-4 and BIO-8.

BIO-8: Prior to constructing treatment wetlands as part of Phase 1b, the City shall survey the site for the presence of sensitive habitats or sensitive species. If sensitive habitats are identified that would be affected by the construction of the new treatment wetlands, the City shall compensate for such impacts by establishing riparian habitat through development of riparian habitat within the new treatment wetlands design, or offsite in the SCRE at a minimum ratio of 1:1. In addition, the City shall consult with USFWS and CDFW to ensure that appropriate mitigation and/or compensation is established to replace lost habitat value. The consultation shall satisfy federal and state Endangered Species Act consultation requirements, and shall implement the proposed mitigation ratio of at least 1:1, or such higher ratio as may be required by USFWS and CDFW.

Onsite mitigation within the treatment wetlands would be accomplished by establishment of riparian habitat at the edges of the treatment cells or within designed islands. If additional riparian acreage is required beyond that which can be incorporated into the treatment wetlands design, then riparian habitat may be established offsite within the SCRE, since the modeling of discharge reductions predicts a substantial increase in riparian habitat within the SCRE as a result of hydrological changes associated with discharge reductions proposed for Phase 1a and Phase 1b.

To achieve mitigation credit for new riparian habitat established pursuant to BIO-8, whether onsite or offsite, the City shall document the increase in riparian habitat at the mitigation site(s) as compared to existing conditions over a period of five years. The City would establish that the new riparian habitat is suitable for least Bell's vireo occupation based on standard metrics regarding the acreage of canopy cover, complexity of sub-canopy vegetation structure, and opportunity for new vegetation recruitment. The City may document the new riparian habitat

acreage and ecological values created by mitigation performed within the Natural Treatment Wetlands pursuant to a 5-year Habitat Management and Monitoring Plan, and may document new riparian habitat acreage and ecological values created within the SCRE as part of the Monitoring, Assessment, and Adaptive Management Plan (MAAMP) to be implemented as Mitigation Measure BIO-6. In the event that sufficient riparian habitat to mitigate for all losses is not created onsite and/or within the SCRE, the City shall provide additional mitigation necessary to attain the ratio of at least 1:1 through the purchase of mitigation bank credits and/or the creation of additional riparian habitat, as determined through consultation with USFWS and CDFW.

Significance Determination: Less than Significant with Mitigation.

Page 3.4-74 of the DEIR has been modified as follows:

Wildlife/Treatment Wetlands

...As shown in Figure 3.4-103, an approximately 1035 to 30-acre treatment wetland may be constructed on vacant property to the east of the VWRP. The site currently supports ~~some chaparral habitat~~, approximately 10 acres of disturbed scrub habitat, 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. New treatment wetlands would be designed to avoid impacts to habitat areas that constitutes environmentally sensitive habitat areas (ESHAs), and would be located on the disturbed scrub habitat areas that do not support special status species to the greatest extent feasible. Depending on the volume of tertiary-treated effluent that continues to be discharged during Phase 1b operations, 10 acres of treatment wetlands may be sufficient to achieve the City's discharge quality objectives. If more than 10 acres of treatment wetlands are needed to achieve water quality goals, ~~C~~construction of the new treatment wetlands within the willow-thicket habitat may be required, which would may eliminate sensitive habitat areas. Mitigation Measure BIO-8 requires that any removal of the sensitive areas be compensated by creation of replacement riparian at a minimum ratio of at least 1:1, meeting standard metrics designed to result in habitat that is suitable for use by least Bell's vireo. In addition, the removal of sensitive habitat would be subject to permitting under the state and federal Endangered Species Acts and the Coastal Act. ~~The affected areas are not designated as sensitive natural communities and do not support sensitive species.~~ As a result, impacts of the proposed projects, including the treatment wetlands, would be less than significant.

Mitigation Measures: Implement Mitigation Measure BIO-8. ~~None required.~~

Significance Determination: Less than Significant with Mitigation.

Page 3.4-79 of the DEIR has been modified as follows:

Wildlife/Treatment Wetlands

...In addition, as shown in Figure 3.4-103, the proposed projects could involve the construction of an approximately 10 to 30~~35~~-acre treatment wetland on vacant property to the east of the VWRP. The site currently supports ~~some chaparral habitat, and~~ approximately 10 acres of disturbed scrub habitats, approximately 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. New treatment wetlands would be designed to avoid the ESHA habitat types, and to be located on the disturbed scrub habitat types that do not support special status species to the greatest extent feasible. Depending on the volume of tertiary-treated effluent discharged during Phase 1b, 10 acres of treatment wetlands may be sufficient to achieve the City's discharge quality objectives. If more than 10 acres of constructed wetlands are needed, these sensitive ESHA habitat areas may be affected. Mitigation Measure BIO-8 requires that any removal of the sensitive habitat types must be compensated by creation of replacement riparian habitat at a minimum ratio of at least 1:1, meeting standard metrics designed to result in habitat that is suitable for use by least Bell's vireo. In addition, the removal of sensitive habitat would be permitted under the state and federal Endangered Species Acts and Coastal Act. ~~Construction of the new wetlands would eliminate these habitat areas.~~ The affected areas are not subject to Section 404 of the Clean Water Act. Once constructed, the new wetlands would provide important wetland and riparian habitats. ~~As a result, the proposed project would improve the biological values of the site.~~ Impacts of the proposed projects would be less than significant.

BIO-9: If the Harbor Site is selected as the location for the AWP, the City shall comply with all requirements of the California Coastal Act, including compensation for any environmentally sensitive habitat area (ESHA) that has been documented on the Harbor Boulevard site since the enactment of the Coastal Act (1977). Compensation shall include replacement of ESHA at a minimum ratio of 1:1 locally within the coastal zone, or as required by the CCC. The replacement site may be the City-owned property to the south of the Harbor Site or another nearby site.

Mitigation Measures: Implement Mitigation Measure BIO-9. ~~None required.~~

Significance Determination: Less than Significant.

The survey report included in Appendix G describes sensitive habitat and species in some areas within the Treatment Wetlands parcel that had not been identified previously. However, the EIR concludes that development of new Treatment Wetlands in the 10 acres on the southern end of the property would not impact these sensitive areas or species, as described in the DEIR. The City would construct wetlands in this area if needed as part of Phase 1b to comply with its water quality objectives prior to 2030, and would apply for a CDP from CCC for activities that would not affect ESHA. The EIR further concludes that if more than 10 acres of treatment wetlands are

needed to attain City water quality objectives, significant impacts to sensitive habitat and species would be mitigated through the implementation of Mitigation Measure BIO-8, requiring that impacts be compensated either on site or off site. With implementation of Mitigation Measure BIO-8, impacts to sensitive species would remain less than significant.

Response S4-3

The City looks forward to working with the CCC as needed to achieve consistency with the California Coastal Act under an appropriate CDP. Please see also Response S4-2.

Response S4-4

The DEIR identifies in Table 2-9 on page 2-60 that the new ocean outfall would require a CDP from the CCC. Design details for the outfall are described on page 2-35. Construction methods are summarized on page 2-48. As noted in the Project Description, a drilling pit would be located within a City Park at the beach and as such would avoid beach habitats.

The EIR provides an extensive description of marine resources in the vicinity of the proposed outfall in Section 3.11, including an analysis of sensitive marine habitat areas along the Ventura coast. Impacts from off-shore construction on marine habitat is provided in Section 3.11-8. Potential impacts to water quality from discharge of brine through the outfall is evaluated in detail beginning on page 3.9-62. The analysis includes plume dispersion modeling required by the RWQCB and recommended by the California Department of Fish and Wildlife (CDFW) to estimate dilution characteristics of the brine and proposed diffuser design. The EIR provides substantial detail on construction methods and operational activities that may affect the marine environment in Section 3.11.8. Operational impacts are addressed on DEIR page 3.11-49, 3.11-53, 3.11-57, 3.11-58 and 3.11-60. Mitigation Measures MARINE-1 and MARINE-2 would assist in avoiding and minimizing potential impacts to the marine environment through implementation of best practices identified in the DEIR, including the following on DEIR page 3.11-50 as revised in response to comment S5-20:

- Pile-driving shall be conducted only between June and November to avoid gray whale migration, unless NMFS in their Section 7 consultation with the USACE determines that the potential effect to marine mammals is less than significant.
- At least 1,600-foot (500-meter) safety zone (or as otherwise required by NMFS) shall be established and maintained visually monitoring around the sound source for the protection of marine mammals and sea turtles in the event that construction sound levels are unknown or cannot be adequately predicted to be harmful to marine mammals:-
 - A NMFS-approved biological monitor will conduct daily surveys before and during impact hammer pile driving to inspect the work zone and adjacent ~~Santa Monica Bay~~ waters for marine mammals. The monitor will be present as specified by NMFS Fisheries during the pile-driving phases of construction.
 - Work activities shall be halted when the biological monitor observes that a marine mammal or sea turtle enters the 1,600-foot (500-meter) established safety zone and

shall cease until the mammal has been gone from the area for a minimum of 15 minutes.

- A “soft start” technique shall be used in all impact hammer sourced pile driving, giving marine mammals an opportunity to vacate the area.

For purposes of CEQA, the EIR, including its attached technical appendices, provides a robust assessment of potential environmental impacts associated with installation of a new ocean outfall. The City looks forward to working with the CCC as needed to provide any additional information CCC may require concerning the CDP.

Response to Commenter S5: California State Lands Commission

Response S5-1

The comment describes the State Land Commission’s jurisdiction over and interest in the proposed projects.

Response S5-2

The comment describes the proposed projects and identifies project components with the potential to affect State sovereign land.

Response S5-3

The DEIR provides substantial analysis supporting conclusions that are consistent and inclusive of changes made to the CEQA Guidelines in late 2018. However, some portions of the DEIR includes language from the Checklist that predates the 2018 amendments. In response to this comment and the December 28, 2018, amendments to the CEQA Guidelines, a matrix has been prepared to identify new and revised CEQA Guidelines, including revisions to the Appendix G Checklist. This matrix is included in Chapter 9, Section 9.3 of the Final EIR. The matrix explains where the EIR addresses issues raised in the amended Checklist. Section 9.3 also reflects new Public Resources Code Section 21082.4, which provides that an EIR may consider specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project and the negative impacts of denying the project.

Response S5-4

The DEIR Project Description explains that vibratory pile installation would be utilized to minimize noise effects on marine life (page 2-50). Piles may not be needed to anchor the outfall to the ocean floor, but if they are needed, the EIR identifies that vibratory pile installation would be utilized in order to minimize underwater ocean noise impacts. To clarify this point, the text in the first paragraph on DEIR page 2-50 has been revised as follows:

The new high-density, concrete-coated steel outfall pipe would rest on the seafloor. If additional geotechnical investigations indicate piles would be required ~~piles to secure~~

prevent the outfall pipe from sinking into the ocean sea floor. ~~V~~vibratory pile installation would be utilized to minimize noise effects on marine life.

Section 3.11.8 (Marine Biological Resources) provides additional information. It acknowledges that the use of either impact or vibratory pile drivers may result in the generation of underwater noise that could be harmful or disturbing to fish, marine mammals, and sea turtles (page 3.11-46). Noise sensitivities and noise thresholds are further discussed on page 3.11-47 – 3.11-49. This discussion explains that the careful design and implementation of a pile driving plan, which includes the selection of BMPs including the use of low-noise generating pilings (piling diameter and composition) and pile driving equipment, preferred use of vibratory pile driving equipment and the use of on-site marine mammal observers and operation cessation thresholds to reduce the potential effects of pile driving underwater noise impacts on marine biological resources, including special-status species, to less than significant. Furthermore, Mitigation Measure MARINE-2 (page 3.11-50 – 3.11-51) requires the City to prepare a Construction Plan that would meet specified underwater noise level criteria and describes BMPs and performance standards that have been shown to reduce underwater noise levels and possible impacts to fish and marine mammals, including the following on DEIR page 3.11-50 as revised in response to comment S5-20:

- Pile-driving shall be conducted only between June and November to avoid gray whale migration, unless NMFS in their Section 7 consultation with the USACE determines that the potential effect to marine mammals is less than significant.
- At least 1,600-foot (500-meter) safety zone (or as otherwise required by NMFS) shall be established and ~~maintained~~ visually monitoring around the sound source for the protection of marine mammals and sea turtles in the event that construction sound levels are ~~unknown or cannot be adequately predicted to be harmful to marine mammals:-~~
 - A NMFS-approved biological monitor will conduct daily surveys before and during impact hammer pile driving to inspect the work zone and adjacent ~~Santa Monica Bay~~ waters for marine mammals. The monitor will be present as specified by NMFS Fisheries during the pile-driving phases of construction.
 - Work activities shall be halted when the biological monitor observes that a marine mammal or sea turtle enters the ~~1,600-foot (500-meter) established~~ safety zone and shall cease until the mammal has been gone from the area for a minimum of 15 minutes.
 - A “soft start” technique shall be used in all impact hammer sourced pile driving, giving marine mammals an opportunity to vacate the area.

As discussed further below, in Response S5-5, the maximum length of the pipeline and associated riprap armoring would be 4,000 feet from the HDD exit hole. As discussed further below in Response S5-6, approximately 2,000 tons of riprap would be installed around the outfall (see DEIR, p. 2-50).

Response S5-5

The EIR explains on page 2-35 that the outfall would be installed with directional drilling techniques, emerging on the seafloor up to 4,000 feet from shore, and once emerged, the outfall pipe would be attached and placed on the seafloor to a depth of approximately 50 feet. While the final design would determine the exact length of the pipeline between 2,000 and 4,000 feet needed to reach 50-foot depth requirements for placement of the diffuser, available bathymetric information for the area was reviewed, and \ indicates that the 50-foot depth mark will occur between 2,000 and 4,000 feet from the HDD exit hole as described in the EIR. The EIR provides a detailed analysis of the impacts of new outfall construction on pages 3.9-59-62, describing the construction footprint and disclosing impacts on water quality from construction activities, including anchoring. On pages 3.11-41 through 3.11-49, the DEIR discusses marine environment impacts, including descriptions of and disclosure of temporary and permanent impacts from construction activities and operations on the seafloor and its benthic community (DEIR p.3.11-43), including impacts from the permanent displacement of soft substrate habitat by the pipeline and armor/anchor rock (riprap) (DEIR p. 3.11-49). Although the exact off-shore acreage of impact is uncertain until final designs are completed, the EIR evaluates a maximum-case scenario of 4,000 feet as requested in the comment.

Response S5-6

The EIR provides a detailed description of ocean outfall construction methods beginning on page 2-48. The EIR explains on page 2-50 that approximately 150,000 cubic yards of sediment could be dredged during construction. This is a conservative estimate since it includes the area around the HDD exit hole (approximately 200 feet long, by 110 feet wide, by 10 feet deep at the HDD exit point, sloping to transition to the sea bed elevation, or approximately 8,150 cubic yards), the connection of the HDD section to the concrete-coated steel outfall pipeline that would rest on the seafloor, and the diffuser installation, as well as any incidental dredging that may be needed to level the pipeline. The diffuser assembly, like the outfall pipeline, would rest on, and not under, the seafloor. Laying the diffuser may require some site preparation of the seafloor, the impacts of which are reflected in the EIR's impact analysis. EIR Section 3.9-59 (Hydrology and Water Quality) explains that offshore construction of the proposed outfall structure would involve activities on the ocean surface (such as the assembly of components and staging equipment on anchored barges) as well as underwater and on the ocean floor (in-water construction), and describes the activities that may have an effect on water quality.

Response S5-7

The Table 2-6 estimate of truck trips during construction activities for the HDD/Outfall Installation includes approximately 1,900 truck trips. These include trips to haul off drilling spoils as well as trips to bring riprap armoring and other materials to the HDD drilling site to support the outfall construction activities. The EIR states on page 2-50 that dredging quantities up to 150,000 cubic yards would occur in preparing (or leveling) the seafloor for installation of the pipeline and daylighting the end of the HDD tunnel. This material would be either sidecast or disposed of at designated ocean disposal sites. Offshore dredging material is not anticipated to be taken on shore

for dry land disposal. This is discussed on pages 2-50, 3.9-62, and 3.11-43. Consequently, Table 2-6 does not include truck trips relating to disposal of offshore dredge material.

Response S5-8

The EIR states on page 2-59 that maintenance of the diffusers would occur periodically. The following text has been added to the EIR:

The frequency of maintenance activities would depend on the results of regular inspections. Periodic cleaning of the ports is routinely conducted for ocean discharge facilities and would be described in detail in permit conditions. Periodic inspections and cleaning of the diffuser would occur approximately once per year and involve one or two 20-40 foot boats conveying a small work crew to the outfall area. The inspection likely would be conducted within one or two days per year at most.

Air emissions during operation of the concentrate discharge facility are discussed on page 3.3-28. The following text is added:

The addition of monthly maintenance activities would contribute minor sources of operational air emissions from workers commuting to the marina and boat engine emissions during the one or two days-worth of work per month. The use of one or two boats to access the mooring locations at the end of the discharge tunnels once a month or less often would not exceed daily emissions thresholds of significance. The contribution of emissions from maintenance activities would be less than significant.

Emissions for marine vessels during offshore construction activities are included in Appendix B as noted on page 3.3-22 of the DEIR and summarized in Table 3.3-10. The estimates provide a worse-case analysis of marine vessel emissions based on conservative assumptions of daily maximum emissions. Similarly, GHG emissions are summarized in Table 3.7-7 reflecting worse case total GHG emissions for marine vessel emissions.

Impacts to the marine environment from operating the outfall are addressed on page 3.11-49. The following text is added to the EIR:

Periodic inspections and cleaning of the diffuser would occur annually at a minimum and would be accomplished by divers using hand-held tools. Cleaning methodologies would follow standard best management practices used on ocean disposal facilities, subject to NMFS and USACE permit conditions, and would not significantly disrupt marine species that rely on habitat created by the hard surface of the diffusers.

Mitigation Measures HAZ-1 and HAZ-2 require an anchoring plan and marine safety plan that would specifically address anchoring impacts to marine wildlife and marine vessel traffic safety.

On page 3.1-18, the DEIR discusses the potential impacts of the Concentrate Discharge Facility on scenic vistas. The following text is added:

Periodic cleaning of the diffuser ports is routinely conducted for ocean discharge facilities and would be described in detail in permit conditions. Periodic inspections and cleaning of the diffuser would occur approximately once per year and involve one or two 20-40 foot boats conveying a small work crew to the outfall area. The inspection likely would take approximately one or two days. The infrequent and temporary presence of boats in the diffuser area would not adversely affect scenic vistas.

Response S5-9

The City has discussed the use of the Calleguas SMP ocean outfall with Calleguas Municipal Water District to confirm the feasibility of connecting to the existing pipeline and ocean outfall. As noted on page 2-13 of the EIR, the connection would require approval from Calleguas. No modifications to the physical outfall would be required. As noted on Table 3.9-10, the brine would be compatible with existing and anticipated brine qualities within the SMP. Please see DEIR pages 3.9-63 – 3.9-65, which discuss an analysis of the water quality constituents of the RO concentrate compared to these concentrations in the Calleguas SMP NPDES (ORDER NO. R4-2014-0033, NPDES NO. CA0064521) effluent limitations, and determined that the RO concentrate would not exceed the NPDES permit effluent limitation. With respect to approvals needed if this option is selected, Calleguas Municipal Water District presumably would approve City use of the existing outfall subject to any required amendment of its existing outfall lease with the State Lands Commission. In the event that such an amendment is necessary, notwithstanding the sufficiency of the outfall in its current configuration to handle anticipated brine discharges, the District would be responsible for obtaining the amendment.

Response S5-10

In response to the comment, Figure 2-2 has been modified to show the location of the existing SMP outfall. No modifications to the outfall would be required and, as discussed in Response S5-9, the brine contribution would need to be incorporated into the existing or renewed NPDES permits, but is not expected to exceed existing NPDES permit effluent limitations applicable to the existing outfall.

Response S5-11

Table 2-7 identifies staging areas onshore. No offshore staging areas would be required other than the barges identified in Table 2-6. The EIR notes that approximately 2,000 to 4,000 linear feet of ocean floor may be affected by the construction activity. The EIR assumes a construction width of 100 feet, and up to 10 acres of ocean floor could be affected during construction. Dredging of the ocean floor would be required at the HDD exit hole to daylight the end of the pipeline, to accommodate the connection of the HDD section to the concrete-coated steel outfall pipeline that would rest on the seafloor, and to connect the diffuser to the pipeline. This dredging zone would be approximately 200 feet by 110 feet and approximately 10 feet deep at the HDD exit point sloping to transition to the sea bed elevation. Design drawings would be prepared to refine the locations and footprints to be included in permit applications.

Response S5-12

As the comment noted, page 3.1-18 the DEIR discusses the potential impacts of the Concentrate Discharge Facility on scenic vistas. The following text is added:

Construction barges would be visible from the shore during temporary construction but would not impact scenic vistas or scenic views since they would be temporary, within an area that experiences substantial boat traffic already, and would be far enough from shore (0.4 to 0.75 miles offshore) to avoid blocking views.

Page 3.1-31 of the DEIR discusses the potential impacts of the Concentrate Discharge Facility on light and glare. The following text is added:

Nighttime lighting on vessels would be required to comply with Mitigation Measure AES-3 to avoid unshielded light sources. The addition of lighted barges temporarily offshore would not result in significant impacts to aesthetics since they would be temporary, would be far enough from shore (0.4 to 0.75 miles), and lighting would be shielded to avoid significant glare.

Response S5-13

Table 3.3-12 identifies construction emissions for all Phase 1 components assuming no mitigation. As noted on page 3.3-23, the VCAPCD has not adopted quantitative thresholds of significance for temporary construction, but it does recommend implementation of emission and dust control requirements for all construction projects with ROC or NO_x emissions over 25 pounds per day for NO_x. Mitigation measures have been included to reduce emissions consistent with this VCAPCD policy.

The lack of quantitative thresholds for temporary construction impacts could have resulted in a determination that the impact is less than significant without mitigation, as the comment indicates, but the DEIR instead addressed the VCAPCD recommended policy in order to ensure maximum air quality protection. This is described on page 3.3-23. Based on that threshold, the impact was determined to be less than significant with mitigation.

Please see also Comment LA4-4 from the Ventura County Air Pollution Control District (APCD), and Response LA4-4. The APCD agreed that there is a lack of quantitative thresholds for comparative construction impacts and noted several potential methods to reduce construction impacts. In response to this comment, the EIR was revised to include additional measures to reduce construction impacts, as noted in Response LA4-4.

Response S5-14

Air emissions associated with constructing an ocean outfall are included in Tables 3.3-10 and 3.3-11. If an outfall has not been constructed during Phase 1, the emissions from construction would add to the additional emissions for Phase 2 summarized in Table 3.3-13. In response to this comment, these additional emissions have been added to Table 3.3-13 as shown below. As

discussed on page 3.3-25, the VCAPCD has not established significance thresholds for criteria pollutants. Nonetheless, Mitigation Measures AQ-1 and AQ-2 require that the City implement measures to minimize emissions that would apply to the construction of either the ocean outfall or the Calleguas SMP connector. As a result, the DEIR concludes that construction emissions would be less than significant in Phase 1 and Phase 2.

Page 3.3-26 of the DEIR has been modified as follows:

The desalination treatment components would include construction at the AWPf for the new treatment equipment and new ocean intake, similar to the outfall. **Table 3.3-13** provides projected emissions resulting from excavating/trenching and drilling. The modelled emissions include emissions associated with construction of a new outfall since it would be required for ocean desalination, if it were not already built in Phase 1. VCAPCD has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NO_x emissions over 25 pounds per day. As shown below, construction emissions from the proposed projects would exceed 25 pounds per day for NO_x. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce construction emissions of criteria pollutants.

TABLE 3.3-13
SHORT-TERM REGIONAL CONSTRUCTION EMISSIONS FOR THE OCEAN DESALINATION – WITHOUT MITIGATION

Year	Maximum Daily Pollutant Emissions (lbs/day)					
	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2024	4 <u>15</u>	34 <u>124</u>	35 <u>125</u>	0	2 <u>7</u>	4 <u>5</u>
2025	4 <u>15</u>	32 <u>124</u>	35 <u>125</u>	0	4 <u>6</u>	4 <u>5</u>

Response S5-15

This comment addresses the EIR's analysis of the possibility of offshore archeological or tribal cultural resources that could be affected by ground disturbing activities that extend more than 3 feet below the ground surface. The comment specifically mentions the HDD exit, pipeline placement, outfall modifications, pile driving, and anchoring plan. The comment incorrectly asserts that the DEIR defers studies and analysis regarding the outfall pipeline.

Prior to identifying the location of the pipeline and outfall as shown on Figure 2-19, the City searched the State Land Commission's shipwreck database. The previously-selected location was altered to avoid the possibility of affecting resources identified by this search. As discussed on pages 3.5-27 – 3.5-28, the City has also conducted consultation with California Native American tribes to identify the potential for the proposed projects to impact tribal cultural resources pursuant to Assembly Bill (AB) 52 and its implementing regulations. The consultation included

consultation regarding the outfall. No tribal cultural resources were identified as part of the AB 52 consultation.

The comment notes that Impact CUL 3.18-1 concludes that construction of the concentrate discharge facility would not cause a substantial adverse change in the significance of a tribal cultural resource, but requests that CUL-5 be modified to include Tribal cultural resources. Both CUL-4 and CUL-5 acknowledge the importance of Native American resources as a component of cultural resources. As a result, CUL-4 requires the presence of a Native American monitor in addition to an archaeological monitor. In addition, both CUL-4 and CUL-5 expressly require continued coordination with the Barbareño/Ventureño Band of Mission Indians. This consultation requirement ensures the minimization of impacts to Tribal cultural resources. Nevertheless, as requested by the comment, the EIR is revised as follows, beginning on page 3.18-5, to reflect that Mitigation Measures CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources, as they would other archaeological cultural resources:

TABLE 3.18-24
SUMMARY TRIBAL CULTURAL RESOURCE IMPACT DETERMINATIONS

Impacts	3.18-4 Historical Resource	3.18-2 Significant to Native American Tribe
Phase 1		
Advanced Water Purification Facility	NILTSM	NILTSM
Water Conveyance System	NILTSM	NILTSM
Groundwater Wells	NILTSM	NILTSM
Wildlife/Treatment Wetlands	NILTSM	NILTSM
VWRF Treatment Upgrade	NILTSM	NILTSM
Concentrate Discharge Facility	NILTSM	NILTSM
Phase 2		
AWPF Expansion	NILTSM	NILTSM
Ocean Desalination	NILTSM	NILTSM
LTS = Less than Significant, no mitigation proposed		
LTSM = Less than Significant impact with mitigation		
NI = No Impact		
SU = Significant and Unavoidable impact, even after implementation of mitigation		

Phase 1

The SLF search conducted by the NAHC indicates that no Native American cultural resources are known to be located within the proposed project area. The AB 52 meetings held on February 8 and March 23, 2018, between the City and tribal representatives Julie

Lynn Tumamait-Stenslie and Patrick Tumamait of the Barbareño/Ventureño Band of Mission Indians involved discussions about the archaeological sensitivity of the proposed project vicinity; however, did not result in the identification of the presence of tribal cultural resources as defined in Public Resources Code Section 21074 within the proposed project area.

Advanced Water Purification Facility

No tribal cultural resources have been identified within the project area. Therefore, ground-disturbing activities associated with the construction of the Advanced Water Purification Facility (AWPF) would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Water Conveyance System

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the water conveyance system would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Groundwater Wells

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the aquifer storage and recovery wells would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Wildlife/Treatment Wetlands

No tribal cultural resources have been identified within the project area. Therefore, ground-disturbing activities associated with the reconfiguration of the existing ponds or the construction of the new treatment wetlands would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

WWRF Treatment Upgrade

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the treatment upgrade would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Concentrate Discharge Facility

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the new outfall, or the discharge pipeline to the Calleguas Salinity Management Pipeline would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 through CUL-6 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 through CUL-6 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 through CUL-6.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Phase 2

AWPF Expansion

No tribal cultural resources have been identified within the project area. Therefore, activities associated with the expansion project would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Garbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Ocean Desalination

Desalination Facility

No tribal cultural resources have been identified within the project area. Therefore, activities associated with the desalination facility operations would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 through CUL-6 both provide for coordination with the Garbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 through CUL-6 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 through CUL-6.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

The comment also requests that a qualified maritime archaeologist participate in the development and implementation of geophysical surveys required for offshore data collection that consist of either drilling rigs or sonar equipment. In response to the comment, Mitigation Measures CUL-4 and CUL-5 has been modified to clearly include these activities.

CUL-4: Prior to the start of ground-disturbing activities associated with the proposed projects, including development, preparation and implementation of project related geophysical surveys and other offshore data collection and construction activities, an archaeological monitor working under the supervision of the Qualified Archaeologist and a Native American monitor associated with the Barbareño/Ventureño Band of Mission Indians, or other locally affiliated tribe, shall monitor all project-related ground-disturbing activities within previously undeveloped project parcels, offshore areas, all jack-and-bore receiving pits, and all pot-holing activities within existing road rights-of-way. Previously undeveloped parcels requiring monitoring include the Harbor Boulevard, Transport Street, offshore areas, and Portola Road AWPf sites, as well as the new treatment wetlands parcel, and groundwater Well Sites 1, 2, and 3. For the pipeline

alignments to be installed within existing road rights-of-way, a monitoring plan shall be prepared by the Qualified Archaeologist outlining the locations and timing of monitoring based on level of disturbance identified during pot-hole monitoring, as well as any geotechnical report to be prepared as part of project implementation. Prior to implementing offshore geophysical surveys, the City shall provide the survey methods and plans to the Barbareño/Ventureño Band of Mission Indians for their information as part of the consultation.

Based on observations of subsurface soil stratigraphy or other factors during initial ground-disturbing activities across the project area, and in consultation with the City and Native American monitor, the Qualified Archaeologist may reduce or discontinue monitoring as warranted if the Qualified Archaeologist determines that the possibility of encountering archaeological deposits is low in a given area or during a given activity. Archaeological monitors shall maintain daily logs documenting their observations. Monitoring activities shall be documented in a Monitoring Report to be prepared by the Qualified Archaeologist at the completion of construction and shall be provided to the City and filed with the SCCIC within 6 months of construction completion.

CUL-5: In the event of the unanticipated discovery of archaeological materials during implementation activities associated with the proposed projects, including offshore data collection and construction activities, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. In the event that cultural resources are discovered on state lands, including discoveries made during any offshore activities, the California State Lands Commission shall also be notified. Construction shall not resume until the qualified archaeologist and, for offshore activities, the California State Lands Commission, has conferred with the City on the significance of the resource.

If it is determined that the discovered archaeological or cultural resource constitutes a significant resource, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with City and Barbareño/Ventureño Band of Mission Indians, or other locally affiliated tribe, that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource.

As discussed in Response S5-5, the maximum length of the pipeline would be 2,000 to 4,000 feet. The diameter of the pipeline would be 12 to 30 inches (DEIR, p. 2-35). On page 2-50, the DEIR points out that a small area would be dredged for the exit of the bore. Any potential impacts on offshore archeological or tribal cultural resources thus would be highly localized to the area at the end of the pipeline between 2,000 and 4,000 feet offshore. Consultations and records searches conducted for purposes of the EIR's impacts analysis revealed no archeological, Tribal, or

cultural resources (including the absence of shipwrecks) within this area. Cul-5 and Cul-6 require and would require detailed off-shore surveys of the construction areas once the exact footprint is determined to confirm the absence of cultural, archeological and tribal resources. These studies will be provided to the SLC with applications for lease agreements.

To clarify that the new outfall is not expected to, but has the potential to affect unknown archeological and tribal cultural resources, the text of the DEIR will be revised as follows on page 3.5-47:

Concentrate Discharge Facility

New Outfall

The directional drilling operation for the outfall pipe would be located within Marina Park. Offshore construction would include dredging for the HDD exit and pipeline placement, outfall modifications, and pile driving. As noted above, the proposed projects would not impact known tribal, cultural or archeological resources that qualify as or have the potential to qualify as historical resources, including offshore resources. Further, The City consulted the shipwreck records maintained by the California State Land Commission, and altered the outfall location of the outfall described in this EIR to avoid all potential shipwreck sites. However, any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant. Title to all 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 California State Lands Commission (Pub. Resources Code, § 6313). Therefore, given the archaeological sensitivity of the area, ground-disturbing and offshore activities associated with the construction of the new outfall may have the potential to impact unknown archaeological and cultural resources, including shipwrecks and Tribal cultural resources, that may qualify as historical resources under CEQA.

Implementation of **Mitigation Measures CUL-1** through **CUL-6** is required to ensure that the parcel in which the onshore and offshore construction activities, including the drilling operation for the new outfall, are subject to cultural resources survey, and that all onshore and offshore impacts associated with the construction of the new outfall to unknown tribal, cultural or archaeological resources qualifying as historical resources, including offshore resources, are less than significant.

The City recognizes that permitting agencies including SLC and CCC may require additional information compiled as a result of pre-construction surveys prior to obtaining a permit. The City looks forward to working with these agencies to provide information requested in the permitting process.

Response S5-16

Please see Responses S5-15. Response S5-15 adds the requested information to the text of the EIR. Response S5-15 also revises Mitigation Measure CUL-5 to include notification of the California State Lands Commission.

Response S5-17

The requested statement will be included in the MMRP. “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.”

Response S5-18

The DEIR does not defer Project level review of noise impacts of construction of the outfall pipeline. As discussed in Response S5-4: The DEIR Project Description has been revised to explain that if piles are needed, vibratory pile installation would be utilized to minimize noise effects on marine life (page 2-50). Section 3.11.8 (Marine Biological Resources) provides additional information. It acknowledges that the use of either impact or vibratory pile drivers may result in the generation of underwater noise that could be harmful or disturbing to fish, marine mammals, and sea turtles (page 3.11-46). Noise sensitivities and noise thresholds are further discussed on page 3.11-47 through 3.11-49. This discussion explains that the careful design and implementation of a pile driving plan, which includes the selection of low-noise generating pilings (piling diameter and composition), pile driving equipment, application of applicable or appropriate BMPs, a menu of which are set forth in the EIR, and effective operational actions, including use of on-site marine mammal observers and operation cessation thresholds, can reduce the potential effects of pile driving underwater noise impacts on marine biological resources, including special-status species, to less than significant. Furthermore, Mitigation Measure MARINE-2 (page 3.11-50 through 3.11-51) requires the City to prepare a Construction Plan that would meet specified underwater noise level criteria and describes BMPs that may be implemented as conditions warrant, and have been shown to reduce underwater noise levels and possible impacts to fish and marine mammals.

Please see also Response S5-19.

Response S5-19

As discussed in Responses S5-4 and S5-18, the City further evaluated the need for piles, and determined that, based on current design criteria and the successful installation of other outfalls in the region, piles would not likely be needed to attach the high-density concrete-coated steel outfall pipeline, or the diffuser to the seafloor. However, if further geotechnical investigations determine that the seafloor sediments are too soft, and therefore unable to support the pipeline from sinking, the use of vibratory pile drivers would be the primary method of installation, as discussed in DEIR Section 3.11 (Marine Biology), pages 3.11-46 through 3.11-50. If it is determined that anchor piles are required, then a detailed pile installation plan will be developed and included in permit conditions of approval.

Mitigation Measure MARINE-2 establishes the noise standards to be met and provides BMPs that have been shown to reduce underwater noise levels and potential impacts to fish and marine species (see DEIR p. 3.11-50). These standards are consistent with NMFS and CDFW underwater noise thresholds for both cumulative and peak SEL's for marine mammals and fish. The BMPs identified in the mitigation measure to ensure that project-generated underwater noise levels from possible pile driving are less than significant include, but are not limited to, the selection of low-noise generating pilings, preferred use of vibratory pile driving equipment, and effective operational actions, including use of on-site marine mammal observers and operation cessation thresholds, to reduce the potential effects of pile driving underwater noise impacts on marine biological resources, including special-status species, to less than significant.

The comment states that the EIR does not include an assessment of impact pile installation methods. As noted above, the likelihood of using impact installation methods is low since the ocean floor materials are expected to be soft. However, as a worse case condition and in response to the comment, Table 3.11-5A has been added to the EIR as shown below, to identify noise impacts of impact pile installation methods.

Page 3.11-48 of the DEIR has been modified as follows:

Until a precise outfall location has been developed, Since it is unknown at this time it cannot be determined whether anchor piles will be required for the construction of the outfall nor what kind of anchor piling design would be required (i.e. the quantity of anchor piles needed, the diameter and composition of the anchor piles, pile spacing, or the type of pile driving equipment that will be used), the potential effects, if any, of underwater noise generated from project related pile driving activities cannot be estimated. Additionally, the specific effects to marine biological resources cannot be determined. However, bBased on similar projects, however, potential effects to fish, marine mammals, and sea turtles can be estimated and maximum underwater noise thresholds at which no impacts occur can be determined (Caltrans 2015).

The key to creating a pile driving program that generates very low underwater noise levels and sufficient attenuation distances such that underwater noise impacts can be feasibly mitigated, if necessary, starts with pile diameter and composition. NOAA adopted a Technical Guidance to assess noise impacts on marine mammals with a new method to calculate the onset of permanent threshold shift (PTS), or Level A harassment (NOAA 2016b). Table 3.11-5A presents the underwater sound thresholds for Level A harassment for marine mammals for both impulsive (i.e., impact pile driving) and non-impulsive (i.e., vibratory pile driving) sounds, established by NOAA, that are associated with the types of piles that could be used for the proposed project. (The final design has not yet been determined, so several choices are provided). Because of the differences in hearing ability and sensitivity to different frequencies of sound, NOAA established underwater noise thresholds for marine mammals based on their sensitivity to low-, mid-, and high-frequency sounds. Low-frequency sensitive cetaceans include all baleen whales; mid-frequency cetaceans include dolphins, toothed and beaked whales; high-frequency cetaceans include true porpoises, river dolphins, Phocid pinnipeds (true seals), and

Otariid pinnipeds (sea lions and fur seals). Table 3.11-5A also presents estimated underwater sound attenuation distances calculated for fish and marine mammals using NOAA and NMFS formulas. As illustrated by this table, the attenuation distances to achieve desired noise levels (SEL cumulative threshold) varies between pile type and construction method. Vibratory methods result in much less noise (and therefore smaller impact areas) than percussive methods. The methods under consideration by the City to anchor the outfall (a potential list is included in the Table) would result in small areas of effect (generally less than 6-meter circumference from the source for high-frequency cetaceans. Vibratory methods could result in a smaller area of effect from the source. These short distances are within the general underwater construction area where the commotion created by the activities will likely discourage pelagic wildlife from entering the area in any case. The effect would be less than significant, subject to concurrence from the regulatory agencies.

As shown in the table, the type of pile driver used and the diameter and composition of the anchor piles affects the size of the affected area. Larger diameter pilings and different design anchor piles, such as H piles, can be expected to generate higher underwater noise levels that attenuate to greater distances from their source. As demonstrated in the cited Huntington Beach desalinization project, the selection of certain anchor pile design can result in very high underwater sound levels and attenuation distances that can be difficult to mitigate.

The data provided in Table 3.11-5A show that the anchor piles being considered as appropriate for the proposed projects would result in smaller areas of impact than those presented in the comment letter for the Huntington Beach project. The greatest radius of effect shown in the Table is 5.5 meters from the source for high frequency cetaceans, whereas the radius of effect identified for the Huntington Beach project is over 1,500 meters for high frequency cetaceans. This is a result of the proposed types of piles to be used that may differ due to ocean floor substrate conditions. In any case, it is unlikely that the effects on aquatic species from the type of pile installation needed for this project would be severe or occur beyond the immediate construction area, as substantiated by the data included in Table 3.11-5A. The EIR concludes that implementation of MARINE-2 will ensure that appropriate low-impact installation methods and BMPs are employed to minimize effects to marine wildlife. The methods and BMPs would be reviewed and enforced through the NMFS and USACE permit requirements.

TABLE 3.11-5A
ESTIMATED VIBRATORY AND IMPACT HAMMER PILE-DRIVING SOUND LEVELS AND DISTURBANCE TO CRITERIA LEVELS

Pile Type	Equipment Type	Distance to Sound Level Thresholds (meters) for Vibratory Hammer Sound Sources ²								Attenuation Equipment
		SEL Cumulative Threshold ⁴		150 dB (Fish-Behavioral) ^{3, 4}	SEL Cumulative Threshold ^{3, 4}					
		187 dB (Fish ≥2g)	183 dB (Fish < 2g)		199 dB (Low-Frequency Cetaceans)	198 dB (Mid-Frequency Cetaceans)	173 dB (High-Frequency Cetaceans)	201 dB (Phocid Pinnipeds)	219 dB (Otariid Pinnipeds)	
12-inch Steel Pipe Pile ¹	Vibratory	0.0	0.0	12.0	2.3	0.1	2.1	1.2	0.1	None
16-inch Steel Pipe Pile ¹	Vibratory	1.0	2.0	4.0	5.1	0.3	4.4	2.7	0.2	None
16-inch Fiberglass/concrete pile ¹	Vibratory	0.0	1.0	1.0	1.8	0.1	1.6	1.0	0.1	None
Pile Type	Equipment Type	Distance to Sound Level Thresholds (meters) for Impact Hammer Sounds Sources ²								Attenuation Equipment
		SEL Cumulative Threshold ⁴		150 dB (Fish-Behavioral) ^{3, 4}	SEL Cumulative Threshold ^{3, 4}					
		187 dB (Fish ≥ 2 g)	183 dB (Fish < 2 g)		183 dB (Low-Frequency Cetaceans)	185 dB (Mid-Frequency Cetaceans)	155 dB (High-Frequency Cetaceans)	185 dB (Phocid Pinnipeds)	203 dB (Otariid Pinnipeds)	
12-inch Steel Pipe Pile ³	Impact	1.0	1.0	100	1.8	0.1	2.2	1.0	0.1	None
16-inch Steel Pipe Pile ³	Impact	2.0	3.0	63	4.8	0.2	5.5	2.5	0.2	None
16-inch Fiberglass/concrete pile ³	Impact	1.0	1.0	76	1.2	0.0	1.4	0.6	0.0	None

NOTES:

¹ Vibratory pile driving hammers have been documented to reduce underwater noise levels a minimum of 14-15 dB and up to 28-29 dB, depending on the pile type, water depth, and type of hammers being used (Caltrans 2015). Estimating the potential underwater noise attenuation distances for steel pipe and fiberglass/concrete pilings using a vibratory hammer, underwater noise levels documented for impact hammers were reduced by 14 dB.

² NOAA 2018b, NOAA 2016b; NMFS 2016; Caltrans 2015, AMS 2018

³ Time duration for using an impact hammer to set any pilings to desired depth assuming the vibratory hammer cannot, by itself, achieve required anchor depth was <1 hour. Calculations assumed 4,440 50 blows per piling, 2 piles driven per day, XLogR = 15, pulse duration = 0.8 seconds, 2.5 2.0 weighting factor adjustment.

⁴ In calculating the potential SEL cumulative or behavioral threshold distances for fish, if no RMS values available for pile driving calculation, the mean of Peak dB and SEL dB values used. If no SEL value available for the pile driving calculation, then the RMS values is used.

Response S5-20

The 500-meter safety zone identified in Mitigation Measure MARINE-2 was meant to establish a conservative, minimum distance within which the acoustic standards must be met in order to result in a less than significant impact. As stated in the measure, if estimated noise levels are to exceed 183 dB within 10 meters, or 120 dB within 500 meters, then the City shall develop a NMFS-approved sound attenuation reduction and monitoring plan that details the sound attenuation system, details methods used to monitor and verify sound levels during pile-placement activities, and describes all BMPs undertaken to reduce impact hammer pile-driving sound in the marine environment.

As discussed in DEIR Section 3.11 (Marine Biology) on pages 3.11-46 through 3.11-50 and in Response S5-19, above, by careful selection of the anchor pile composition, diameter, and type of hammer, a project can generate pile driving underwater noise levels that meet established regulatory underwater noise frequencies at attenuation distances far less than 10-meters. The 500-meter distance was originally included to represent a generously conservative distance from marine construction operations within which construction impacts such as noise would be monitored. Because the mitigation measures trigger development of a noise attenuation Construction Plan, it is conservative and assures that noise-attenuating BMPs are employed to minimize underwater construction related noise impacts to marine life to a level that is less than significant. The Construction Plan would ensure that the cumulative SEL and peak SPL established by NMFS as the dual performance standards that the noise attenuation Construction Plan are met. In addition, NMFS would review and approve the noise attenuation Construction Plan and ensure that the cumulative SEL and peak SPL standards are met. The DEIR text for Mitigation Measure MARINE-2 has been revised to read as follows:

MARINE-2: Prior to the initiation of any offshore pile driving activities for the project, the City of Ventura shall prepare a Construction Plan that outlines the details of the piling installation approach. The information provided in this plan shall include, but not be limited to:

- The type of piling and piling size to be used.
- The method of pile installation to be used.
- Noise levels for the type of piling to be used and the method of pile driving (vibratory or impact).
- Calculation of potential underwater noise levels that could be generated during pile driving using methodologies outlined in Caltrans 2015 and NOAA 2016b.
- A schedule of when pile-driving would occur.

~~If the results of the calculations provided in the detailed Construction Plan for pile-driving indicate that underwater noise levels are <183 dB for fish at a distance of ≤10 meters and <120 dB for marine mammals for a distance ≤500 meters, then the Plan will recommend that no further measures are required to mitigate underwater noise. If calculated noise levels are > 183 dB at ≤ 10 meters or >120 dB at a distance of ≤ 500~~

meters, ~~then~~ the City of Ventura shall develop a NMFS-approved sound attenuation reduction and monitoring plan. This plan shall detail the sound attenuation system, detail methods used to monitor and verify sound levels during pile-placement activities, and describe all BMPs undertaken to reduce impact hammer pile-driving sound in the marine environment to an intensity level of less than 183 and 120 dB at distances of 10 meters and less, and 500 meters and less, respectively. These performance standards assure compliance with NMFS cumulative SEL and peak SPL acoustic metrics. The sound-monitoring results shall be made available to NMFS. The Construction Plan shall be presented to the NMFS Environmental Review Officer prior to commencement of construction for review and approval.

The plan shall incorporate, but not be limited to the following BMPs, which have been shown to reduce underwater noise levels and possible impacts to fish and marine mammals:

- Pile -driving shall be conducted only between June and November to avoid gray whale migration, unless NMFS in their Section 7 consultation with the USACE determines that the potential effect to marine mammals is less than significant.
- At least 1,600-foot (500-meter) safety zone (or as otherwise required by NMFS) shall be established and maintained visually monitoring around the sound source for the protection of marine mammals and sea turtles in the event that construction sound levels are unknown or cannot be adequately predicted to be harmful to marine mammals:-
- A NMFS-approved biological monitor will conduct daily surveys before and during impact hammer pile driving to inspect the work zone and adjacent ~~Santa Monica Bay~~ waters for marine mammals. The monitor will be present as specified by NMFS Fisheries during the pile-driving phases of construction.
- Work activities shall be halted when the biological monitor observes that a marine mammal or sea turtle enters the 1,600-foot (500-meter)-established safety zone and shall cease until the mammal has been gone from the area for a minimum of 15 minutes.
- A “soft start” technique shall be used in all impact hammer sourced pile driving, giving marine mammals an opportunity to vacate the area.

Other BMPs will be implemented if the biological monitor determines they are necessary, such as bubble curtains or an air barrier, to reduce underwater noise levels to the performance standards applicable pursuant to in this mitigation in Table 311-5A, or at those more stringent thresholds established by NMFS for acute and chronic levels 10 meters and 500 meters, or such other more stringent distances as may be established by NMFS within a distance of 500 meters (1,600 feet), if feasible.

Alternatively, to meet these noise criteria, the City of Ventura may consult with NMFS directly and submit evidence to the satisfaction of the Environmental Review Officer. In such case, City of Ventura shall comply with NMFS recommendations and/or requirements to meet

the noise criteria. The BMPs listed above provide examples of measures that are normally used to reduce noise impacts to below the noise criteria.

Response S5-21

No offshore demolition is anticipated. In response to the comment the following modification has been made to the EIR.

Page 3.11-46 of the DEIR has been modified as follows:

Underwater Noise

Underwater noise would be produced by marine vessels and in-water construction activities, especially pile-driving, ~~and demolition of any offshore structures~~ resulting in short-term elevated underwater noise levels. If anchor pilings are required to secure portions of the outfall to the seafloor ~~prior to reburial~~, the use of either impact or vibratory pile drivers to install the anchor pilings would result in the generation of underwater noise that could be harmful or disturbing to fish, marine mammals, and sea turtles.

Response S5-22

Copies of the requested documents will be provided to the State Lands Commission.

California Department of Fish and Wildlife

Response S6- 1

The comment describes CDFW's authority, summarizes the project description, and describes habitats and species in the area of the proposed projects. We offer the following clarifications to that description.

Comment S6-1, p. 5, states that the DEIR finds Alternative 4 as the "environmentally superior alternative (other than the No Project Alternative)" because it complies with the SRP Report and the TRT Reports (March 2018 and June 2018). Please note that the DEIR concludes that the proposed project is environmentally superior to all of the alternatives (DEIR, p. 6-42). Of the *alternatives* to the proposed projects, the DEIR identifies Alternative 4 as the environmentally superior alternative (DEIR, pp. 6-41- 6-42), but concludes that the proposed project is environmentally superior to Alternative 4.

Alternative 4 is determined to be environmentally superior to other alternatives primarily because it eliminates the need to construct an ocean desalination project component in the future as a part of Phase 2. However, Alternative 4 is not considered to be environmentally superior to the proposed projects primarily because Alternative 4 does not include project design features incorporated into the proposed projects as "measures of safety." The proposed projects, unlike Alternative 4:

- Would phase discharge reductions first to an average annual Phase 1a Continued Discharge Levels (CDLs) of 1.9 MGD during closed-berm conditions (measured on the basis of a water year spanning October 1 to September 30), and then, by 2030, to a Phase 1b average annual CDL of 0 to 0.5 MGD during closed-berm conditions, rather than immediately reducing discharges to a CDL of 0 (zero) MGD.
- Would include post Phase 1a discharge reduction monitoring and implementation of adaptive management measures set forth in BIO-5 and BIO-6 (the Monitoring, Assessment, and Adaptive Management Program or “MAAMP”) to confirm and assure that anticipated benefits to SCRE water quality, salinity, breaching dynamics and other habitat conditions critical to the listed species occupying the SCRE, do, in fact, result from discharge reductions as predicted based on best available science.

Project phasing and the MAAMP were incorporated into the proposed projects as design features in response to, and to be consistent with, CDFW’s recommendations provided to the RWQCB in its December 14, 2018, letter. Based on incorporation of these design features as measures of safety, and the determinations of the SRP and TRT supported by the best available science, the DEIR concludes that the proposed project is environmentally superior to Alternative 4 and all other alternatives.

Please also note that the DEIR does not find that Alternative 1 (No Project Alternative) would be environmentally superior to the proposed projects (p. 6-39), as Comment S6-1’s summary of alternatives indicates on page 5. Alternative 1 (No Project Alternative) is not limited to “no development of new water supplies,” as stated on page 4 of comment S6-1. The most significant attribute of the No Project Alternative is that all tertiary-treated discharge from the VWRP would continue to flow into the existing 20-acre system of freshwater wildlife/treatment ponds and then would continue to discharge to the SCRE. The No Project Alternative would deprive the SCRE of the ecological benefits, including benefits to listed species and their habitats within the SCRE, that all available information and scientific reports conclude would be provided by reductions in average annual discharges to the estuary. Studies supporting this conclusion include the Phase 3 Study, the SRP Report, the TRT Report (March 2018), and the TRT Report (June 2018). As summarized in the DEIR (Section 6.4, p. 6-40), the best available scientific evidence has led all experts to conclude that, at a minimum, reductions in current VWRP discharges to an average annual closed-berm continued discharge level, or “CDL.”³ of 1.9 MGD would enhance the SCRE

³ Whenever the terms “CDL” or “Continued Discharge Level” are used in the DEIR, the FEIR and/or the Responses to comments, the term is referring to the average annual level of continued VWRP discharge to the SCRE *during closed-berm conditions* (DEIR, p. ES-2), calculated on the basis of a water year (October 1 to Sept. 30), whether or not those conditions are state. When the berm is open during the steelhead migratory season due to Santa Clara River flows (“Open-Berm Conditions”), the discharges in excess of the closed-berm CDL would be permissible, pursuant to the SRP Report’s conclusions that higher discharges during open-berm conditions would not be expected to adversely affect listed species, or related beneficial uses (SRP 2018, pp. 10, 26). In addition, pursuant to requirements of the Consent Decree entered into with Wishtoyo and Heal the Bay, the Proposed projects would further limit Open-Berm Conditions, discharges to events such as: **(a) Maintenance, Health and Safety Situations**, which are scheduled or unscheduled temporary events that prevent limiting discharge to the CDL, such as: a need to draw down tertiary-treated water in storage facilities as necessary to create storage capacity sufficient to assure that discharges during closed-berm conditions do not exceed the average annual CDL; implementation of maintenance, repairs, safety measures or capital improvements to assure proper continued

and support its beneficial uses, including habitat for the four listed species occupying the estuary. Benefits would include improved water quality, more natural salinity and breaching dynamics, and benefits to other “primary constituent elements” or primary biological features of their estuarine habitat (SRP 2018, p. 26; TRT June 2018, p. 2; TRT March 2018, pp. 15-16; Stillwater Sciences 2018, Section 6). Similarly, all the experts and all available scientific information support the conclusion that continuing discharges at current levels will not enhance, or provide environmental benefits for the listed species that occupy the SCRE or their habitats. (Id.) It is also important to note that the failure of Alternative 1 to reduce VWRf discharge to the SCRE in light of the existing science would result in the City’s failure to comply with state law, including the “Water Quality Control Policy for Enclosed Bays and Estuaries” (or the “Enclosed Bays and Estuaries Policy,” or “EBE Policy”) promulgated by the State Water Resources Control Board (adopted May 16, 1974, as amended November 16, 1995, Resolution No. 95084) pursuant to the California Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.) Therefore, the DEIR does not identify Alternative 1 (No Project) as the environmentally superior alternative.

In addition, please also note the following clarifications to statements within comment S6-1:

- On page 3 of comment S6-1: the Wildlife/Treatment Wetlands, if needed to treat the CDL, are proposed to be constructed as a part of Phase 1b, after the final average annual CDL is confirmed and fully implemented pursuant to the MAAMP required by BIO-6. BIO-6 provides that the City shall adaptively manage and confirm, under supervision of CDFW, USFWS, NMFS and the RWQCB, the anticipated ecological benefits of reducing discharges from an annual average CDL of 1.9 MGD to an average annual CDL of 0-0.5 MGD to the beneficial uses and ecology of the SCRE, its listed species and their habitats, as recommended by the preponderance of available scientific information *i.e.*, the SRP Report (June 2018) and the TRT Reports (March 2018 and June 2018). In contrast, the concentrate discharge facility is proposed to be implemented in Phase 1a.
- On page 5 of Comment S6-1: The RWQCB and the City requested CDFW to provide flow recommendations and monitoring requirements for the reduction in discharge from the VWRf to the SCRE for multiple purposes: (1) determining appropriate discharges to the SCRE under the City’s NPDES permit for the City’s VWRf (and not the NPDES permit for the VenturaWaterPure AWPf, which would accept diverted VWRf discharges as influent, and would not discharge reverse osmosis (RO) concentrate to the SCRE, but rather to the proposed ocean outfall described in the DEIR); (2) determining whether reductions in discharge comply with the California Endangered Species Act (Cal. Fish and Game Code Sections 2050 et seq.) and its prohibitions against “take” of listed species; and (3) determining under Water Code Sections 1210–1212 whether a reduction

operations of the VWRf and/or AWPf; or a need for either plant to be “offline” for health and safety purposes; and **(b) Events of Force Majeure**, which are events beyond the City’s reasonable control that cannot be prevented by the exercise of due diligence, such as: an emergency that prevents delivery of VWRf discharges to the AWPf and/or Treatment Wetlands; an event that creates a credible risk of plant inundation, or that may cause a discharge, spill or release from the VWRf or AWPf that results in nuisance or adverse impacts to public health, safety or the environment; an event that creates a credible risk of bypass of plant treatment operations; and/or any mechanical failure of the facilities or equipment, or a treatment process failure (DEIR, p. ES-3).

in discharges would “unreasonably harm” or “impair” the SCRE’s “instream beneficial uses,” and particularly those related to the listed species and their habitats within the estuary.⁴ The DEIR analysis, this response to comments, and ongoing consultations with

⁴ The City notes that, as described in the DEIR p. 3.9-40, it is the owner of the VWRF, which has since approximately 1977, and currently discharges tertiary-treated recycled wastewater to the wildlife water quality ponds, and then to the SCRE to enhance the receiving water quality beneficial uses. The SCRE is a “coastal lagoon, defined as shallow brackish or marine water bodies separated from the ocean by a barrier island, spit, reef, or sand bank. Depending on the extent of the barrier, coastal lagoons may be partially or totally enclosed, although most are connected at least intermittently to the open ocean by one or more restricted tidal inlets. This sensitive natural community currently exists from the mouth of the Santa Clara River to the Harbor Boulevard Bridge, encompassing approximately 85 acres. (DEIR, p. 3.4-18) Coastal lagoon is one of the two CDFW-designated sensitive habitats in the SCRE; the other is Steelhead Stream (DEIR, p. 3.4-68).

The character of the SCRE as a coastal lagoon has a number of important legal and regulatory consequences for all agencies, persons and entities bound by California State law. As described in the DEIR (p. 3.9-2), coastal lagoons are characterized as “estuaries” for regulatory purposes by the State Water Resources Control Board (SWRCB). This has important legal implications for reductions of discharges pursuant to the EBE Policy.

First, for purposes of determining compliance with receiving water quality standards, the SCRE is considered an estuary, a feature that is distinct from the Santa Clara River watercourse (which is tributary to the SCRE). See, e.g., the California Clean Water Act Section 303(d) lists, which distinguish “estuaries” from rivers and watercourses. During open-berm conditions, as a coastal lagoon, the SCRE is a part of the ocean. During closed-berm conditions, as a coastal lagoon, the SCRE is considered an “estuary” for purposes of the Water Quality Control Policy for Enclosed Bays and Estuaries. EBE Policy, footnote 1 p. 9 (SWRCB Resolution 95-84, November 16, 1995).

Pursuant to state law, as set forth in the EBE Policy, all municipal wastewater discharges to enclosed bays and estuaries, including the SCRE:

“shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Board only when the Regional Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of discharge.” [Emphasis in the original].

All scientific experts have concluded, based on the best available science, consisting of more than 17 years of data collection and ecological studies of the SCRE, that VWRF discharges greater than an average annual CDL of 1.9 MGD (at most) during closed-berm conditions do *not* enhance the quality of the SCRE receiving water above that which would occur in the absence of the discharge (DEIR, pp. 3.9-26 – 3.9-48). State law therefore requires discharge reductions. Further, the majority of scientific experts, namely the SRP and the TRT, have determined based on the best available science that discharges in excess of an average annual CDL of 0 to 0.5 MGD during closed-berm conditions do *not* enhance the quality of the SCRE receiving waters above that which would occur in the absence of the discharge. Accordingly, state law, which is binding the City as well as other local, state and federal agencies, mandates reductions in discharges to the SCRE to an average annual CDL of 0 to 0.5 MGD in closed-berm conditions, unless additional scientific information that can be relied upon by the City is brought forward or developed indicating that a CDL of 1.9 MGD enhances the SCRE.

Second, because the SCRE is a coastal lagoon, it is not a “watercourse” as defined by the SWRCB Division of Water Rights for purposes of exercising permitting authority. The SWRCB defines a watercourse as:

“A natural channel or an artificial channel under certain conditions, which conveys natural flows of water such as a river, stream or even a ditch. A major characteristic of a water course is a defined channel that transports the water” (SWRCB 2018. *Onstream Reservoirs Policy Fact Sheet*, p. 2).

or

“A natural or artificial channel through which water flows,” including perennial (Class I), intermittent (Class II), ephemeral (Class III) and other (Class IV) watercourses (SWRCB, 2019. *Cannabis Cultivation Policy*, Attachment 1, p. 17

https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy/final_cannabis_policy_with_attach_a.pdf)

Under Water Code Section 1211(b) wastewater change petitions do not apply to changes in the discharge or use of treated wastewater that do not result in decreasing flow in a “watercourse.” More specifically, when a treatment plant currently discharges into a bay or the ocean, and will be reusing a portion of the water, a petition for wastewater change is not required, even where the discharge is reduced (SWRCB 2018. *Wastewater Change Petition Guidance*, Frequently Asked Questions.

https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/wastewaterchange). No guidance is provided with respect to reductions in wastewater discharges to a coastal lagoon or estuary. Finally, because the

CDFW in its capacity as a trustee and responsible agency are being undertaken to ensure that the City complies with all applicable laws and obtains all required permits and approvals from CDFW, such that CDFW would support, and would not need to protest, the reduction of VWRf discharges to the SCRE. In addition, the RWQCB and the City desire to obtain information from CDFW now and continuing through development and implementation of the MAAMP regarding the appropriate flow design capacity for the proposed AWPf, for the VWRf after construction of the AWPf, and regarding any measures that CDFW believes are or may be necessary to assure that predicted ecological benefits from discharge reductions are obtained, and/or to better assure that potential adverse impacts to biological resources are avoided and minimized.

Response S6-2

Mitigation Measures BIO-5 and BIO-6 constitute a science-based monitoring program with data collection and adaptive management strategies, consistent with the recommendation in the comment. It is important to clarify that BIO-5 and BIO-6, while labelled and tracked as mitigation measures under the City's proposed CEQA mitigation monitoring program, actually constitute a science-based data collection and adaptive management program, which is quite different than a CEQA mitigation measure from a regulatory perspective. Unlike typical CEQA mitigation measures, BIO-5 and BIO-6 are not intended to reduce or eliminate adverse environmental impacts. Rather, the purpose of BIO-5 and BIO-6's data collection and adaptive management program is (as is the case with all adaptive management programs) to assure that the ecological benefits of discharge reductions, predicted based on the best available scientific information provided by the SRP and TRT, are, in fact, realized. The program is not intended to "mitigate" or offset any significant adverse environmental impacts of the Proposed projects to sensitive environmental resources within the SCRE, including listed species and critical habitats, because the preponderance of expert opinion based on the best available science supports a determination that the proposed projects would not result in significant adverse impacts on those resources. As the DEIR (p. 3.4-61) states "[f]or purposes of CEQA significance conclusions, the project's environmental impacts provide overall benefits to endangered species, resulting in habitat of greater quality than under existing conditions. As a result, impacts from the project would be less than significant under CEQA."

Accordingly, rather than mitigating a significant adverse impact identified in the DEIR, the City has included BIO-5 and BIO-6 as project design features in response to recommendations by NMFS, USFWS and CDFW, as well as the SRP (SRP 2018, p. 14) and the TRT (TRT June 2018, p. 2; March 2018, p. 17) calling for development and implementation of an adaptive management program as a feature of the proposed projects. BIO-5 and BIO-6 would serve to confirm, during

VWRf discharges to a coastal lagoon, there are no other downstream legal users of the tertiary-treated water whose interests are protected by the Water Code and who might be harmed by the reductions.

Because the VWRf currently discharges to a coastal lagoon or estuary, and not to a 'watercourse,' the EBE Policy, and not Water Code Sections 1210-1212 regarding wastewater change petitions, applies to continued VWRf discharges. However, in an abundance of caution, given the length of time that tertiary-treated discharges have been ongoing, and the listed species and critical habitats that occupy the SCRE, the City intends to submit a wastewater change petition to the SWRCB in coordination with the RWQCB, and in consultation with CDFW to allow SWRCB evaluation of whether discharge reductions will "unreasonably harm" or "impair" instream beneficial uses or violate the state or federal Endangered Species Act.

project implementation, that listed species and habitats within the SCRE would benefit from implementation of Phase 1b of the proposed projects.

Response S6-3

As explained in the response to comment S6-1 above, the heading of “Comment #1” and the discussion in “Issue #1” incorrectly describe the DEIR’s discussion of the environmentally superior alternative. The DEIR concludes that the proposed projects are environmentally superior to all of the alternatives (DEIR, p. 6-42). Of the alternatives to the proposed projects, the DEIR identifies Alternative 4 as the environmentally superior alternative (DEIR, pp. 6-41 – 6-42). The DEIR does not find that the No Project Alternative would be environmentally superior to the proposed projects (DEIR p. 6-39), as “Issue #1” states for the reasons explained in Response S6-1.

Response S6-4

This comment states that the DEIR “primarily utilize[s] the tidewater goby,” as the key species for determining effects of continued discharges and discharge reductions on species and habitats within the SCRE, preventing the analysis from fully identifying the minimum flow criteria necessary to protect steelhead smolt and the health of the entire estuary. The premise that the DEIR focuses on the tidewater goby to the exclusion of other species is incorrect. In fact, the DEIR analysis is based on the best available science, comprising more than 17 years of data collection, study and analysis, assessing the optimal conditions for the estuary as a whole, and with respect to *all four* of the listed species and the critical habitats designated within the SCRE. These analyses and studies encompass an in-depth evaluation of the likely effects of reduced discharge on all life stages of all listed species (i.e., southern California steelhead, California tidewater goby, western snowy Plover, and California least tern) and their designated critical habitat areas. The analyses further consider riparian designated critical habitat for the southwestern willow flycatcher, a species that does not occupy and has not been recorded within the SCRE, concluding that this habitat type increases as a result of discharge reductions proposed by the Project (DEIR, p. 3.4-55, 3.4-69, 3.4-73).

Of the three scientific evaluations, the Phase 3 Study Report, prepared by scientific experts of Stillwater Sciences,⁵ the consultants hired by the City, most broadly evaluated and balanced needs and considerations of not only all four listed species and their habitats, but also the health and beneficial uses of the Estuary as a whole, including water contact recreation (REC-1), commercial and sport fishing (COMM), and municipal and domestic supply (MUN), which are additional beneficial uses, though unrelated to sensitive species and habitat health. Tables 3.9-3 and 3.9-4 (DEIR, pp. 3.9-27 – 3.9-28), show the beneficial use designations for the SCRE and define the beneficial uses.

The Phase 3 Report addresses all listed species and their habitats, and other species and habitats within the SCRE, as well as the overall health and non-species related beneficial uses of the SCRE, by:

⁵ Curriculum vitae of the City’s Scientists is included in the administrative record as an appendix to the Phase 3 Study.

- Employing a “focal species” approach to evaluate potential effects of various discharge reduction scenarios (as compared to the existing and zero discharge scenarios, and as compared to one another) on listed aquatic and terrestrial species and their variable life histories, as well as their habitats, and related beneficial uses (Stillwater Sciences 2018, Section 1.3.1, p. 7).
- Comparing and evaluating, via the Analytical Hierarchy Process (AHP), the potential effects of various discharge reduction scenarios in terms of realization of 9 different designated beneficial uses of the SCRE (Stillwater Sciences 2018). These beneficial uses include support of listed species and their habitats, but also uses related to human recreation, municipal water supply uses, and other uses unrelated to the ecology of the SCRE. This approach allowed comparison of the impacts of discharge reductions on “a balance of all potentially competing beneficial uses” designated for the SCRE, including:
 - COMM (commercial and sport fishing) (Stillwater Sciences 2018, Section 5.5.1);
 - MUN (Municipal and Domestic Water Supply) (Section 5.5.5);
 - REC-1 (Water Contact Recreation (Section 5.5.8);
 - REC -2 (Non-Water Contact Recreation) (Section 5.5.9);
 - Rare (Rare, Threatened or Endangered Species) (Section 5.5.7);
 - EST (Estuarine Habitat (Marine Habitat) (Section 5.5.3);
 - MIGR (Migration of Aquatic Organism (Section 5.5.4); and
 - SPWN (Spawning Reproduction and/or Early Development (Section 5.5.10).

Elements of the Phase 3 Study’s approach, including reliance on the AHP and the flow criteria conclusions of the Phase 3 Report, were specifically rejected by the SRP⁶ and the TRT⁷ because the SRP and TRT scientists did not believe the Phase 3 Report analysis sufficiently prioritized evaluation of the adverse effects of current discharges, as well as the effects of proposed discharge reductions on: each of the four listed species (including the steelhead), and the quality (rather than the quantity) and Primary Constituent Elements or primary biological features (PCEs) of each listed species’ habitat (SRP 2018, p. 3; TRT March 2018, p. 3, Attachment 1 pp. 8-14).

As set forth on page 3 of the SRP Report:

“Given the SRP’s specific charge to protect sensitive species in the SCRE, the SRP deliberately focused on a subset of all the beneficial uses that were identified in the final Phase 3 Report, and did not use the AHP’s beneficial use optimization approach. The SRP focused on the following four prioritized beneficial uses (some undesignated):

⁶ The SRP team of experts was convened pursuant to the Consent Decree and in accordance with the RWQCB’s conditions of the approval for the work plan for the Phase 3 Study via appointment of one member by Wishtoyo and Heal the Bay, one member by the City, and one member by the other two appointed members). Curriculum vitae for the SRP member are included in the administrative record as an attachment to the SRP Report (2018).

⁷ The TRT was a team of experts convened by Wishtoyo and Heal the Bay to provide input into, and to critique the Phase 3 Study. Curriculum vitae for the SRP member are included in the administrative record as an attachment to the TRT Report (March 2018).

1. Rare, Threatened, or Endangered Species (RARE)
2. Spawning, Reproduction, and/or Early Development (SPAWN)[SIC]
3. Migration of Aquatic Organisms (MIGR)
4. Estuarine, Wildlife and Wetland Habitats (HAB)”

The SRP, while basing its analysis upon the data, information and assessments of the Phase 3 Report, changed its analytical methodology to increase the focus on all relevant life stages of all four listed species known to use the SCRE: the tidewater goby; southern California steelhead; western snowy plover, and California least tern (SRP 2018, p. 3, pp. 5-6). While the SRP “selected tidewater goby as the most sensitive indicator for the ecology of the SCRE because “[o]f the four species, the tidewater goby is most reliant on the SCRE for all aspects of its life history” (*id.*), the SRP specifically “also evaluated the effects of the VWRP discharge on steelhead, western snowy plover, and California least tern for the life stages supported by the SCRE” (SRP 2018, Tables 1-4, pp. 7-9). In fact, “[t]he SRP developed conceptual models of the key needs for the four sensitive species, focusing on beneficial drivers and negative stressors associated with each life history stage” (SRP 2018, p. 6, item 2).

Further, unlike the Phase 3 Report,

“[t]he SRP did **not** attempt to identify a discharge that optimized all beneficial uses. Instead, the SRP considered incremental increases in discharges from zero, and attempted to identify the maximum point above which additional discharges would result in undesirable adverse effect on the aquatic life beneficial uses (i.e., the minimum point of adverse effect for the four sensitive species” (SRP 2018, p. 6, item 3, emphasis added).

Instead,

“[t]he SRP operated under a different fundamental premise than the Phase 3 work. Specifically, the SRP began with an assumption that zero discharge from the VWRP (i.e. 100% discharge diversion) is ecologically preferred unless there is evidence to the contrary” based on “[t]he rationale...that under “natural” hydrologic conditions, the Santa Clara River would be a seasonally flashy system, with most discharge events occurring in the winter and early spring, and low or no surface water discharge in summer” (SRP 2018, p. 4).”

The SRP also listed its “primary areas of disagreement” with the Phase 3 Study:

- The use of habitat quantity vs. quality as the primary measure of benefits vs. adverse effects;
- The heavy reliance on the Water Balance Model and its derivative models, which did not explicitly consider the seasonal and episodic nature of coastal processes; and
- Incomplete consideration of the various discharge scenarios on water quality in the SCRE [which the SRP considered to be a PCE, and primary determinant of the quality of listed species’ habitat within the estuary] (SRP 2018, pp. 2-3).

In summary, contrary to the statements in the comment, the SRP Report considered the optimal condition of the SCRE for all four native species, with an increased emphasis on the quality of listed species' habitats, and particularly breaching dynamics and water quality related parameters of the listed species' habitat. These parameters include temperature and water salinity (as mentioned in the comment), as well as nutrient loads and concentrations and dissolved oxygen conditions. The TRT advocated a similar methodology to the one used by the SRP (TRT March 2018) and concurred with the SRP's methodology, approach and the SRP Report conclusions (TRT June 2018, p. 2).

The DEIR analyzes potential impacts to steelhead and goby habitat in Section 3.4.8 based on the preponderance of available scientific expert opinion, namely based on the findings and conclusions of the SRP Report, the TRT Report (March 2018), and the Final TRT Report (June 2018). The DEIR analysis also uses the Phase 3 Study Report data and information, but critiques the Phase 3 Study Report's methodology, approach and conclusions for providing insufficient protection to listed species and their habitats within the SCRE. More specifically, the DEIR (p. 3.4-45, emphasis added) explains:

“In its review and analysis, the SRP focused on aquatic life beneficial uses, prioritizing the capacity of the SCRE to provide quality habitat for the tidewater goby in particular, which it viewed as most reliant on the SCRE for all aspects of its life history. **It then applied its findings for goby to steelhead and other sensitive species**, and found not only that its findings and recommendations were **needed to protect steelhead** and other sensitive species, but that the SCRE's other beneficial uses would be protected under its CDL too. The SRP concluded that when evaluating habitat quality for the species of concern in the SCRE, a 90 – 100 percent reduction in VWRP discharges would result in substantially improved and preferred conditions compared to existing conditions within the SCRE.”

The DEIR analysis then considers, as the SRP and TRT did, the habitat type conversion estimates, including reductions in open water habitat, presented in Table 3.4-6 (p. 3.4-49), based on the Phase 3 Study. The DEIR analysis also considers that both steelhead smolts and goby occupy aquatic habitats in the SCRE, and further takes into account that both species are subject to similar unseasonal breaching, water quality, and predation pressures under existing conditions within the SCRE. The DEIR then concludes, based on a preponderance of scientific opinion represented by the SRP and TRT Reports, that reductions in open water habitat and conversion of the SCRE to more natural coastal lagoon conditions due to the proposed Phase 1b discharge reductions to an average annual CDL of 0-0.5 MGD provides better habitat quality and sufficient quantity of habitat for each of the four sensitive species. See Response S6-6, S6-7, S6-8, S6-10, S6-14, S6-15, S6-16, S6-17, and USFWS Response F1-5 for further discussion of this topic.

Response S6-5

“Issue #3” describes acreage of open water habitat under existing conditions and with reductions in discharge to the estuary. The following clarification is needed: Phase 1b proposes discharge reductions in the range of 90 percent to 100 percent to produce an average annual CDL of 0–0.5 MGD during closed-berm conditions, resulting in 41–49 acres of open water habitat within the

SCRE during those conditions. An average annual CDL of 0 MGD is not proposed for Phase 1b, and would only occur in Phase 2 of the proposed projects, if that option is selected by the City, and provided that the MAAMP confirms that, as predicted by the SRP, 100% diversion producing an average annual CDL of 0 MGD discharge will benefit, and will not adversely affect, the listed species or their habitats. A Phase 2 average annual CDL of 0 MGD is expected to result in 41 acres of open water habitat.

Response S6-6

This comment makes three primary assumptions or assertions that are not supported by the scientific information and expert opinion underpinning the DEIR: (A) steelhead should be the primary focus in analyzing impacts of discharge reductions proposed by the Project; (B) significant adverse impacts to steelhead, especially fingerlings and smolts, will result from VWRf discharge reductions associated with the proposed projects due to reductions in open water depths and acreage required to support steelhead and protect them from predators; and (C) significant adverse impacts to steelhead, especially fingerlings and smolts, will result from VWRf discharge reductions associated with the proposed projects due to reductions in freshwater dilution of contaminants generally associated with surface runoff and groundwater, including nutrients, and other contaminants generally associated with groundwater such as total dissolved solids (TDS), sulfates and manganese.

A. Primary Focus for Analysis of Impacts of VWRf Discharge Reductions.

As summarized in Response S6-4 and contrary to the assumptions of the comment, all of the scientific reports determined it was most appropriate to evaluate the potential adverse effects of reduced VWRf discharges on all four listed species, as required by the state and federal Endangered Species Acts and CEQA. The first threshold of significance that the DEIR addresses states that the proposed projects “could have a significant impact if they would have a substantial adverse effect, either directly or through habitat modifications, on **any species** identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or USFWS” (DEIR, Significance Thresholds and Criteria, p. 3.4-42, and analysis of potential impacts on steelhead under BIO 3.4-1, pp. 3.4-51 – 3.4-52, emphasis added). The DEIR concluded, based on the SRP Report and TRT Reports, that the discharge reductions associated with the proposed projects “would result in an improvement over existing conditions for steelhead.”

Only the Phase 3 Report methodology limited consideration of the adverse effects of reduced discharges on the four listed species as a single factor, in the context of potential impacts to other beneficial uses and ecological resources of the SCRE unrelated to fish and wildlife, for purposes of developing its flow recommendations. As summarized in the DEIR (pp. 1-17 - 1-18, emphasis added):

“While the AHP [a methodology used by the Phase 3 Study, but not used by the SRP] also considered RARE species as the most significant factor, it only comprised 35% of the final score, whereas the SRP’s approach would have given these species 100%. Other beneficial uses such as wetlands and estuarine habitat had opposite trends to

that of rare species, with increasing water discharge being more beneficial. This tended to drive the habitat acreage benefits more to the middle score range. Such results are expected when evaluating effects on a wide range of beneficial uses that, in some cases, have conflicting requirements.

...[T]he SRP makes a strong and compelling argument to focus on listed species. In that context, and recognizing that the RARE beneficial use is, by definition, the most important to preserve and enhance, the TRT supports the SRP recommendation to provide the best protection for these species.”

Both the SRP and the TRT rejected the Phase 3 Study Report’s approach to evaluating the impacts of reduced discharges, especially the use of the AHP methodology, on the basis that the Phase 3 Study failed to sufficiently focus on the four listed species occupying the SCRE, and their habitats (SRP 2018, p. 3; TRT June 2018, p. 2).

Further, the SRP Report identifies the tidewater goby “as the most sensitive indicator for the ecology of the SCRE ecosystem” because, “of the four species, the tidewater goby is most reliant on the SCRE for all aspects of its life history” (SRP 2018, p. 3). The SRP explains this determination as follows:

“Although the other sensitive species (i.e., the birds and steelhead) rely on the estuary for critical periods of their life history, they also spend part of their lives outside the estuary. Thus, the SRP focused first on the life history of the tidewater goby in the SCRE, and examined how discharges from the VWRf may affect the various life history stages and completion of its life cycle.

* * *

Recommendations developed for the goby were [then] examined carefully against the life history needs of the other identified sensitive species for the life stages dependent on the SCRE, and the **recommendations were adjusted as necessary to ensure that all critical sensitive species life history needs are considered** in arriving at the SRPs recommendations.” *Id.*, emphasis added.

The SRP conducted this careful examination of the effects of reduced discharges on all four listed species (SRP 2018, pp. 3-4) by developing conceptual models of the key needs of each of the species, then focusing analysis of discharge reduction impacts on the beneficial drivers and the negative stressors associated with each life history stage for each species (SRP 2018, p. 6, item 2). The SRP summarized the results of its analysis in Tables 1-4, with each Table being devoted to the summary of the analysis of positive drivers and negative stressors on each of the four listed species (SRP 2018, pp. 7-9). The TRT concurred in this approach (TRT June 2018, p. 1).

Therefore, the City, as lead agency, has accepted the preponderance of expert scientific opinion regarding the proper focus and methodology for evaluating impacts of the VWRf discharge reductions on all four listed species and their critical habitats, given that evaluation of impacts to all of the listed species and their habitats is required by law.

The DEIR summarizes this methodology involving evaluation of the effects of the reductions in VWRP discharge to the SCRE associated with the proposed projects on all 4 listed species occupying the SCRE and their critical (DEIR, pp. 3.4-44 – 3.4-45).

B. Potential for Impacts to Steelhead Due to Reductions in Open Water Habitat Acreage and Depths.

Each of the groups of scientific experts evaluating the data compiled in, and the conclusions of, the Phase 1, Phase 2, and Phase 3 Estuary Studies considered the question of how much open water habitat acreage and depths should remain to create optimal habitat conditions for the sensitive species, and particularly for steelhead and tidewater goby.

As acknowledge by Stillwater Sciences, author of the Phase 3 Report, physical open water habitat area for aquatic species was predicted pursuant to a water balance model. This model employed “rules,” established for modeling purposes by Stillwater, regarding changes in SCRE stage-full water elevations that would result from different discharge scenarios (Stillwater Sciences, Section 5.3.1.2, p. 235). The rules established for determining area of open water that would be associated with each reduced discharge scenario are:

- Area of open water habitat is reduced in direct proportion to lowering the existing water surface elevation; and
- Only the area predicted by modeling to be 3 feet or more below the modeled stage full estuary elevation would be considered open water, meaning a constant modeling assumption that any inundated area 0 to 3 feet in depth would not constitute open water habitat.

As a result of these modeling rules, open water and tidally exposed mudflat were predicted to decrease in a linear and directly proportional fashion as continued VWRP discharges were reduced (Stillwater Sciences 2018, Section 5.6.3, Table 5-4 pp. 234-235). Stillwater Sciences (2018) noted that the reductions in open water habitat set forth in Table 5-5 of the Phase 3 Study, based on model predictions, are likely to be inaccurate (pp. 236-237). They also do not take into account historically observed variability in open water habitat area under relatively constant discharge flow volumes (ranging from 102.4 acre to 188.7 acres of open water habitat). *Id.* Nonetheless, the Phase 3 Report states that modeled water depth and associated open water habitat acreage is a very “highly weighted factor” and was considered the “foremost component” in determining habitat suitability for all four listed species, and particularly for the tidewater goby and steelhead (Stillwater Sciences 2018, Section 5.6.3.3, p. 311).

Both the TRT and the SRP Reports are critical of the modeling “rules” employed in the Phase 3 Report to drive the analysis of habitat suitability because the result was that “water depth [and, by extension, habitat acreage] emerged as the only steelhead, and dominant tidewater goby habitat suitability parameter factors into the comparative analysis of alternative discharge scenarios” (TRT March 2018, Attachment 1, p. 4). The TRT rejected using water depth and open water area as the only/primary habitat suitability parameter and primary determinant of an appropriate average annual CDL because the approach:

- Unacceptably biases the comparative analysis of discharge reductions toward 0 percent reduction (continued discharge).
- Overemphasizes the importance of water depth to steelhead habitat suitability, ignoring the fact that the range of effective water depths usable to steelhead is relatively wide.
- Underemphasizes the importance of water quality as a primary factor in determining habitat suitability for the listed species, including the negative stressors associated with high nutrient loads and low salinity caused by freshwater VWRP discharges.
- Fails to take into account that an inundated surface area of approximately 63 acres, 29 acres of which is predicted to exhibit water depths equal to or exceeding 2.5 feet, should be more than sufficient for steelhead, and would exceed the area and depths of open water habitat in other lagoons supporting steelhead and critical habitat.
- Fails to account for the number of non-native aquatic species and predators that have thrived in the SCRE in recent history due to the consistent SCRE depths, temperatures and salinities resulting from relatively constant VWRP freshwater discharges.
- Fails to recognize the advantage of restoring more natural variability in flows and salinities, which native species, including the goby and the steelhead, exhibit unique behavioral adaptations to withstand, unlike their predators and competitors.

(TRT March 2018, Attachment 1, pp. 4–6, “*Habitat Quantity Over Quantity*”)

Similarly, the SRP Report explains “more habitat is not always the best prescription; rather the SRP supports improved habitat quality over quantity.” Or, as the SRP stated more simply, with respect to the SCRE and its listed species, “More Is Not Better” (SRP 2018, pp. 22–23; Attachment 1, Section 4, p. 34).

Instead, as stated on page 21 of the SRP Report:

“The SRP disagrees with the Final Phase 3 Report assumption that goby and steelhead habitat are depth-limited or based on quantity (acres or volume) of habitat. For example, the Final Phase 3 Report indicates that habitat suitable for tidewater goby is between 0.1 and 2 m deep. In fact, this has been considered an artifact of the methods used for sampling... Surveys conducted in deeper water portion of estuaries and lagoons have indicated that tidewater gobies are likely not limited by depth. Steelhead, on the other hand, may need greater depth to provide cover from avian predators, which supports a low discharge (0.5 MGD discharge level) over no discharge level.... The bathymetry of the SCRE is such that between scenarios 7 [average annual CDL of 1.9 MGD] and 8 [average annual CDL of 1.4 MGD], there is an increase [for scenario 8] in the amount of open water habitat; however, that jump [in open water habitat with increase discharges under scenario 8] is associated with shallow water inundating shallow mudflats and may not be providing good habitat conditions for juvenile steelhead rearing (see Table 5 and Appendix F [of Phase 3 Study Report]). In fact, inundation of this shallow habitat acreage [associated with increasing open water between scenario 7 and scenario 8] may increase the mortality risk due to stranding during an artificial breach and rapid dewatering event. ... The SCRE provides important acclimation habitat for adult steelhead migrating to

upstream spawning tributaries, and for smolts and downstream migrating kelts, and rearing habitat for young-of-the-year steelhead. Estuary rearing provides juveniles an opportunity to increase their size before ocean entry, and young-of-the-year steelhead to exercise a life history strategy of over-summering in the estuary prior to ocean entry. Attaining this larger size at ocean entry is critical to maximizing opportunity for ocean survival, which can even be quite low even for larger juveniles.”

In light of these considerations, the SRP Report concludes on page 22 that there is no specific benefit for either steelhead or tidewater goby associated with a larger lagoon size, stating as follows:

“1) Tidewater goby typically occur in small coastal estuaries and lagoons. For example, most estuaries and lagoons where goby occurs are 1.25 to 12.5 acres, with most stable and largest populations occurring in lagoons 5 to 125 acres.

2) Juvenile steelhead also rear in small coastal estuaries – and often in small estuaries that also support tidewater goby...”

On balance, the best scientific information available to the City in drafting the DEIR supports the conclusion that, despite reductions in the area of open water habitat that are predicted by Phase 3 Study modeling to result from discharge reductions associated with the proposed projects:

- All scientists consulted for this project support the conclusion that reductions in discharge to an average annual CDL of 1.9 MGD during closed-berm conditions in connection with implementation of Phase 1a of the Proposed projects will benefit native, and listed aquatic listed species; and
- The preponderance of scientific expert opinion supports the conclusion that reductions in discharge to an average annual CDL of 0–0.5 MGD during closed-berm conditions in connection with implementation of Phase 1b of the proposed projects will benefit native and listed aquatic species.

The scientists consulted for this project conclude that discharge reductions associated with the proposed projects will benefit native and listed aquatic species, despite reductions in open water habitat depth and acreage, because the reductions would improve habitat quality and suitability for listed species substantially as compared to existing conditions. In particular, discharge reductions would improve PCEs for goby and steelhead critical habitat within the estuary by:

- Reducing potential for discharges to interfere with lagoon closure during declining river flows in the spring as the steelhead migration period is closing, which improves low velocity habitat for goby and conditions for young-of the-year juvenile steelhead (SRP 2018, pp. 11–12, pp. 24 – 26; Stillwater Science 2018, p. 249).
- Creating a hydrologic regime that more closely mimics historical and natural conditions within the watershed while taking into account historical anthropogenic modifications to, and the current hydrological conditions within the watershed (SRP 2018, pp. 14–15; TRT March 2018, p.14).

- Retaining depths within open water areas that are sufficient for goby and juvenile steelhead cover, while limiting open water areas that are too shallow when closed-berm discharges exceed 0.5 MGD to provide good habitat (SRP 2018, pp. 21–26; TRT March 2018, pp. 8–9; Stillwater Sciences 2018, p. 157, p. 162).
- Improving water quality within the estuary for all life stages of the goby, steelhead migration, and steelhead juveniles and rearing, particularly with respect to nutrient loads and related periods of dissolved oxygen (DO) insufficiency, and adverse swings in pH (SRP 2018, pp. 15–16; TRT June 2018, p. 2); Stillwater Sciences 2018, pp. 242–243).
- Improving aquatic and native species’ (including the least tern, the goby and the steelhead) food sources based on improvements in water quality (SRP 2018, p. 16; TRT June 2018, p. 2; Stillwater Sciences 2018, Section 5.6.2.4, p. 280).
- Improving salinity conditions and slowing freshening within the SCRE consistent with native estuarine species’ needs, including those of goby life stages and juvenile steelhead rearing (SRP 2018, pp. 24–26; Stillwater Sciences 2018, p. 252).
- Improving opportunity for seasonally appropriate wave overwash (SRP 2018, pp. 10–13).
- Improving the availability of burrowing substrate for the goby (SRP 2018, p. 11, 20; Stillwater Sciences 2018, p. 269; TRT March 2018, p. 5).
- Reducing competition and predation from non-native species (SRP 2018, p. 11).
- Reducing or ultimately eliminating the impetus for unseasonal breaching of the lagoon berm, which presents mortality risk to goby and juvenile steelhead using the estuary during dry weather, closed-berm conditions (SRP 2018, p. 10; Stillwater Sciences 2018, p. 271).

The DEIR (pp. 3.4-59 through 3.4-60) summarizes this scientific analysis and expert opinion supporting the determination that the proposed projects’ implementation of VWRf discharge reductions proposed projects would benefit the four listed species, despite reductions in aquatic habitat area and open water depth, as follows:

“However, the discharge reduction would result in benefits to each of these species through improved water quality including fewer opportunities for eutrophication, reduced suitability for predatory non-native species, and reduced adverse impacts of dry season breaching, including reduced stranding of individuals and nests, reduced transport to sea, and reduced changes in salinity. Moreover, as documented by the SRP and TRT, the project would still provide sufficient habitat area to support the current population of goby and steelhead, and targeted recovery populations based on historic populations and recovery plans.

The TRT and SRP determined that fish and wildlife species native to the SCRE, including the four species listed as threatened or endangered (the tidewater goby, California steelhead, California least tern and western snowy plover), have evolved in and adapted to highly seasonal hydrology characterized by natural low-flow conditions. Consequently, the SRP recommended that protecting the natural habitat of these

endangered and threatened species requires that the discharge of tertiary-treated effluent be limited to no more than 0.5 MGD when the berm is closed. The SRP determined that doing so is especially important in order to replicate the “natural hydrology” of the SCRE, and to reduce the risk of unnatural and untimely breaching of the berm during critical life stages of the tidewater goby and steelhead. The SRP also determined that doing so would protect all of the other natural beneficial uses of the estuary that evolved with the estuary’s native special status species. The TRT concurred with the SRP’s determinations and recommendation to limit VWRP’s discharges the SCRE. In the Phase 3 Study, Scenario 10 best illustrates conditions associated with this minimal discharge recommendation.

In summary, it was the SRP’s best professional judgment that a discharge of between 0 and 0.5 MGD of tertiary-treated effluent would support the most sensitive beneficial uses in the SCRE, which are all related to listed species and their habitats (i.e., RARE, SPAWN, MIGR, and HAB), by more closely approximating the natural historical hydrological, salinity and nutrient conditions under which the resident endangered and threatened species evolved and by providing these species with suitable habitat. The SRP found that too much freshwater effluent dampens the natural variations in salinity that normally prevents exotic invasive species (such as carp and arundo) from outcompeting and displacing the native fish. Too much tertiary-treated effluent also promotes excessive algal growth, leading to lower dissolved oxygen concentrations, and an unacceptable risk of catastrophic hypoxic events to aquatic organisms in the SCRE when the berm is closed. Finally, discharging larger amounts of tertiary-treated wastewater produces unnaturally high water levels that increase the risk that localized flooding that may adversely impact the nesting habitat of endangered bird species in the estuary. In short, as described above, reduced discharge of tertiary-treated effluent (<0.5 MGD) will enhance beneficial uses related to native species and habitats within the SCRE during the critical low-flow conditions.”

See responses to comment, S6-7, S6-8, S6-10, S6-14, S6-15, S6-16, and S6-17 for additional discussion.

C. Potential for Impacts to Steelhead Due to Reductions in Dilution of Surface Water Runoff and Groundwater Pollutants.

1. **Source of Inflow to the SCRE.** All experts agree that, as described in Sections 3.3.3 and 3.3.4 of the Phase 3 Report, the hydrology of the SCRE is complex, and the SCRE receives inflow from a number of different sources in addition to inflows from VWRP discharges, surface water runoff, and “groundwater inflow upstream in the Santa Clara River.” More specifically, under existing conditions, the SCRE receives inflow from:
 - a) Surface water Santa Clara River flows which vary widely in volume, but are driven by inputs from the semi-perched aquifer, and are enhanced by seasonal runoff and precipitation within the river watershed (Stillwater Sciences 2018, Section 3.3.3.1);
 - b) VWRP discharges (Stillwater Sciences 2018, Section 3.3.3.2), which under existing conditions, dominate the hydrology of and flows within the SCRE (p. 55), and

control the inflow and directional flow of groundwater, because the discharges determine the elevation and stage of the SCRE (Stillwater Sciences 2018, Section 3.3.4.2);

- c) Tidal flow, which strongly influences conditions in the SCRE during a breaching event, but also influences conditions within the SCRE due to seepage and exchange through the berm in closed-berm conditions (Stillwater Sciences 2018, Sections 3.3.3.3, 3.3.4.3); and
- d) Groundwater flows, including inflows from the semi-perched aquifer below the lower Santa Clara River, areas of the Oxnard Plain in and around the river and the SCRE, McGrath Lake, adjacent McGrath State Park, and the entire SCRE (Stillwater Sciences 2018, Section 3.3.4). The perched aquifer is separated from deep aquifers known as the Mound Sub-basin and the Oxnard Plain Sub-basin by thousands of feet in depth, and a very thick, impermeable clay layer underlying the perched aquifer. Direction of groundwater inflow, and the most prominent area of groundwater inflow into the SCRE, vary based on the elevation of water within the SCRE, and the amount of hydraulic pressure asserted by water within the SCRE on the underlying perched aquifer (Stillwater Sciences 2018, Section, 3.3.4.2).

The DEIR summarizes and integrates this critical information regarding sources of flow to the SCRE into the description of the existing condition (DEIR pages 3.9-2 – 3.9-5) and the impacts analysis (DEIR pages 3.9-54 – 3.9-55). The TRT and SRP relied upon this analysis in the Phase 3 Study.

2. **Water Quality Effects of VWRP Discharges in the SCRE.** The comment appears to assert that VWRP discharges are diluting pollutants from other sources of inflow, particularly pollutants generally associated with urban runoff, such that reduction in discharges associated with the proposed projects would adversely affect water quality within the SCRE. In fact, the best available science indicates the opposite: reductions in VWRP discharges proposed by the projects are expected to improve water quality within the SCRE to the benefit of listed species.

Based on a review of data collected since 2008 as part of the Phase 1, Phase 2 and Phase 3 Estuary Studies, and the VWRP NPDES Discharge Permit monitoring programs (taking into account changes in treatment processes and VWRP discharge water quality implemented in 2011), the Phase 3 Study Report concludes that key “pollutants and water quality conditions of concern” within the SCRE under existing and potential reduced VWRP discharge conditions are:

- a) Nutrient levels within the SCRE for chlorophyll-a, total inorganic nitrogen, nitrates and phosphate;
- b) Dissolved oxygen levels within the SCRE, and particularly the potential for unsuitably low dissolved oxygen levels resulting from algal blooms fueled by nutrient levels; and

- c) Maintenance of salinity levels within the SCRE that better favor native listed species, rather than non-native invasive species and predators.

The SRP agreed with the identification of these three primary pollutant categories and water quality issues of concern, and also expressed a concern that toxin-producing algae fostered by high nutrient levels may be a water quality condition of concern for the SCRE (SRP 2018, p. 3 “key issues of concern”, p. 5, p. 11 “major determinants for MEPDV and CDL”). The TRT agreed with the identification of these key pollutant categories and water quality issues of concern, and also expressed a concern that temperatures within the SCRE may be a key water quality condition of concern (TRT March 2018, pp. 3-4, 7-8). The data and Phase 3, SRP Report and TRT Reports do not support a conclusion that SCRE water quality is compromised by total dissolved solids, sulfates, or manganese commonly found in urban runoff.

With respect to the contention that VWRf discharges are diluting pollutants from surface water and groundwater upwelling inflows to the SCRE, the Phase 3 Report reaches the following conclusions regarding the effect of the VWRf discharge on “dilution” of key pollutants of concern contributed to the SCRE by groundwater and/or surface water inflows, as well as VWRf discharges in the current condition:

- a) With respect to nutrients and related dissolved oxygen conditions within the SCRE, the Phase 3 Report concludes that nutrient levels will be reduced as discharges are reduced, indicating that VWRf discharges are not diluting nutrient related pollutants of concern within the SCRE sufficiently to provide good habitat quality because:
 - i. While well within NPDES permit discharge limitations, VWRf discharges contribute more phosphate to the SCRE than Santa Clara River flows, runoff, or groundwater flows.
 - ii. While well within NPDES permit discharge limitations, VWRf discharge contribute more total inorganic nitrogen (TIN) than Santa Clara River flows, runoff, or the majority of groundwater inflows (Stillwater Sciences 2018, Section 5.3.2, Table 5-6). While certain groundwater inflows may be higher in TIN concentrations than VWRf discharges, nutrient loads contributed by VWRf discharges far outweigh groundwater flow contributions to nutrient loads (Stillwater Sciences 2018, Section 5.3.2, Table 5-6). Water quality modeling results predict that, even without factoring natural nutrient uptake within the SCRE into the water quality model, receiving water conditions improve, and nutrient levels (TIN and phosphate) generally *decrease* as VWRf discharges are reduced (Stillwater Sciences 2018, Section 5.3.2.2 Table 5-8).⁸

⁸ The one apparent exception to this pattern occurs when the average annual CDL is reduced to zero as proposed by Alternative 4 (rather than an average annual of 0 to 0.5 MGD, as would occur under Phase 1b of the proposed projects). (Stillwater Sciences 2018, Section 5.3.2.2 Table 5-8). Even this exception is likely an artifact of modeling assumptions. The Phase 3 Report predicts that when VWRf discharges are reduced to an average annual CDL of 0, TIN (but not phosphate) may increase to concentrations akin to those under existing discharge

- iii. Further, when biological nutrient uptake and removal processes in the SCRE are factored into the water quality model as recommended by the TRT (TRT March 2018, Attachment 1, p. 8),⁹ both TIN and phosphate concentrations are substantially reduced with reductions in VWRf discharges (Stillwater Sciences 2018, Section, 5.3.2.2, Table 5-8).
 - iv. In addition, the Phase 3 Report concludes that reductions in VWRf discharges are expected to reduce nutrient loads, and thereby reduce algal blooms and incidence of low DO conditions (Stillwater Sciences 2018, Section 5.3.2.3).
 - v. Finally, the SRP Report, the TRT Report (June 2018) and the TRT Report (March 2018) conclude that reduction in nutrient loads, and related reductions in the probability (or duration) of hypoxia, outweigh the questionable benefits of any nutrient dilution demonstrated by one modeling scenario in the Phase 3 Report. These reductions comprise a major justification for limiting VWRf discharges to an average annual CDL of 0-0.5 MGD (SRP 2018, p. 11, 16; TRT June 2018, p. 2; TRT March 2018, Attachment 1, pp. 7-8).
- b) With respect to salinity levels, the Phase 3 Report (Section 5.3.2.1), the SRP Report (pp. 16-20, Table 5), and the TRT Report (June 2018, p. 2) all conclude that VWRf discharges have the effect of diluting salinity otherwise provided by tidal influence and wave overwash, to the detriment of the listed species within the SCRE, and to the advantage of non-native predators. The SRP determined that VWRf discharge dilution of salinity in the SCRE adversely affects all four listed species, and constitutes a major reason or justification for reducing VWRf discharges to an average annual CDL of 0-0.5 MGD (SRP 2018, p. 20, Table 5) as proposed by Phase 1b of the project, subject to confirmation of benefits for listed species pursuant to the implementation of the MAAMP.

This information regarding the likely water quality benefits of reduced discharges on the SCRE was integrated into the impact analysis in the DEIR. The DEIR (p. 3.4-51) establishes existing conditions, which provide the baseline for addressing environmental impacts.

With respect to nutrients, the DEIR notes that the Phase 3 report found that eutrophication, or over-enrichment by nutrients and minerals resulting in excessive growth of plants and algae, and low dissolved oxygen concentrations within the lagoon may be present 40 percent of the time

conditions. *Id.* The Phase 3 Report explains that this exception for TIN in a zero discharge condition is driven by the elimination by the model of inflows from the wildlife ponds, which are presumed by the model to dry up entirely in the zero discharge scenario, but not in the scenario where the proposed annual average CDL is 0 to 0.5 MGD (scenario 10% or 90% diversion in the Phase 3 Report) (Stillwater Sciences, 2018, Section 5.3.2.2., p. 240). The Phase 3 Report further explains that, as pointed out by the TRT (March 2018, pp. 7-8), the increase in TIN that is predicted when discharges are reduced from an average annual CDL of 0.5 MGD to an average annual CDL of zero “may be an overestimate in the TIN in groundwater inputs from the NBF-East inflow.” *Id.*

⁹ The TRT is very critical of the accuracy of the Phase 3 Study estuary mixing (i.e., the water quality) model predictions regarding water quality conditions associated with variations in VWRf discharge, because among other things, the model failed to take biological uptake into account (TRT March 2018, Attachment 1, pp. 7-8). The SRP also considers the modeled predictions regarding nutrients to be flawed (SRP 2018, p. 11, 16, 26).

under existing conditions, primarily during closed-mouth conditions. The lagoon is unsuitable habitat for steelhead and goby under these conditions. During extended periods of time, dissolved oxygen levels in the lagoon are zero or close to zero mg/L—conditions that are lethal for steelhead and goby.

Current VWRF discharges include dissolved nutrients. The DEIR (p. 3.4-51) concludes that reduction of nutrient loads to the SCRE is beneficial to water quality of the SCRE, stating as follows (emphasis added):

The primary sources of nutrients driving these patterns are discharges from the VWRF and groundwater exfiltration (Kramer 2018). The proportion of nutrient loading associated with groundwater exfiltration versus VWRF discharges is unknown. However, reducing nutrient loading from the VWRF can only serve to reduce eutrophication and associated hypoxia (oxygen deficiency in a biotic environment). The SRP Report (Kramer 2018) concludes that the benefits of reduced nutrient loading outweigh potential benefits of dilution from VWRF discharge, if indeed the VWRF does provide any dilution benefit (the VWRF discharge may also increase the concentration of nitrate and phosphate in the estuary). Therefore, less discharge from the VWRF would benefit the tidewater goby and juvenile steelhead by improving water quality in the lagoon.

Reductions in VWRF discharge volume and associated nutrient loads are critical to reduction in the current frequency and duration of adverse nutrient related water quality conditions within the SCRE because it is the total volume or “load” of nutrients that create water quality concerns within the SCRE; nutrient concentrations (in mg/L) in current VWRF discharges are low, and fall within NPDES Permit limitations and receiving water objectives.

With respect to other pollutants, the DEIR further explains that “[r]earing steelhead require moderately low salinity, relatively high dissolved oxygen, refuge from excessive water temperatures, and cover to avoid avian predation. Poor water quality conditions, including low DO or high temperatures, can interfere with rearing success and migration” (DEIR, p. 3.4-28). Based on the SRP Report, the TRT Report, the Phase 3 Study, and the monitoring and research dating back to 2002 that preceded the Phase 3 Study, the DEIR states:

Decreased discharge would also decrease the acreage of open water in the lagoon currently available to steelhead juveniles. However, a stable lagoon berm, somewhat higher and more variable salinity conditions within estuary, with lower nutrient loads and sufficient DO and water quality provides necessary rearing habitat for early life stages, and will disadvantage predators and non-native invasive species and competitors. Even if the habitat acreage of the deeper pool is decreased, shoreline refugia will develop similar to existing conditions. In addition, the reduction of non-native invasive species that prey on and compete with steelhead smolt under a Phase 1b average annual CDL of 0 – 0.5 MGD is important for steelhead survival and successful rearing. As a result, the SRP Report (Kramer 2018) and TRT Report (June 2018) conclude that the proposed projects would result in an improvement over existing conditions for steelhead (DEIR, p. 3.4-52).

Compared to existing conditions, the record supports the conclusion that the proposed projects discharge reductions associated with the proposed projects would result in improved water quality within the SCRE (DEIR, p. 3.4-52).

Response S6-7

This comment states that habitat conditions in the SCRE “could be unsuitable or lethal to any out-migrating juvenile steelhead during closed sand berm conditions due to a decrease in VWRF discharges.” As the DEIR states, “[m]igratory steelhead require open mouth conditions during their migration window (November to July)” (DEIR, p. 3.4-28). When the sand berm is closed, not only would migration be impossible due to the presence of the lagoon berm, under historical natural conditions, “steelhead would not be expected to migrate due to insufficient migration flows in the Santa Clara River mainstem” associated with dry weather, closed-berm time periods. (DEIR, p. 3.4-52). The sand berm is typically closed during summertime, dry weather conditions. Breaching during these conditions is considered to be “unseasonal” breaching.

Effects of Variations in CDL on Seasonal Breaching. The comment may intend to refer to reductions in VWRF discharge adversely affecting steelhead migration by altering the timing or duration of seasonal berm opening. The Phase 3 Study modeled and studied the secondary consequences of VWRF discharge levels on the timing of breaching and the duration of open-mouth conditions based dry, normal and wet years. All experts agree, as set forth in the Phase 3 Report, that seasonal berm breaching is primarily controlled by the timing and intensity of storms producing runoff, and the volume and rate of flow in the Santa Clara River (Stillwater Sciences 2018, Section 5.4.1, p. 247).

Timing of seasonal berm opening. Based on the modeling and analysis of berm breaching dynamics set forth in the Phase 3 Report, all experts agree that that higher VWRF discharge levels are generally predicted to result in slightly earlier seasonal berm opening because the additional water volume from VWRF discharges result in a higher SCRE water surface elevation. When a storm event causes rapid filling of the SCRE, breaching of the berm is triggered slightly earlier than in lower discharge/lower SCRE elevation circumstances due to the higher stage full elevation of the SCRE when runoff and river flows reach it (Stillwater Sciences 2018, Section 5.4.1, p. 247). However, the Phase 3 Study concludes that reductions in discharge levels to a CDL of 0-0.5 MGD only postpone seasonal berm opening in dry years and normal years by less than 1 day, compared to higher discharge scenarios. *Id.* The Phase 3 Study concludes that that reductions in discharge levels to a CDL of 0-0.5 MGD in wet years is likely to have variable effects with respect to postponing seasonal berm opening. The modeling predicted that reduced discharges during wet years could postpone seasonal berm opening by as much as 5 to 8 days; however, during wet years, the berm is already open much more often and for longer durations, so the predicted postponement is not anticipated to adversely affect steelhead migration. *Id.*

Duration of seasonal berm opening. Based on the modeling and analysis of berm breaching dynamics set forth in the Phase 3 Report, all experts agree that that variations in VWRF discharge generally do not influence duration of berm open conditions more than negligibly because closure of the beach berm following a breaching event is controlled by tidal influences, which are not impacted by VWRF discharges (Stillwater Sciences 2018, Section 5.4.1, p. 247). Accordingly,

variations in VWRf discharges only negligibly impact the duration of seasonal open-berm conditions. *Id.*

In total, during wet and normal years, the total time of open-berm conditions during the steelhead migration window may decline slightly (less than 2%) with reductions in discharge approaching an average annual CDL of 0-0.5 MGD, primarily as a result of postponing the timing of the first berm breach during the migratory period. In dry years, the total time of open mouth conditions during the migration period does not change appreciably with reductions in VWRf discharge (Stillwater Sciences 2018, Section 5.4.1, p. 249).

Based on this information, the TRT and SRP concluded that VWRf reductions in VWRf discharge are not anticipated to constitute a negative stressor on in-migrating or out-migrating steelhead (SRP 2018, Table 2, p. 8; TRT June 2018, p. 2).

This information is summarized in the DEIR (p. 3.4-52) as follows:

During open mouth conditions corresponding to wet weather, steelhead utilize the lagoon to initiate migration upstream to rearing habitat (November to May). Juvenile steelhead rear in the SCRE during the spring and summer months. The proposed projects would not reduce the opportunity for migration during open mouth conditions. During closed mouth conditions, when steelhead would not be expected to migrate due to insufficient migration flows in the Santa Clara River mainstem, reduced discharge would result in lower water levels in the lagoon. Lower water levels would protect against unseasonal breaching of the lagoon caused when the water level is too high, as under existing conditions. It would be unlikely that lower water levels could delay open mouth conditions during wet weather compared to recent conditions, but this would be similar to historic conditions where winter storm flows have filled the estuary before breaching the sand berm, which would also provide assurance to steelhead that sufficient flows were present upstream to successfully migrate to tributary spawning grounds. The slight delay in breaching, if any, that could be caused by lower lagoon water levels would not significantly affect migratory opportunities that are most likely to be successful during strong storm events where the sand berm remains open for long periods due to natural hydrology and flowing water in the river channel far up the watershed.

Effects of Variations in CDL on Unseasonal Breaching. The comment may intend to refer to the impacts of discharge reductions on berm breaching and rearing steelhead outside the migratory period.

While all experts concluded that the reductions in VWRf discharges do not significantly alter seasonal breaching of the berm in a manner that adversely impact steelheads during the migratory period, reductions in VWRf discharge as proposed by the project would reduce unseasonal breaching to the benefit the steelhead, tidewater goby, western snowy plover and California least tern. Under existing conditions, higher levels of VWRf discharge increase unseasonal berm breaching outside of the steelhead migratory period. The Phase 3 Report concludes that, while unseasonal breaches could not be modeled because they are typically anthropogenic, higher water elevation within the SCRE resulting from increased VWRf discharges reduce the “freeboard”

within the SCRE and bring the elevation of the berm height and water elevation into close proximity with one another (within 2 feet). These higher water elevations greatly increase the likelihood of unseasonal breaching due to manual trenching (Stillwater Sciences 2018, Section 5.5.7.1, p. 268). The SRP and TRT concluded that increased unseasonal breaching, which occurs more frequently when SCRE water surface and berm height approach the same elevation, is a major negative stressor for all four listed species (SRP 2018, Tables 1, 2, 3 and 4, pp. 7-9), is detrimental and sometimes catastrophic to goby and juvenile steelhead, and constitutes perhaps the most critical impact of the VWRf discharge on the SCRE (SRP 2018, p. 10, 15; TRT March 2018, Attachment 1, pp. 9-10). Accordingly, the SRP and the TRT recommend reductions in discharge to avoid unseasonal breaching, particularly in summer (SRP 2018, p. 4; Conclusion 3, pp. 25-26; TRT June 2018, p. 1).

As summarized in the DEIR, “[o]pen mouth conditions outside the migratory period, however, can harm or kill rearing steelhead, which are not physiologically prepared to enter the ocean” (p. 3.4-28). The DEIR notes that the “main risk of the existing discharge into the SCRE. . . is artificial berm breaching” (p. 3.4-29). This is the consistent conclusions of the Phase 3 Study, the TRT Reports, and the SRP Report, as well as the Phase 1 and 2 Studies and many years of scientific research by Entrix and other scientists preceding those reports. As the DEIR states:

The SRP Report concludes, consistent with the Phase 3 Study, that unseasonal berm breaching poses the greatest risk of adverse impacts on the fish that use the estuary. . . Artificial breaching during the crucial summer and early fall life stages of goby and steelhead pose the greatest risk to these species . . .

Juvenile salmon reside in the lagoons until they are ready to migrate to the ocean. Closed-mouth conditions protect the lagoon from ocean tides. When dry-weather breaches occur, the lagoon rapidly drains. Artificial breaching has three deleterious effects on sensitive native species and their habitat. First, rapid dewatering can leave fish isolated in small pools or trapped on mud/sand flats that were previously shallow water habitats. . . .

Second, rapid dewatering can transport fish out of the estuary to the ocean before they are ready for ocean conditions. Third, the influx of seawater rapidly increases the salinity within the estuary, when juvenile steelhead and tidewater goby are unable to tolerate salinity changes, especially in early stages of development. (DEIR, p. 3.4-50).

As a lead agency under CEQA, the City is constrained by scientific information and expert analyses and opinion in the administrative record. The record does not support the comment’s statement that reduced discharge during closed-berm conditions could be “unsuitable to lethal for out-migrating juvenile steelhead during closed sand berm condition due to a decrease in the VWRf discharges.” The record strongly supports the DEIR conclusion that reduced discharge during closed-berm periods outside of the migratory period would result in, among other ecological benefits, a benefit to juvenile steelhead rearing, and ecologically appropriate timing of out-migration of steelhead, and discharges equivalent to or greater than an average annual CDL of 0-0.5 MGD during closed-berm conditions would not adversely impact steelhead in- or out-

migration. See also Responses to Comment S6-6, S6-8, S6-10, S6-14, S6-15, S6-16, S6-17 and USFWS Response F1-5.

Response S6-8

The comment asserts that reductions in VWRf discharges associated with the proposed projects are likely to result in high levels of pesticides generally associated with surface water runoff and Santa Clara River flows to accumulate in the SCRE, and notes that pesticides are generally known to adversely alter benthic macroinvertebrates, reducing prey for steelhead, and to disrupt olfactory sensory neurons for steelhead.

No site specific data indicate that ambient pesticide concentrations in the SCRE are causing toxicity in the SCRE or that the risk of pesticide-induced toxicity would be higher if VWRf's discharges to the SCRE were significantly reduced. As discussed in response to S6-6 above, pollutants and water quality conditions of concern specific to the SCRE have been identified based on analysis of multiple years of data collected under the Phase 1, 2 and 3 Studies and multiple NPDES Permit monitoring program reports dating back to 2002, and are summarized as: high nutrient levels, low dissolved oxygen levels, and insufficient salinity levels within the SCRE. While pesticides are generally known to be present in surface water runoff and may be present at some times within the SCRE, pesticides are not known to create toxicity or other adverse water quality conditions in the SCRE based on the best available scientific information, and neither the Phase 3 Study, the SRP Report, nor the TRT Reports indicate that pesticides are a pollutant of concern within the SCRE. This is discussed further below.

If excess pesticides in urban and agricultural runoff are causing or contributing to toxicity in the SCRE, then the Regional Board, State Board and EPA have the necessary legal authority to address this problem at the source. At a minimum, if the waterbody is impaired by pesticides, it should be added to the state's 303(d) list and a TMDL should be established to control these pollutants at the source. Similarly, if federal or state resource agencies conclude that elevated pesticide concentrations in stormwater discharges are causing harm to endangered or threatened species, they also have the legal authority to prohibit any activity that may cause a "take" of these species.

In addition, all pesticides used in California must first be approved by the state Department of Pesticide Regulation (DPR). To receive such an approval, the agency must first conclude that, when used in accordance with the mandatory label conditions, the pesticide will not cause significant adverse effect on the environment. If the resource agencies believe that pesticides are posing a significant ecological risk, especially to endangered and threatened species, then the resource agencies should raise this concern with DPR so that the problem can be prevented at the source. The SWRCB is now in the process of developing a new Management Agency Agreement (MAA) with DPR highlighting the need to reassess many approved pesticides based on new and better information regarding potential adverse effects on the environment, including California's listed and sensitive species.

The comment may assume that VWRf discharges are diluting otherwise excessive pesticide concentrations in surface water runoff or Santa Clara River inflows, but that assumption is

similarly not supported by the best available scientific information set forth in the administrative record. See Response to S6-6 above. Instead, the SRP Report and the TRT Report (March 2018) conclude that the Phase 3 Report's allusion to minor benefits of the dilution of nutrient concentrations (only—pesticide dilution is not anticipated to occur in the existing condition) from potential perched groundwater inflows was not justified (SRP 2018, p. 11). The SRP Report found that any such dilution benefits are outweighed by the impact of the volume of current VWRF discharges, which contribute nutrient loads and dominant freshwater conditions within the SCRE. Therefore, the SRP and the TRT did not consider that there dilution of groundwater inflows provided enough benefit to water quality conditions within the SCRE to be considered as an important factor in determining an appropriate discharge reduction amount (SRP 2018, p. 11, pp. 15-16, p. 25, reason 2, p. 26, reason 4; TRT March 2018, Attachment 1, p. 7).

Furthermore, since no mixing zone has been authorized for VWRF discharges, it would be illegal to rely on dilution in the receiving water to demonstrate compliance with narrative toxicity objectives in the Basin Plan. It would be equally inappropriate to require VWRF to provide dilution in order to allow others to continue violating pesticide water quality standards.

With respect to macroinvertebrates, the Phase 3 Report analyzed benthic macroinvertebrate (BMI) monitoring data collected since 1997 for the SCRE. The data indicated that the BMI community in the SCRE is composed of organisms common to freshwater or estuarine environments, but tends to be dominated by only 3 or 4 invertebrate species that are tolerant of low salinity conditions created by VWRF discharges, and dynamic sediment conditions created by seasonal storm events, scour, and the variable open and closed-berm conditions that characterize the SCRE (Stillwater Sciences 2018, Section 3.6.1, p.142). In comparing SCRE BMI data to BMI community data in other similarly-sized estuaries within coastal southern California, the Phase 3 Report concludes that the composition of the SCRE BMI community is considerably different than the BMI community composition in other estuaries because the other estuaries (which had very similar BMI communities to one another) all exhibited far more saline or marine water quality conditions than the SCRE does. *Id.* SCRE BMI species are dominated by taxa that prefer freshwater, but are tolerant of variable brackish conditions. The dominance of these taxa is determined to most likely result from the prevalence of freshwater condition caused by existing VWRF discharges in much of the SCRE during prolonged closed mouth periods, and the low frequency of wave over wash and tidal exchange that occurs at the current SCRE stage full water elevation during closed-berm conditions (Stillwater Sciences 2018, Section 3.6.1, p.143).

The Phase 3 Report considered the potential for water quality impact to BMI within the SCRE, but determined that the data did not support a conclusion that water quality contaminants or sediment contaminates created toxicity or other issues for the community within the SCRE. Instead, the experts concluded that the SCRE BMI community, and particularly the diversity of species within that community, would likely benefit most from a reduction in closed-berm VWRF discharges that create longer and more frequent periods of salinity, and preserve or enhance wet weather, open-berm scouring within the SCRE (Stillwater Sciences 2018, Section 3.6.1, p. 144). The TRT also concluded that reduced discharges should benefit the BMI community within the SCRE, though for reasons that are unsupported by SCRE-specific water quality and BMI data (TRT March 2018, Attachment 1, p. 14). The SRP concluded that although reduced discharges

would reduce the area of foraging habitat for least terns and snowy plover, the reduction in foraging habitat would not be adverse due to other available foraging habitat and the likelihood of improved abundance and diversity of food sources provided by a more varied BMI community within the SCRE for the listed bird species (SRP 2018, p. 11, pp. 24-25, p. 26 reason 5).

Based on the best available scientific information, contrary to the assumption of the comment, reductions in discharge associated with the Proposed projects would not be expected to adversely affect the BMI community, which serves as the food source for steelhead, as well as California least tern and western snowy plover. Moreover, the potential for sub-lethal effects from pollutants on steelhead and other species within the SCRE were specifically evaluated by the Phase 3 Study, (Section 3.4.1.5), and concentrations of pesticides, metals and other pollutants that result in those types of effects are not predicted to increase to harmful levels within the SCRE as a result of reductions in VWRf discharge. *Id.* Instead, the Phase 3 Report, the TRT Reports, and the SRP report conclude that the health and diversity of the BMI community will improve, and water quality conditions will improve under reduced discharge conditions, benefitting the listed species. This information and conclusion are summarized in the DEIR (pp. 3.9-5 – 6).

Response S6-9

The comment recommends that a minimum average annual CDL of 1.9 MGD should be adopted as an alternative or “mitigation measure” based on the Phase 3 Report and as a “conservative best estimate” of flows necessary to maintain ecological functions of the SCRE. As discussed in Response S6-2, the proposed projects would result in ecological benefits, and mitigation measures are not required. The EIR concludes that, “[f]or purposes of CEQA significance conclusions, the project’s environmental impacts provide overall benefits to endangered species, resulting in habitat of greater quality than under existing conditions. As a result, impacts from the project would be less than significant under CEQA.” DEIR, p. 3.4-61.

The comment mistakenly assumes that Alternative 3 is the only alternative that would result in an average annual CDL of 1.9 MGD. In fact, the proposed projects incorporate the average annual CDL of 1.9 MGD during closed-berm conditions in Phase 1a. Because all experts (Stillwater Sciences, the SRP and the TRT) agree that VWRf discharge reductions to an average annual CDL of 1.9 MGD would benefit the SCRE, including its beneficial uses, water quality, listed species and habitats, and because CDFW recommended in its December 18, 2018, letter to the RWQCB that an average annual CDL of 1.9 MGD would provide a margin of safety for the ecological functions of the SCRE, Phase 1a of the proposed project is designed to implement this mutual recommendation. Because the proposed projects implement the recommended closed-berm average annual CDL of 1.9 MGD, adoption of an alternative or “mitigation measure” to do so is unnecessary.

Further, as explained in the DEIR (p. 3.4-63) and response to Comment S6-1 above, additional reductions during Phase 1b to an average annual CDL of 0–0.5 MGD during closed-berm conditions for the benefit of listed species and their habitats as recommended by the SRP Report and TRT Reports would occur *only* so long as the MAAMP confirms, subject to oversight of

CDFW, NMFS, USFWS and the RWQCB, the benefits of additional discharge reductions. The MAAMP was also added as a project design feature in response to CDFW recommendations in its December 18, 2018, letter. Therefore, a mitigation measure that retains an average annual CDL of 1.9 MGD is unnecessary to achieve CDFW's desired measure of safety.

The phasing of the Proposed projects, and the incorporation of the MAAMP into the design of the Proposed projects pursuant to BIO-5 and BIO-6, ensure a conservative approach to VWRf discharge reductions. If an average annual CDL of 1.9 MGD during closed-berm conditions is needed to support the ecological functions of the SCRE, it will be retained. However, unlike Alternative 3, the implementation of an average annual CDL of 1.9 MGD as Phase 1a of the proposed projects does not force the City either:

- to ignore the preponderance of scientific opinion that additional reductions to an average annual CDL of 0-0.5 MGD is likely to further benefit the listed species, habitats and ecology of the SCRE; or
- to commit at this time to Phase 1b implementation of an ocean desalination plant.

The proposed projects, unlike Alternative 3, allow the City to implement, with a margin of safety, those discharge reductions recommended by the SRP and the TRT to provide the maximum benefit to listed species and critical habitats of the SCRE. The proposed projects are also consistent with the recommendations of the Phase 3 Report, the TRT Report, and the SRP Report suggesting that adaptive management should be conducted as VWRf discharges are reduced, to address the highly complex, ever-changing conditions within the SCRE, including morphology, bathymetry, and status of invasive species, as well as the uncertainties and caveats with respect to the ecological benefits predicted to result from those discharge reduction based on available scientific information (Stillwater Sciences 2018, Section 5.6.5, pp. 314-315; TRT March 2018, Attachment 1, pp. 16-17; SRP 2018, p. 14 recommendation 1). In addition, if it is determined pursuant to the MAAMP in coordination with the regulatory agencies that ecological benefits of discharge reductions to the listed species and critical habitats within the SCRE are maximized, Phase 1b and Phase 2 project components may be tailored to implement those diversions/discharge reductions that provide maximum ecological benefit, while best avoiding and minimizing adverse environmental effects to listed species and their habitats.

It is important to clarify that the comment's preference for the average annual CDL conclusions of the Phase 3 Report is inconsistent with the commenting agency's previous emphasis on protecting steelhead. As the DEIR explains, the methodology of the Phase 3 Report was criticized by both the TRT and the SRP because it *deemphasizes* the significance of habitat for steelhead compared to the subsequent recommendations by the SRP Report and TRT Reports (March 2018 and June 2018). The DEIR quotes the TRT Comment's explanation of the differences in methodology (pp. 1-17 – 1-18), emphasis added:

The SRP focused their analysis on effects of the discharge on federal listed species under the Endangered Species Act: tidewater goby, steelhead, western snowy plover, and California least tern (also listed as an endangered by the state and a California Fully Protected Species). **While the AHP [a methodology used by the Phase 3 Study, but**

not used by the SRP] also considered RARE species as the most significant factor, it only comprised 35% of the final score, whereas the SRP's approach would have given these species 100%. Other beneficial uses such as wetlands and estuarine habitat had opposite trends to that of rare species, with increasing water discharge being more beneficial. This tended to drive the habitat acreage benefits more to the middle score range. Such results are expected when evaluating effects on a wide range of beneficial uses that, in some cases, have conflicting requirements.

. . . [T]he SRP makes a strong and compelling argument to focus on listed species. In that context, and recognizing that the RARE beneficial use is, by definition, the most important to preserve and enhance, the TRT supports the SRP recommendation to provide the best protection for these species.

As the DEIR observes, the Phase 3 Report methodology “result[ed] in a compromise that did not reflect the optimal conditions for steelhead and goby” (p. 3.4-45).

The proposed projects initially would implement in Phase 1a the VWRf discharge reductions recommended in the Phase 3 Study Report to attain an average annual CDL of 1.9 MGD during closed-berm conditions, and then in Phase 1b would reduce VWRf discharges further, subject to monitoring and adaptive management, results of which are reported to the regulatory agencies, to confirm predicted benefits to steelhead and other protected species and their habitats as supported by the SRP Report and TRT Reports .

The DEIR (p. 3.4-45) discusses the reasons for this approach in greater detail. This approach eliminates a need to commit immediately to Phase 1b implementation of a larger ocean desalination plant in order to satisfy the project objective of creating a reliable long-term local water supply. The phased implementation of discharge reductions, based on ensuring benefits to the SCRE, is one reason that the DEIR finds the proposed projects to be environmentally superior to the implementation of Alternative 3.

Response S6-10

The comment recommends water and sediment sampling for toxicity. Adoption of such a mitigation measure is not required by CEQA. Under CEQA, feasible mitigation measures and feasible alternatives that reduce environmental impacts and achieve project objectives are only required to be considered for adoption when there is a finding of significant adverse impact identified in the CEQA analysis and/or evidence underlying the CEQA analysis. Mitigation measures need not be adopted to address impacts that an EIR concludes are less than significant or are beneficial, for example because the project is designed to benefit sensitive species and their habitats. CEQA Section 21081; CEQA Guidelines Section 15091(a). *Environmental Protection Info. Ctr. v. Dept. of Forestry & Fire Protection* (2008) 44 C4th 459 (HCP was designed to benefit and reduce impacts to sensitive species, and so lead agency was not required to adopt findings on mitigation measures).

In the evaluation of scientific experts considering the best available scientific information, the proposed projects, including the phased VWRf discharge reductions and MAAMP component,

are expected to result in benefits to aquatic habitat types and the fish and avian listed species using those habitats within the SCRE by, among other things, improving water quality within the SCRE. See Responses S6-6 above, and citations therein. Accordingly, mitigation measures requiring additional toxicity sediment and water quality monitoring are not required pursuant to CEQA to address the effects of the proposed projects discharge reductions associated with the proposed projects on aquatic habitat types or species, including the snowy plover, California least tern, Southern California steelhead and tidewater goby, using those habitat types within the SCRE.

Nevertheless, as a project design feature, to assure that predicted ecological benefits of discharge reductions occur, the City has proposed to continue receiving water quality testing for toxicity within the SCRE, as well as toxicity testing of VWRf discharges for purposes of comparison to receiving water quality results. This monitoring will be conducted pursuant to the VWRf NPDES discharge permit conditions, as well as pursuant to the project design features outlined in BIO-5 and BIO-6.

The request for sediment sampling to test for existing levels of toxicity is likely to be unnecessary and ineffective for collecting useful data, based on the substantial sediment scouring that occurs seasonally within the SCRE during high Santa Clara River flows that open the berm, and in light of the complete elimination of SCRE sediments that occurs as a result of scour in very wet years. High Santa Clara River flows in wetter than normal years result in a geomorphological “reset” of the physical configuration of sediments within the estuary. As explained in the DEIR (3.4-60), the Phase 3 Report, SRP Report and TRT Reports all find that reductions in VWRf discharges associated with the proposed projects are not expected to significantly adversely impact the occurrence of toxicity within SCRE, whether resulting from sediments, upwelling groundwater, or surface water inputs. See Responses S6-6, S6-7 and S6-8 above. Instead, reducing discharges of tertiary-treated effluent to the SCRE proposed project is expected to improve water quality, a primary constituent element of the aquatic habitats for all four listed species, through nutrient load reductions, and related dissolved oxygen increases, and improvements in salinity.

Response S6-11

The comment notes that, as described in the DEIR (p. 3.6-9), the Oxnard Basin is designated as a critically overdrafted basin, and states that the DEIR should analyze impacts of injection and extraction of purified water into the Oxnard Basin on groundwater depended ecosystems (GDEs) that rely upon the Oxnard Basin. In fact, the DEIR has identified the affected deep aquifer and determined that it does not come into contact with the more surficial, perched groundwater that supports phreatophytic vegetation and GDEs. No additional monitoring or adaptive management is needed.

As shown in Figure 3.9-2 and described in the DEIR (p. 3.9-9, 3.9-13), the proposed projects would inject and extract water on a “put and take” basis into a deep and confined portion of the Oxnard Plain Aquifer that is isolated from more shallow groundwater that is supporting the existing GDEs identified in the comment. Injecting and extracting water at these depths would not affect the surface perched aquifer supporting phreatophytic vegetation in and around the lower Santa Clara River and SCRE,

Response S6-12

As discussed in the DEIR (p. 3.9-77), the proposed projects would inject and extract water into the deep Oxnard Plain Aquifer, which is unrelated to the perched aquifer supporting the GDEs, on a “put and take” basis. In other words, the proposed projects require injection of purified water within the aquifer prior to extracting water, resulting in a net balance of water. Due to injection of purified water, the proposed projects would not contribute to overdrafting of the basin or related subsidence. Furthermore, the project requires a well permit from Fox Canyon Groundwater Management Agency and would be identified in the Fox Canyon Groundwater Sustainability Plan (GSP) for the Oxnard Plain Aquifer. The injection and extraction associated with the proposed projects would be subject to a demonstration of consistency with the GSP that is currently under development to assure sustainable management of the Oxnard Plains Aquifer. A description of the Sustainable Groundwater Management Act and role of GSPs in managing groundwater is included in the DEIR on page 3.9-48.

Similarly, because the proposed projects incorporate management of the duration and flow of injected water, they would not result in reduced storage capacity of the groundwater basins that could push water out of the system or promote saltwater intrusion. The relatively confined area of project influence would be limited to the area immediately surrounding the project wells where other pumpers are not impacted. Beyond the influence of the injection system, groundwater flow would not change and pumpers would not lose access to groundwater due to the proposed projects.

Furthermore, the aquifer used by the proposed project is a confined aquifer and does not support GDEs supporting phreatophytic vegetation. Please see Response S6-4.

As suggested by the commenter, the DEIR analyzes on page how groundwater activities, including injection and extraction within the Oxnard Plain confined aquifer, would be regulated by the RWQCB through the Title 22 IPR regulations with the oversight of the Fox Canyon Groundwater Management Agency and the City as a contributing member of the Groundwater Sustainability Agency (GSA).

Response S6-13

The aquifer used by the proposed projects is a deep, confined aquifer and does not support GDEs associated with the lower Santa Clara River in the vicinity of the proposed wells, including phreatophytic vegetation. Please see Response S6-11. Contrary to the paragraphs in the bracketed comment entitled “Why impact would occur,” groundwater extraction would not lower groundwater tables, and groundwater recharge would not raise local groundwater table elevations. The proposed projects would not cause subsidence or increased saltwater intrusion. The suggested impacts on habitat communities would not occur.

The DEIR (p. 3.9-57) considers the potential for impacts of proposed projects injection and extraction of purified water into the deep aquifer associated with the proposed projects on the quality, and quantity and elevations of groundwater. As described in the DEIR and the technical appendices provisions cited therein, injection and extraction of purified water produced by the

AWPF into the Oxnard Plain deep aquifer would not impact any aquatic species, their habitats or GDEs because the deep aquifer is physically separated from the confined, perched aquifer that supports GDEs. The Oxnard Plain deep aquifer is separated from the perched aquifer by depths of up to 500 feet, and by a clay layer that confines the perched groundwater supporting the GDEs (DEIR, Figure 3.9-2, p. 3.9-9).

Response S6-14

The comment states that (A) the proposed projects may cause significant adverse impacts on species in the SCRE and Santa Clara River due to reductions in aquatic species' habitat and/or degradation of the quality of habitat, which may result in reduced reproductive capacity, population declines, or local extirpation of rare, special status or threatened or endangered aquatic species; and (B) that the DEIR must analyze potentially significant impacts on aquatic species and must prescribe a mitigation measure that requires current focused surveys for fish, amphibians and marine species.

This comment is based on an assumption that is not supported by the record. It assumes that the proposed projects would result in reductions in both quality and quantity of aquatic habitats within the SCRE, and then proposes mitigation for the assumed adverse impacts to fish, amphibians and marine species. It is important to clarify that the DEIR and its technical appendices fully evaluated not only the potential for significant adverse impacts on fish, amphibians and marine species, but also the potential for significant adverse impacts on the California least tern and the snowy plover that might result from reductions in quantity of aquatic habitat types, because those species also use aquatic habitats, i.e. open water, freshwater marsh, and mudflat habitat types, for foraging (Stillwater Sciences 2018, Section 3.7.2, pp 172-185).

A. DEIR Analysis of Proposed Projects Impacts on Sensitive Species within the SCRE and Santa Clara River Due to Reduction or Degradation of Aquatic Habitats. A primary purpose of the DEIR is to present the lengthy scientific analyses that have been conducted to evaluate potential significant adverse impacts to fish and avian species within and near the SCRE that could result from degradation of the quality, and/or reductions in the quantity of aquatic habitat types within the estuary, i.e., reductions in acres and depth of open water, and acres of tidal mudflat and freshwater marsh habitats (DEIR pp. 3.4-51 – 3.4-59, pp. 1-7 – 1-16).

Analysis of Proposed Projects Impacts on Aquatic Habitats within the SCRE and Related Species. The DEIR summarizes the expert evaluation of adverse impacts that may result from losses in acreage and depth of open water, and acreage of tidal mudflat and freshwater marsh habitats within the SCRE based on modeling performed for the Phase 3 Study Report, which losses are summarized in Table 5-5 (Stillwater Sciences 2018, p. 237). Contrary to the assertion in the comment, however, the DEIR concludes that reductions in VWRP discharges to the SCRE associated with the proposed projects would benefit the quality of aquatic habitat types within the SCRE, and that the fish and avian species using these habitat types would benefit from the proposed projects, notwithstanding predicted reductions in the quantity of those habitats types within the SCRE. This conclusion is based on the best available science set forth in the Phase 3 Study Report, the TRT Reports (March

2018 and June 2018), and the SRP Report See Responses S6-6, S6-7, S6-8, S6-9, S6-10, S6-15, S6-16, and S6-17 and information cited therein.

Pursuant to CEQA, the City is required to determine whether a project may have a significant adverse physical effect on the environment based on substantial evidence in light of the whole record, including the information set forth in the DEIR and its technical appendices (CEQA, Public Resources Code Section 21082.2(a); CEQA Guidelines, Sections 15064, 15065, 15091(b), 15121(c)). Unsubstantiated opinion is not substantial evidence, but instead substantial evidence includes facts, and expert opinion predicated upon the facts (CEQA Section 21082.2(c)). The DEIR must explain in the impacts analysis the basis for its findings regarding the nature of the Proposed projects' physical effects of the proposed projects on the environment, which basis may be comprised of the informed judgment of experts. *Banning Ranch Conservancy v. City of Newport* each 92021) 211 CA 4th 1209, 1233. With respect to substantive CEQA comments regarding project activities within the expertise and jurisdiction of a Responsible or Trustee Agency, CEQA Guideline Section 15068(d) requires that "[t]hose comments shall be supported by specific documentation."

As also discussed in depth in Responses S6-6, S6-7, S6-8, S6-9, S6-10, S6-15, S6-16, and S6-17, all scientific reports set forth as technical appendices to the DEIR conclude that all four listed species and the SCORE aquatic habitat types they depend upon, including the tidewater goby, the Southern California steelhead trout, the California least tern and the snowy plover, each of which was analyzed individually and as focal indicator species for all sensitive species using the corresponding aquatic habitat types within the SCORE, would be benefitted by VWRf discharge reductions associated with implementation of Phase 1a of the proposed projects to an average annual CDL of 1.9 MGD during closed-berm conditions. The scientific experts based their conclusions on many years of monitoring data, information, and quantitative and qualitative analysis set forth in the Phase 3 Report, as supplemented by additional sources relied upon in the SRP Report and the TRT Report (March 2018). In response to this comment **Figure 10-3** has been added to the Final EIR to provide a succinct exposition of the studies, based on over a decade of monitoring and scientific analysis, that support the EIR's conclusions.

The best available scientific information for all fish species using the SCORE (Stillwater Sciences 2018, Table 3-20 p. 110, Table 3-28 p. 140), including the listed tidewater goby and southern California steelhead, consists of monitoring data, information and analysis conducted from 2002 through 2017, which is summarized in the Phase 3 Report (Section 3.6, pp. 141-172), and set forth in the studies cited therein. For the listed California least tern and the snowy plover, the best available scientific information consists of monitoring data and information collected from 2000 to 2017, as summarized in the Phase 3 Report (Section 3.7, pp. 172-186). Based on that robust scientific information, all scientific experts determined that the Phase 1a reductions in discharge would be expected to benefit the species using SCORE aquatic habitat types, despite the reduction in some habitat quantities predicted by Phase 3 Study modeling.

2000 NPDES Permit

- Metals Translator (2002 Entrix)*
- Discharge Effects on Critical Habitat Distribution (2002 Entrix)*
- Toxicology, Ecology, Hydrology (Nautilus 2005)*
- Water Budget and Salinity (Kamman 2007)*
- Resident Species Study (Entrix 2007)*
- Metals Translator (Entrix 2007)*
- Water Effects Ratio (Nautilus 2007)*

2008 NPDES Permit

- Phase I Estuary Study (Stillwater 2011)*
- Phase 2 Estuary Studies (Stillwater 2013)*


* Integrated into Phase 3 Study
± Integrated into DEIR

2013 NPDES Permit

- Phase 3 Estuary Studies (2018)[±]
- Nutrient, DO, Toxicity Study (2018)[±]
- Groundwater Special Studies (2018)[±]

TRT and SRP Reports[±]

- See Bibliographies
- 2008 NMFS United Water Conservation District BO
- United Water Conservation District Fish Passage 1933-2014 (Booth 2014)
- United Water Conservation District Fish Passage (Booth Howard 2014)
- USFWS and NMFS critical habitat designations, recovery plans, final rules, status reviews

- 
- Continued VWRF **Discharge** Level (**CDL**) to Estuary
 - Maximum Environmentally Protective **Diversion** Volume (**MEPDV**) = Influent Capacity for Advanced Water Purification Facility (AWPF)

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This conclusion was based on the fact that the quality of aquatic habitat types would be improved, particularly with respect to primary constituent elements or primary biological features of the habitat types particularly relied upon by the listed fish and avian species using aquatic habitat types within the Estuary (Stillwater Sciences 2018, Sections 5.6.2.1-5.6.2.4; TRT March 2018, Attachment 8 pp. 4-6, 9-14, p.1; SRP 2018, *inter alia*, pp.11-13, 14-23). Further, the SRP and TRT (which comprise a majority of the experts and those experts who were not serving as the City's consultants), concluded that implementation of Phase 1b proposed projects reductions in VWRP discharge to an average annual CDL of 0-0.5 MGD during closed-berm conditions would benefit each of the listed species for the same reasons, i.e., because the quality of remaining aquatic habitat types used by the listed species would improve even if overall aquatic habitat quantity is reduced. *Id.* See also, Responses S6-6, S6-7, S6-8, S6-9, S6-10, S6-15, S6-16, and S6-17.

The DEIR analysis of effects of VWRP discharge reductions Proposed projects associated with the proposed projects on the three aquatic habitat types within the SCRE (open water, mudflat, and freshwater wetland), summarizes this best available scientific information regarding anticipated benefits to the quality of those habitat types, and adopts the conclusion of the scientific experts who opined that the proposed projects and associated discharge reductions would improve the quality of aquatic habitat types within the estuary, and would therefore benefit the avian and fish species using those habitat types notwithstanding reductions in quantity (acres) of those habitat types (DEIR pp. 3.4-51 – 3.4-59, pp. 1-7 – 1-16).

Analysis of Proposed Projects Impacts on Groundwater Dependent Aquatic Habitats and Related Species. The DEIR also considers the potential for impacts, and particularly impacts of the proposed injection and extraction wells, on the quality and quantity of groundwater (p. 3.9-57). As described in the DEIR and the technical appendices provisions cited therein, and as discussed in Responses S6-4, S6-5, and S6-6 above, injection and extraction of purified water produced by the AWP into the Oxnard Plain deep aquifer would not impact flows within the Santa Clara River adjacent to or downstream of the groundwater wells, or any of the aquatic species that may be using that habitat, because the deep aquifer (into which purified water would be injected, and from which purified water would be extracted) is physically separated from the confined, perched aquifer that supports GDEs by depths of up to 500 feet, and by a clay layer that confines the perched groundwater supporting the GDEs (DEIR, Figure 3.9-2, p. 3.9-9). As a result, based on substantial evidence, including quantitative and qualitative scientific analysis by expert hydrogeologists set forth in the DEIR on page 3.9-77, the DEIR concludes that the proposed projects would **not** result in a significant adverse impact on groundwater quantity or lower water levels that could potentially adversely affect aquatic habitats, including open water, riparian, or freshwater wetland, within the Santa Clara River in the vicinity of the proposed injection/extraction wells. Furthermore, the DEIR notes on page 3.9-48 that the groundwater basin would be subject to permitting by, oversight and management of the GSA, whose responsibility it is to prevent undesirable effects including impacts to GDEs. The proposed projects would be included in the GSP as a project subject to oversight, to ensure GDEs are not adversely affected. As noted on page 3.9-77 the proposed projects would provide additional purified

water to enhance beneficial uses of existing groundwater supplies, which would benefit sustainable management practices

DEIR Analysis Compared to Assumptions of Comment. In contrast to the impacts analysis and conclusions of environmental benefit set forth in the DEIR, the conclusions in the comment that “Project implementation could substantially reduce aquatic species habitat and/or degrade the quality of habitat, which may cause aquatic species populations to drop below self-sustaining levels” in the SCRE and or the Santa Clara River are unsubstantiated, and contradict the SRP Report, the TRT Reports (March 2018 and June 2018), and the Phase 3 Study. As a lead agency, the City must, consistent with the requirements of CEQA, base the DEIR aquatic habitat and species impacts analysis and conclusions of benefit and significance of impacts on the available technical and scientific information, and expert opinion substantiated by such evidence. In the event that the commenter has contrary data and information on which to base its opinion regarding significance of impacts to aquatic habitat types and related species within the SCRE and its vicinity, the City requests that such information be submitted to the City.

- B. Sufficiency of DEIR Impacts Analysis Methodology and Mitigation Measures.** The comment recommends that focused, protocol fish surveys be conducted within the SCRE and upstream to support the DEIR findings of proposed projects beneficial effects on listed aquatic species, as a mitigation measure that should be incorporated into the DEIR. Adoption of the suggested methodology for conducting the impacts analysis and/or of such a mitigation measure is not required by CEQA because the proposed projects would benefit listed species, making mitigation unnecessary, and because there is no legal requirement that a lead agency preparing an EIR must undertake protocol-level survey methodologies to support an impact analysis, provided that the methodology used to conduct the impacts analysis is supported by substantial evidence. *Assn. of Irrigated Residents v. County of Madera* (2003) 107 CA 4th 1383, 1396.

Site-specific analysis conducted by scientific experts, which forms the basis of the DEIR impacts analysis, is considered sufficient to support an impacts analysis in an EIR, even in the absence of protocol surveys. *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 CA 4th 1209, 1233.

As described in Response S6-6 above, the DEIR analysis of impacts to aquatic habitat types and related species relies on both protocol and non-protocol monitoring reports, data, information and analysis collected over the course of 15 to 17 years. These data and reports were summarized and quantitatively and qualitatively analyzed in the Phase 3 Study Report. This information and these analyses were then further augmented with data from both regional monitoring surveys and local monitoring surveys, as well as the knowledge and expertise of the TRT and the SRP in producing the TRT Reports (March 2018 and June 2018) and the SRP Report.

The DEIR methodology for evaluation of effects on aquatic habitats and related species adopts the methods recommended by the SRP (2018, p. 5), and Stillwater Sciences (2018,

Section 3.5). The approach to developing the aquatic habitats impacts analysis and conclusions of the DEIR is appropriate because:

- the scientific experts evaluating the information considered the use of the extensive body of work completed on the SCRE and the ecology of the sensitive species to be appropriate because it provides a long-term understanding of SCRE aquatic habitat conditions, and of related negative stressors and beneficial drivers for the various life stages of the listed species depending on those habitats, rather than a “snapshot in time” of habitat and species conditions at a particular point in recent history (SRP 2018, pp. 5-9); and
- protocol fish survey methodologies (including snorkeling, ‘electrofishing’ and seining methods) may result in “take” of the surveyed species contrary to the prohibitions of the state and federal Endangered Species Acts.

The DEIR impacts analysis considers the extensive body of knowledge already developed regarding the SCRE (SRP 2018, p. 5) rather than relying solely on the results of focused surveys at a single point in time. By using this more comprehensive approach, the DEIR impacts analysis is more conservative and protective of species than an analysis based upon focused survey results, particularly given that protocol surveys for certain sensitive species have been negative when conducted within the SCRE in the past. Notwithstanding any past negative survey results, the DEIR impacts analysis adopts the approach of the Phase 3 Study, and presumes the presence and current occupation of the SCRE by sensitive and listed fish and avian species historically found within the SCRE, even when the current likelihood of occurrence is low and/or has not been documented recently or by protocol surveys (Stillwater Sciences 2018, Section 3.6, pp. 141-172; DEIR, pp. 3.4-27 – 3.4-29). By presuming the current occupation and suitability of aquatic habitat types by listed and sensitive species, including steelhead, goby, least tern and snowy plover, the DEIR errs on the side of overstating potential impacts to, and conservatively protecting sensitive species.

The DEIR relies on site-specific analysis conducted by scientific experts, whose conclusions are based on comprehensive data, information and analysis regarding aquatic habitats and related species in and near the SCRE collected over the course of the past 17 years and memorialized in the Phase 3 Study Report, the TRT Reports (March 2018 and June 2018) and the SRP Report to evaluate potential adverse impacts to aquatic habitats and species. Such an analysis is sufficient under CEQA, even in the absence of protocol surveys. Accordingly, CEQA does not require additional fish and aquatic species surveys to address the effects of the proposed projects on aquatic habitat types or on the species, such as the steelhead or tidewater goby, using those habitat types within the SCRE or in the Santa Clara River adjacent to the proposed wells.

As discussed above, BIO-5 and BIO-6 require the development and implementation of the MAAMP as a project design feature to confirm predicted ecological benefits of discharge reductions associated with the proposed projects. BIO-5 and BIO-6 require additional surveys and monitoring for aquatic habitat types and related species. Implementation of the MAAMP assures that the City’s scientific monitoring and analysis of aquatic habitats and related species continues during implementation of Phase 1a (BIO-5) and Phase 1b (Bio-6). The

MAAMP is to be developed and implemented in coordination with CDFW pursuant to BIO-5 and BIO-6. While additional protocol surveys for aquatic species are not required by CEQA based on determinations by Stillwater Sciences, the TRT and the SRP that the appropriate information to rely upon for purposes of analyzing impacts of discharge reductions associated with the proposed projects to aquatic habitats and species is set forth in the Phase 3 Report, the implementation of BIO-5 and BIO-6 will provide CDFW with ongoing additional survey data regarding aquatic habitats and species, including information regarding the listed tidewater goby, Southern California steelhead, California least tern, and snowy plover, and related aquatic habitat types used by those species. .

Response S6-15

This comment asserts that (A) the proposed projects may cause significant adverse impacts to sensitive avian species based on reductions in the quantity of their habitats or degradation of the quality of habitats that would reduce avian reproductive capacity, or contribute to population declines, or local extirpation of rare, special status or threatened or endangered aquatic species; and (B) that focused surveys for sensitive avian species must be conducted within the SCRE adjacent to groundwater pumping well sites.

The statement regarding surveys adjacent to groundwater pumping wells appears to be based on the misconception addressed in Response S6-15. Groundwater pumping would only affect a deep, confined aquifer and would not affect any avian habitat. Similar to the previous comment, this comment is based on assumptions that are not supported by the record.

A. DEIR Analysis of Proposed Projects Impacts on Sensitive Avian Species within the SCRE and Santa Clara River Due to Reduction or Degradation of Habitats. As a preliminary matter, as discussed in Response S6-7 above, CEQA requires the EIR to analyze impacts based on scientific evidence, and expert opinions substantiated by such evidence. The assumptions stated in the comment that the proposed projects may result in a significant adverse impacts related to reduced reproductive capacity, population declines, or local extirpation of rare, special status or threatened or endangered avian species such as the least tern and snowy plover and other rare, special status or threatened or endangered avian species using riparian habitat types is unsubstantiated and contradictory to the SRP Report, TRT Reports (March 2018 and June 2018), and Phase 3 Study Report scientific analysis and conclusions. In the event that the commenter has contrary data and information on which to base its opinion regarding the significance of impacts on these sensitive species and the habitats within and near the SCRE on which they depend, the City requests that such information be submitted to the City.

Also as a preliminary matter, the western snowy plover and California least tern are primarily associated with different habitats than the other avian species mentioned in the comment. As summarized in the DEIR (pp. 3.4-28 through 3.4-29), the western snowy plover and California least tern are primarily associated with open beach and foredune habitat for nesting, and with mudflat and open water aquatic habitat types for foraging (Stillwater Sciences 2018, Section 3.7.2 pp. 175-186). As summarized in the DEIR (p. 3.4-27) the southwestern willow flycatcher, least Bell's vireo, yellow warbler, yellow chat, and any

foraging raptors are primarily associated with riparian and riparian riverwash habitat types (Stillwater Sciences 2018, Section 3.7.1.4 pp. 174-175).

DEIR Analysis of Impacts on Least Tern and Snowy Plover and Related Habitat Types.

As summarized the DEIR, the Phase 3 Study concluded, and all scientists agree, that nesting habitat for the least tern and snowy plover is not likely to be adversely affected by VWRf discharge reductions associated with the proposed projects. More specifically:

- Open beach habitat area is likely to increase due to implementation of the Proposed projects from 47 acres to 53 acres in Phases 1a and 1b (Stillwater Sciences 2018, Table 5-5, p. 237).
- Foredune habitat will remain the same at about 76 acres or will increase slightly. *Id.*

More importantly, the quality of these nesting habitats is also expected to improve with implementation of proposed projects. This result is predicted not just because nesting habitat area increases, but also because, for example, stage full SCRE water surface water elevations would be lower in the post-project condition, reducing the potential for nests formed in these habitat areas to flood when the berm closes, or to be washed out during unseasonal berm breaches (Stillwater Sciences 2018, Section 5.5.7.2, pp. 273-277; SRP 2018, pp. 24-26; TRT March 2018, Attachment 1, p. 16).

Also, as discussed in Responses S6-6, S6-7, S6-8, S6-9, S6-10, S6-16, and S6-17, despite the reductions anticipated in open water and mudflat aquatic habitat types used for foraging by the least tern and snowy plover, improvements in post-project habitat quality are expected to benefit the listed birds. For example, the abundance and diversity of food resources are expected to improve with improved water quality and salinity, providing a benefit, on balance, to the listed bird species (Stillwater Sciences 2018, Section 5.5.7.2, pp. 273-277; SRP 2018, pp. 24-26; TRT March 2018, Attachment 1, p. 16).

Accordingly, the DEIR adopts the impacts analysis and conclusions of the scientific experts, based on the best available scientific information set forth in the Phase 3 Study Report, the TRT Reports and the SRP Report, that the Proposed projects will benefit, and will not result in significant adverse impacts to, nesting or foraging habitats within or near the SCRE used by the California least tern and the western snowy plover (DEIR, pp. 3.4-53 – 3.4-54).

DEIR Analysis of Impacts on Sensitive Avian Species Associated with Riparian Habitat Types. With respect to the other avian species mentioned in the comment associated with riparian and riparian riverwash habitat types, including the southwestern willow flycatcher, least Bell's vireo, yellow warbler, and yellow breasted chat, and foraging raptors, the Phase 3 Study estimates that implementation of Proposed projects VWRf discharge reductions associated with the proposed projects will result in substantial increases in the quantity of riparian habitat types that support these native, sensitive avian species.

Riparian habitat area is estimated to increase between 17 and 23% over existing conditions depending on the phase of the proposed projects and related level of VWRf discharge reductions (Stillwater Sciences 2018, Table 5-5 p. 237). Riparian riverwash habitat is

expected to increase between 33% and 313% over existing conditions, depending on the phase of the proposed projects and related level of VWRf discharge reductions. Id. The increase in quantity of riparian habitat is expected to benefit least Bell's vireo, southwestern willow flycatcher, yellow breasted chat, yellow warbler, and foraging raptors, all of which use the riparian habitat types (Stillwater Sciences 2018, Section 5.5.7.2, pp. 273-274; DEIR, p. 3.4-54). Moreover, the quality of riparian habitat types is also expected to improve in post-project conditions, benefitting the avian species identified in the comment due to improvements in riparian related ecological functions (Stillwater Sciences 2018, Section 5.5.7.2, pp. 273-274, Section 5.5.11, pp. 289-291).

Although these increases of riparian and riparian riverwash habitats are expected as a result of VWRf discharge reductions associated with the proposed projects, based on this comment and a similar comment raised by the California Coastal Commission, the City carefully reviewed all potential direct and indirect impacts to riparian and riparian riverwash habitat types that might result from facilities related components of the proposed projects other than VWRf discharge reductions (e.g., construction of pipelines, AWPf, groundwater wells, etc.) Based on that review, it is important to note that approximately 10 acres of arroyo willow habitat have been identified on the potential Treatment Wetlands Site located east of the VWRf, and least Bell's vireo were heard in the area. It is unclear if the vireo were nesting or passing through that area. A Technical Memorandum summarizing the results of the April 2019 field survey is included in Appendix G of the Final EIR. The survey concludes that approximately 10 acres of the site contains habitat suitable for least Bell's vireo, and that the vireo may be nesting currently in the area. In addition, approximately 1.74 acres of dune habitat is located in the northeast corner of the site.

To achieve water quality goal of 4 mg/l nitrate, the City would employ a combination of upgrades at the VWRf and would construct treatment wetlands during Phase 1b as noted on page 2-12 of the Project Description. The City would first design wetlands on the parcel in areas that would avoid or minimize impacts to sensitive habitat. The coyote brush/saltbrush areas of the proposed site do not contain sensitive habitats or support sensitive species. An area of approximately 10 acres on the southern portion of the site shown in **Figure 3.4-10** could be utilized without affecting any sensitive habitat and may be sufficient to meet the project's tertiary-discharge water quality goals. However, if more than 10 acres of constructed wetlands are needed, sensitive habitat areas such as arroyo willow may be affected.

Mitigation Measure BIO-8 would require that any removal of the sensitive habitat areas be compensated pursuant to BIO-8, and in addition, be properly permitted under the state and federal Endangered Species Acts as required by law. Mitigation Measure BIO-8 provides as follows:

BIO-8: Prior to constructing treatment wetlands as a part of Phase 1b, the City shall survey the site for the presence of sensitive habitats or sensitive species. If sensitive habitats are identified that would be affected by the construction of the new treatment wetlands, the City shall compensate for such impacts by establishing riparian habitat

through establishment and preservation of riparian habitat at a minimum ratio of 1:1, or at such higher ratio as may be required by USFWS and CDFW pursuant to consultation with those agencies pursuant to the federal and state Endangered Species Act requirements.

Compensatory habitat may be established and conserved onsite. The treatment wetlands would provide opportunities for establishment of riparian habitat at the edges of the treatment cells or within designed islands. If additional acreage is required beyond that which can be incorporated into the treatment wetlands design, then riparian habitat might also be established and conserved offsite. Offsite compensation opportunities may be achieved within the SCRE since the modeling of discharge reductions predicts a substantial increase in riparian habitat within the SCRE as a result of VWRf discharge reductions.

To achieve compensatory mitigation credit for new habitat onsite or offsite within the SCRE, the City shall document the increase in riparian habitat at the mitigation site as compared to existing conditions over a period of five years. The City would also document that the new habitat is suitable for least Bell's vireo occupation based on standard metrics related to PCEs identified for least Bell's vireo habitat suitability, namely the acreage of canopy cover, complexity of sub-canopy vegetation structure, and opportunity for new vegetation recruitment. The City would document the new habitat acreage and ecological values created by mitigation performed within the Natural Treatment Wetlands site pursuant to a 5-year Habitat Management and Monitoring Plan, and may document new riparian habitat acreage and ecological values created within the SCRE as part of the Monitoring, Assessment, and Adaptive Management Plan (MAAMP) to be implemented as Mitigation Measure BIO-6. In the event that sufficient riparian habitat to mitigate for all riparian habitat losses is not created onsite and/or within the SCRE, the City shall provide additional compensatory necessary to attain the ratio of at least 1:1 through the purchase of mitigation bank credits and/or the creation of additional riparian habitat, as determined through consultation with USFWS and CDFW.

Based on the Phase 3 Study Report and scientific opinions based on that report, the DEIR concludes that the substantial net increase in riparian habitat quantity and improved ecological functions of the far larger riparian habitat areas within the SCRE assure that the proposed projects would not result in significant adverse effects on riparian habitat or on the sensitive avian species that could occupy and use that habitat in and near the SCRE (DEIR p. 3.4-54). Mitigation Measure BIO-8 would ensure the avoidance or mitigation of any impacts on the proposed Harbor Site.

- B. Sufficiency of DEIR Impacts Analysis Methodology and Mitigation Measures.** The comment recommends that focused, protocol avian surveys be conducted within the SCRE and upstream to support the DEIR findings of the proposed projects' effects on sensitive listed avian species, and/or that such surveys must be required pursuant to a mitigation measure incorporated into the DEIR. Adoption of the suggested methodology for conducting

the impacts analysis and/or of such a mitigation measure is not required by CEQA for two reasons.

First, as also discussed in Response S6-7 above, there is no legal requirement that a lead agency preparing an EIR must undertake protocol-level survey methodologies to support an impact analysis, provided that analysis methodology used is site-specific, approved by scientific experts, and supported by substantial evidence.

The DEIR relies on site-specific analysis conducted by, and the conclusions of scientific experts based on comprehensive data, information and analysis regarding sensitive avian species and their habitat types within and near the SCRE, collected over the course of the past 17 years and memorialized in the Phase 3 Study Report, the TRT Reports (March 2018 and June 2018) and the SRP Report to evaluate potential adverse impacts to sensitive avian species. Such an analysis is sufficient under CEQA, even in the absence of protocol surveys.

Second, as also discussed in Response S6-7 above, adoption of an avian protocol survey mitigation measure is not required by CEQA because:

- Based on the opinion of scientific experts considering the best available scientific information, the proposed projects are expected to benefit sensitive avian species and the quality, and in the case of riparian and riparian riverwash habitat, the quantity of their habitats, and the proposed projects will not significantly adversely impact those habitat types or species; and
- The DEIR impacts analysis relies on both protocol and non-protocol monitoring reports, data, information and analysis collected over the course of 15 to 17 years, summarized in the Phase 3 Study Report and augmented with data from regional and local monitoring surveys, as well as the knowledge and expertise of Stillwater Sciences, the TRT and the SRP, and presumes the presence of sensitive avian species.

While development of the treatment wetlands on the Natural Treatment Site might affect sensitive habitat, Mitigation Measure BIO-8 would ensure that any impact is avoided and minimized, and fully mitigated. Consequently, pursuant to CEQA, no additional mitigation measures are warranted.

Although no additional mitigation measure requiring an avian protocol surveys is required under CEQA, the development and implementation of the MAAMP as a project design feature pursuant to BIO-5 and BIO-6, and implementation of BIO-8 for the Natural Treatment Wetlands Site are anticipated to include performance of additional surveys and monitoring for sensitive avian species and related species. Implementation of the MAAMP assures that the City's scientific monitoring and analysis of sensitive avian species and related habitats within and near the SCRE continues during implementation of Phase 1a (BIO-5) and Phase 1b (BIO-6). The MAAMP is to be developed and implemented in coordination with CDFW pursuant to BIO-5 and BIO-6. Similarly, BIO-8 requires additional surveys of the Natural Treatment Wetlands Site prior to construction of the wetlands during Phase 1b, and consultation with USFWS and CDFW if any listed avian species are determined or presumed to be present. As a result, additional survey data regarding sensitive avian species, including

information regarding snowy plover, California least Tern, southwestern willow flycatcher, least Bell's vireo, yellow warbler, yellow breasted chat, and foraging raptors, would be collected and shared with CDFW pursuant to the implementation of BIO-5 and BIO-6, as well as BIO-8.

Response S6-16

This comment summarizes information from DEIR (p. 3.4-59), which states that the proposed projects are predicted to reduce the acreages of aquatic habitat types (open water and mudflat) within the SCRE. Immediately following the reduction discussion, the DEIR addresses the effects of these acreage reductions, summarizing the reasons that the acreage reductions would not have significant adverse impacts on the species using these habitat types, including the steelhead, goby, least tern, and snowy plover, because post-project:

- aquatic habitat acreage and depths would be sufficient to support the listed species in all their life stages; and
- quality of aquatic habitat areas is expected to improve, particularly with respect to constituent habitat elements that are considered essential for supporting the listed species, including improved water quality, improved salinity, reduced support for invasive species, and increased berm stability outside of the steelhead migratory period.

Because the comment omitted this essential information, it is set forth below (DEIR, pp. 3.4-59 - 3.4-60, emphasis added):

However, **the discharge reduction would result in benefits to each of these species** through improved water quality, including fewer opportunities for eutrophication, reduced suitability for predatory non-native species, and reduced adverse impacts of dry season breaching, including reduced stranding of individuals and nests, reduced transport to sea, and reduced changes in salinity. Moreover, **as documented by the SRP and TRT, the project would still provide sufficient habitat area to support the current population of goby and steelhead, and targeted recovery populations based on historic populations and recovery plans.**

The TRT and SRP determined that fish and wildlife species native to the SCRE, including the four species listed as threatened or endangered (the tidewater goby, California steelhead, California least tern and western snowy plover), have evolved in and adapted to highly seasonal hydrology characterized by natural low-flow conditions. Consequently, the SRP recommended that protecting the natural habitat of these endangered and threatened species requires that the discharge of tertiary-treated effluent be limited to no more than 0 to 0.5 MGD when the berm is closed. The SRP determined that doing so is especially important in order to replicate the “natural hydrology” of the SCRE, and to reduce the risk of unnatural and untimely breaching of the berm during critical life stages of the tidewater goby and steelhead. The SRP also determined that doing so would **protect all of the other natural beneficial uses of the estuary that evolved with the estuary’s native special status species.** The TRT concurred with the SRP's determinations and recommendation to limit VWRP's discharges the SCRE. In the

Phase 3 Study, Scenario 10 best illustrates conditions associated with this minimal discharge recommendation.

In summary, it was the SRP's best professional judgment that a discharge of between 0 and 0.5 MGD of tertiary-treated effluent would **support the most sensitive beneficial uses in the SCRE, which are all related to listed species and their habitats** (i.e., RARE, SPAWN, MIGR, and HAB), by more closely approximating the natural historical hydrological, salinity and nutrient conditions under which the resident endangered and threatened species evolved and by providing these species with suitable habitat. The SRP found that **too much freshwater effluent dampens the natural variations in salinity that normally prevents exotic invasive species (such as carp and arundo) from outcompeting and displacing the native fish. Too much tertiary-treated effluent also promotes excessive algal growth, leading to lower dissolved oxygen concentrations, and an unacceptable risk of catastrophic hypoxic events to aquatic organisms in the SCRE when the berm is closed. Finally, discharging larger amounts of tertiary-treated wastewater produces unnaturally high water levels that increase the risk that localized flooding may adversely impact the nesting habitat of endangered bird species in the estuary.** In short, as described above, **reduced discharge of tertiary-treated effluent (<0.5 MGD) will enhance beneficial uses related to native species and habitats within the SCRE during the critical low-flow conditions.**

All of these statements and conclusions are supported by references to the supporting scientific record, which has been developed over the course of many years by recognized and respected experts.

The following clarifications for statements in the comment are also important.

(1) The comment states that “The DEIR concludes that the Project would result in a 90-100 percent reduction of VWRP discharges and cause a reduction of open water estuary acreages and mudflat estuary acreages by 55-62 percent.”

Table 3.4-8 (DEIR, p. 3.4-68), identifies estimated habitat acreage under existing conditions and with the proposed projects, addressing both open water and exposed mudflat habitat losses. The DEIR concludes that the effects of VWRP discharge reductions are beneficial for species using the SCRE despite reductions in the quantity of those habitat types, and therefore the impact is determined to be less than significant. Please see Responses S6-6, S6-7, S6-8, S6-9, S6-10, above.

The DEIR (pp. 3.4-69 – 4.4-70) identifies impacts to mudflats, concluding as follows:

“Mudflats provide foraging habitats for shorebirds when exposed. While the acreage for this habitat would decrease substantially, ample feeding opportunities for shorebirds, most notably, the western snowy plover, still exist within this habitat and the adjacent open beach. The exposed mudflats only occur when the sand berm is breached. During closed mouth conditions, exposed mudflat acreage is similar to existing conditions. Loss of the exposed mudflats during open mouth conditions would be less than significant.”

(2) The comment states that “The Project would also reduce the acreage of spawning and rearing habitat for tidewater goby, rearing habitat for subadult steelhead, and foraging habitat for California least tern and western snowy plover.”

As described in the SRP Report and TRT Report, based in part on the Tidewater Goby Recovery Plan (USFWS 2005) and by available information regarding other smaller goby-supporting lagoons along the California coast (Kramer 2018), the quantity of open water above 5 acres does not appear to be a limiting factor for goby or steelhead population abundance. Water quality, unseasonal breaching, and predation pressures are limiting factors for abundance for these listed species, each of which is improved by the proposed projects. Based on the best available scientific information and expert opinion, reduced discharges to the SCRE associated with the proposed projects would benefit the tidewater goby and steelhead, and the DEIR accordingly finds that impacts to those species are less than significant.

With respect to rearing habitat for subadult steelhead, please see Response S6-7, explaining and citing the evidence supporting the DEIR conclusion that the proposed projects’ impact would be beneficial.

With respect to foraging habitat for California least tern and western snowy plover, please see Response S6-16. As noted above, the DEIR supports the conclusion that ample feeding opportunities for these shorebirds, still exist within this habitat and the adjacent open beach (DEIR p. 3.4-70). The DEIR concludes that all of the impacts referenced by this comment would be less than significant. Please see Responses S6-6, S6-7, S6-8, S6-9, and S6-10.

As demonstrated in this response, and in Responses S6-6, S6-7, S6-8, S6-9, and S6-10 above, the DEIR has not inappropriately deferred identification or evaluation of potential impacts on aquatic habitat types or related species, including the steelhead, goby, least tern and snowy plover. The RWQCB has required that robust scientific study be conducted to determine the appropriate CDL based on the best available scientific information, and the City has prepared and incorporated the information, analysis and conclusions of the Phase 1, Phase 2, and Phase 3 estuary studies into the design of the Proposed projects. In addition, the City has considered and incorporated the independent assessments and recommendations of the TRT Reports and the SRP Report, prepared by consultants that are independent of the City, into the design of, and impacts analysis for the Proposed projects. All of the available scientific information and analysis supports the conclusion that the VWRf discharge reductions associated with the proposed projects, including the phasing and MAAMP project design features, would benefit aquatic habitat types and related sensitive and listed species compared to existing conditions.

As discussed in Response S6-7 above, CEQA requires the EIR’s impacts analysis and conclusions of environmental benefit to be based on scientific evidence, and expert opinions substantiated by such evidence. In the event that the commenter has contrary data and information regarding significance of impacts to aquatic habitat types and associated species within and near the SCRE, the City requests that such information be submitted to the City.

Response S6-17

This comment states that “VWRF discharges have altered the baseline hydrograph and have created ecosystem reliance on the discharge flows” and suggests that any alteration of the baseline hydrograph would result in adverse impacts to the SCRE and sensitive vegetation and wildlife. The record does not support this conclusion.

The “baseline hydrograph,” upon which “ecosystem reliance” is predicated, constitutes existing conditions for purposes of the DEIR analysis, including an average annual VWRF discharge level of 4.7 MGD, as cited in the comment. This “baseline” has not been ignored in the DEIR. Potential water quality, sensitive habitat, sensitive species and beneficial use impacts resulting from reductions in VWRF discharge associated with the proposed projects were considered as compared to continuing existing average annual discharge of 4.7 MGD. This baseline was used because CEQA provides that existing environmental conditions should serve as the baseline for measuring changes to the environment that will result from a project, and for determining whether those environmental effects are significant (CEQA Guideline Sections 15125, 15126.2(a)). Existing conditions were described in the Phase 3 Study Report (Section 4.1.5 p. 193, Section 5, pp. 223-224, Section 5.3, Tables 5-2, 5-3, 5-5 pp. 227-243, Section 5.4 pp. 243-255, Section 5.5 pp. 252-301).

It is important to understand, however, that this analysis of the existing “baseline” condition does not mean that baseline conditions are optimal or beneficial for the sensitive species occupying the SCRE. The newly-adopted amendments to the CEQA Guidelines recognize that impacts may best be measured against both existing conditions and future conditions:

Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project’s impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use **baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.**

(CEQA Guidelines Section 15125(a)(1) [emphasis added]).

The DEIR incorporated this approach in its analysis of alternatives, explaining on page 6-39 that future conditions during operation will result in future benefits to the SCRE:

CEQA generally requires environmental impacts to be assessed against a baseline of conditions at the time of the filing of the Notice of Preparation. The impact analyses in Chapter 3 are compared to a baseline of existing conditions. For purposes of the comparison of alternatives in this section, however, the analysis will consider both existing conditions and conditions during the operational phase of the proposed projects

in order to take into account the **future benefits to the SCRE that would result from discharge diversion.**

Emphasis added.

Substantial evidence supports the conclusion that operation of the proposed projects will improve environmental conditions, compared to the baseline condition of the SCRE and its habitat. See also, the discussion of environmental benefits of the proposed projects included in Chapter 9. The SRP Report and TRT Report (March 2018) support the conclusion that existing hydrology and related habitat assemblages supported by an average annual freshwater discharge of 4.7 MGD are not a “preferred” ecological condition for a southern California lagoon.

The SRP and TRT did not find that the current discharge of 4.7 MGD, and discharge-dependent habitat assemblages and SCRE characteristics, are environmentally preferred. Instead, the TRT concluded that “using currently impaired conditions as the standard against which potential reduction in discharge are judged based on habitat extent is a flawed approach” (TRT March 2018, Attachment 1, p. 14). Similarly, the SRP concluded that an assumption that zero discharge from the VWRf is ecologically preferred unless there is evidence to the contrary is more appropriate for protection of the species because “...under ‘natural’ hydrologic conditions, the Santa Clara River would be a seasonally flashy system, with most discharge events occurring in the winter and early spring and low or no surface water discharge in summer” (SRP 2018, p. 4). The SRP further explained that continued discharges of substantial freshwater flow to the estuary would only be appropriate if in a historical, natural condition, southern California lagoons, and particularly the SCRE, exhibited a predominant flow pattern indicating substantial freshwater flows were naturally contributed to the lagoon during dry weather conditions (SRP 2018, p. 16). In the case of the SCRE, the SRP concluded that the only freshwater inputs to the estuary during historical, dry weather conditions were local groundwater discharges, and very limited trickle flows downstream of the losing reach of the Santa Clara River, beginning in the vicinity of the Victoria avenue bridge (SRP 2018, pp. 16-17). Further, the SRP noted that the currently existing manmade diversions affecting flows within the Santa Clara River are only truncating river flows to the SCRE during spring wet weather conditions, and not during summer dry weather periods (SRP 2018, p. 17). Consequently, both the SRP and TRT determined that **“the conclusion that VWRf discharge is necessary to replace diverted natural [Santa Clara River] inflows is not well-founded”** (SRP 2018, p. 25, Conclusion 2; TRT March 2018, Attachment 1, p. 9, 11, pp. 13–16. Emphasis added).

The SRP Report and TRT Report (March 2018) additionally conclude that sensitive native species have **not**, in fact, successfully adapted to the “altered baseline hydrograph” created by discharges. In particular, the SRP Report summarizes various adverse effects on aquatic habitats and related species using the SCRE that the TRT and SRP believe are associated with the current substantial VWRf freshwater discharge levels, including the following:

- Poor habitat conditions for juvenile steelhead rearing (SRP 2018, p. 22):
- More freshwater conditions conducive to listed species’ predators and competitors (SRP 2018 p. 22);

- Increased propensity for breaching outside the steelhead migratory season, which is “catastrophic” for the goby and early life stages of steelhead, and to nesting and foraging for the plover and tern (SRP 2018, p. 15, pp. 22-23, p. 25);
- Increased nutrient loading and related water quality issues, including periods of critically low dissolved oxygen, algal blooms, and the potential for cyanobacteria blooms (SRP 2018, p. 15, 25).
- Absence of ability to develop thermal, temperature and salinity stratification and refugia (SRP 2018, p. 26, Conclusion 5).
- Decreased forging opportunities for the least tern (SRP 2018, Table 5 p. 24).

See also TRT Report (March 2018) Attachment 1 pages 9 through 14.

Due to these issues related to VWRP discharges to the SCRE under existing conditions, all scientists agreed that discharges should be reduced to an average annual CDL of 1.9 MGD during closed-berm conditions, and the SRP and TRT further recommended that discharges should be reduced to an average annual CDL of 0-0.5 MGD during closed-berm conditions:

- As the SRP concluded: “...the rationale presented to support discharges recommended by the Final Phase 3 Report is not well-supported and fails to make a compelling case that discharges much greater than zero would enhance beneficial uses, particularly for sensitive species” (SRP 2018, p. 24); and
- As the TRT concluded:
 - “maintaining [even] 60% of current discharge levels to protect against excessive reduction in physical habitat area for steelhead would be superfluous and misguided” (TRT March 2018, Attachment 1, p. 14); and
 - “maintaining a fuller estuary for the sake of habitat quantity [constitutes] a management decision [that] would ignore the importance of habitat quality and continue[s] to stack the deck against tidewater goby.” *Id.*

While extensively documenting existing SCRE conditions as the baseline for CEQA review, the DEIR recognizes that current conditions are “currently impaired conditions,” as concluded in both the SRP Report and the TRT Reports (March 2018 and June 2018), and that discharge diversion would protect, maintain, and improve SCRE ecological resources (DEIR pp. 3.4-44 – 3.4-46, 3.4-49 - 3.4-61). “For purposes of CEQA significance conclusions, the project’s environmental impacts provide overall benefits to endangered species, resulting in habitat of greater quality than under existing conditions. As a result, impacts from the project would be less than significant under CEQA” (DEIR, p. 3.4-67).

The DEIR properly describes existing habitat and ecological baseline conditions pertinent to the listed species, and at the same time considers the impairment in those existing conditions that all scientists recommend should be addressed by reducing VWRP discharges in connection with the proposed projects. The only disagreement among the scientists is whether predicted benefits of discharge reductions below a closed-berm, average annual CDL of 1.9 MGD in Phase 1a to a closed-berm average annual CDL of 0-0.5 MGD in Phase 1b or to 0 MGD discharge in Phase 2

will result in the greatest benefits for aquatic habitats and related species, as predicted by the SRP and TRT.

Consistent with expert opinion, the DEIR impacts analysis determines that a return to more natural hydrological conditions by limiting VWRF closed-berm, dry weather discharges to the SCRE would provide benefits to the quality of aquatic habitat types, and to the quality and quantity of riparian habitat types, thereby benefitting the sensitive native species, including tidewater goby and steelhead, that rely on those habitats as compared to existing discharge conditions. The more “natural functions” improved, as summarized in the DEIR, include:

- Seasonally high flows and episodic high sediment discharge provide mineral and organic matter to shape the estuary and beach, as well as functions to open the mouth seasonally and provide flushing.
- Gradual mouth closure due to the combination of declining winter and spring freshwater flows from the Santa Clara River, reducing tidal prism and mouth building sedimentary processes due to longer period waves inducing bar formation.
- A longer freshening of the SCRE over the spring and summer due to lower seepage during a closed mouth with reduced surface and VWRF discharge and groundwater discharge.
- Support for sensitive endemic species dependent on seasonal changes in dynamic physical processes (e.g., overtopping causing changes in salinity) that many nonnative competitors and predators are not well adapted to
- Low nutrient loading to the estuary to maintain better oligotrophic to mesotrophic conditions and minimize the likelihood of harmful algal blooms.
- Potential for increased stratification and more brackish conditions in the SCRE with lower freshwater input from VWRF discharge, depending on overwash conditions.

See also SRP Report, page 14; DEIR pages 1-7 through 1-9 and pages 3.4-44 through 3.4-60. Please see also, Responses S6-6, S6-7, S6-8, S6-9, S6-10, S6-15, and S6-16 above.

As discussed above, pursuant to the requirements of CEQA, the impacts analysis and conclusions of environmental benefit set forth in the DEIR associated with implementation of VWRF discharge reductions must be, and are based on substantial scientific evidence, and expert opinions substantiated by such evidence. The DEIR conclusions also reflect the admonitions of the SRP and TRT, most succinctly summarized in Attachment 1 of the TRT Report (March 2018, p. 14, emphasis added) as follows:

- **“Ultimately, the concept of managing for, among other beneficial uses, steelhead recovery with wastewater discharges runs counter to sound ecological restoration principles.”**
- “The concept that more habitat (i.e., greater open water area) is more beneficial for tidewater goby overly simplifies the biotic interaction that are integrated into the habitat.”

- “By maintaining a fuller estuary for the sake of habitat quantity, the management decision would ignore the important of habitat quality and continuing [sic] to stack the deck against the tidewater goby.”

In the event that the commenter has contrary scientific data and information to support the assertion stated in the comment that the proposed VWRP discharge reductions “could result in direct mortality, reduced reproductive capacity, population declines or local extirpation of several sensitive species” due to the alteration of the current (“baseline”) hydrograph, the City requests that such information be submitted to the City.

Response S6-18

The comment asserts that: (A) the DEIR defers analysis of significant adverse impacts to vegetation and habitat communities that should be considered significant under CEQA; and (B) the DEIR defers development and analysis mitigation for discharge reductions by providing for development and implementation of the MAAMP.

A. DEIR Analysis of Significant Impacts to Vegetation and Habitat Communities. As discussed in Responses S6-6, S6-7, S6-8, S6-9, S6-10, S6-15, and S6-16 above, the DEIR fully analyzes the potential effects of VWRP discharge reductions associated with implementation of the Proposed projects on vegetation communities and habitats in the SCRE and its vicinity, and on the sensitive and native species that use those habitats support. In fact, the preamble to the comment’s assertion of “deferred analysis,” and other comments in the comment letter, cite excerpts from the impacts analysis detailed in the DEIR.

There is no reasonable argument that the impacts analysis has been deferred, in light of the lengthy investigation of the potential impacts of discharge reductions conducted by well-credentialed scientific experts and the full disclosure of this information in the DEIR. Instead, it appears that the commenter disagrees with the conclusions of the TRT and SRP, as integrated into the DEIR, regarding the benefits to aquatic habitats and related species of reducing VWRP discharge to a closed-berm average annual CDL of less than 1.9 MGD. Based on the preponderance of expert opinion and best available science, the DEIR concludes that the reduction in VWRP discharge recommended by the SRP and supported by the TRT would **not** result in significant adverse impacts on sensitive species that rely on habitat in the SCRE. As discussed in greater detail in the previous responses, the DEIR concludes that discharge reductions avoid and minimize impacts associated with current VWRP discharge levels, improving the quality of sensitive habitats and benefitting sensitive species. Seventeen years of scientific data, information and analysis summarized the DEIR, its technical appendices, and the Responses referenced above, provide the basis for the DEIR’s “supporting impact analysis.”

The design of the proposed projects’ discharge regime, and the DEIR’s conclusions regarding less than significant impacts, are supported by best available, site specific information, expert analysis and expert opinion. The comment does not reference or provide scientific evidence to support its assertions. For the City to change the significance conclusions set forth in the DEIR, the City would need to rely on substantial scientific evidence and countervailing expert opinion to support

different conclusions. The commenter does not cite or provide such evidence in its comment letter.

Recognizing the commenter's disagreement with the DEIR's conclusion that reducing VWRP discharges to a closed-berm average annual CDL of less than 1.9 MGD would benefit aquatic habitat types and related species and do not result in significant adverse impacts, the City commits to additional analysis and consultation with CDFW as a Responsible and Trustee agency, as required by applicable laws other than CEQA, to confirm this conclusion of the scientific experts via the MAAMP. Nevertheless, the DEIR does not defer its impacts analysis nor does it reach unsubstantiated conclusions of significance contrary to the requirements of CEQA.

B. DEIR Development and Implementation of the MAAMP. Two design features or components of the proposed projects are a direct response to the commenter's concerns about reducing VWRP discharges to a closed-berm annual average CDL of less than 1.9 MGD, which were first expressed by CDFW in workshops and in its December 18, 2018, letter to the LA RWQCB:

- Phased implementation of VWRP discharge reductions, such that reductions to an average annual CDL of less than 1.9 MGD do not occur until Phase 1b. Phased implementation provides time for SCRE adaptation, and time to confirm that benefits to habitats and species occur as projected.
- The MAAMP was developed as a component of the project in order to confirm the ecological benefits predicted by scientific experts and DEIR impacts analysis, based on the best available science.

The MAAMP does not defer impact identification or mitigation. Rather, it formalizes the City's commitment to assuring that the proposed projects improve the quality of the listed species' habitat over existing (baseline) conditions as anticipated by extensive scientific analysis, in a manner that is responsive to CDFW's concerns, and to the recommendations from NMFS, USFWS, CDFW, and scientific expert recommendations endorsing development and implementation of an adaptive management program as a part of the project (see USFWS comment letter F-1 and letter from CDFW to the City of Ventura dated, December 18, 2018). Development and implementation of adaptive management programs are the typical tool for managing uncertainties in scientific predictions to assure that anticipated ecological benefits for listed species and critical habitats occur. The MAAMP will provide assurances of benefits prior to initiating, and during implementation of the Phase 1b discharge reductions to a closed-berm average annual CDL of 0 – 0.5 MGD.

Pursuant to CEQA, no mitigation measures for reduction in aquatic habitat types are warranted. This does not mean that implementation of adaptive management is unwarranted.

Adaptive management provides the feedback loops needed to manage dynamic natural systems. CDFW's published policy supports this assertion:

Adaptive management is defined in Delta Reform Act (Water Code §85052) as “a framework and flexible decision-making process for ongoing knowledge acquisition,

monitoring, and evaluation leading to continuous improvements in management planning and implementation of a project to achieve specified objectives.” An adaptive management approach provides a structured process that allows for taking action under uncertain conditions based on the best available science, closely monitoring and evaluating outcomes, and re-evaluating and adjusting decisions as more information is learned (https://www.dfg.ca.gov/erp/adaptive_management.asp).

CDFW requested that an adaptive management plan be prepared in a letter to the City dated December 18, 2018:

Adaptive Management Plan. The final NPDES permit should include a science-based adaptive management plan to minimize uncertainties when predicting changes in the conservation value of habitat or wildlife. The monitoring framework should annually inform the discharge schedule and amount during the lifetime of the proposed water-recycling facility, including seasonal minimum and maximum flows for wildlife. In order to detect if failure to meet performance stands is related to changes in current discharge, the adaptive management plan should identify ecological triggers that would initiate additional analysis or study and provide contingency measures to remedy the failure.

In accordance with this request, the MAAMP would be developed during Phase 1a, and implemented after Phase 1a is constructed and operating, but before further Phase 1b discharge reductions are permanently implemented, and during implementation of Phase 1b to ensure that additional Phase 1b discharge reductions benefit the ecology of the SCRE as predicted. Potential impacts have been fully identified, and do not require mitigation under CEQA. The MAAMP is intended to monitor scientifically-supported reductions in VWRP discharge, which represents “only one of many alterations to the SCRE system” within a “complex and dynamic system” (SRP 2018, p. 2), in order to assure the identified ecological benefits to the SCRE.

Response S6-19

Please see Responses S6-4, S6-5 and S6-6. By design, the proposed projects would not impact the quantity or quality of groundwater supporting groundwater dependent vegetation communities or ecosystems.

Response S6-20

As a preliminary note, it is important to clarify that the proposed projects do not propose to implement, and would not result in any upstream diversions of water from the Santa Clara River of any other drainages. The comment further suggests that (A) current upstream diversions of Santa Clara River flow and related limitations on freshwater surface flow contributions are not considered in the DEIR; and (B) that the DEIR fails to consider upstream diversions in its cumulative impact analysis.

A. DEIR Consideration of Upstream Diversions of Santa Clara River Flow. Upstream diversions of Santa Clara River flow are considered in the DEIR’s baseline condition and impacts analysis, and are taken into account in identifying inflows to the lower reaches of the Santa Clara River and the SCRE. In that manner, upstream diversions of flow and related

reductions in freshwater inputs into the SCRE are factored into the DEIR's analysis of potential impacts of discharge reductions associated with the proposed projects to resources within and near the SCRE. The following excerpts from the Phase 3 Study Report and SRP Report summarize key factors taken into account in the DEIR regarding current Santa Clara River flows into the SCRE, as impacted by upstream diversions in the existing condition:

Phase 3 Study Report, Section 3.3.3.1, pages 52 through 54 (emphasis added):

“The **contemporary river hydrology** is dominated by floods. Between flood periods, flows through the lower river reach reaching the SCRE are intermittent with some sub-reaches, such as the Oxnard Forebay reach between highways 118 and 101 bridges, going dry for much of the year, while the lowermost reach leading into the SCRE supports perennial, albeit low volume, flow during most water-year types. This baseflow, which is driven by inputs from the semi-perched aquifer, is partly enhanced by seasonal agricultural runoff, particularly on the northern floodplain.

The **watershed's seasonal hydrologic regime** is apparent in examination of monthly mean discharge recorded at four locations in the lower watershed (Figure 3-9). Over the long-term record, February has experienced the highest monthly flows (~750 cfs in the lower river) while August and September have experienced the lowest flows (~1 cfs in the lower river). As expected, these patterns closely follow seasonal variability of precipitation (see above).

Daily mean flows have averaged about 150 cfs in the lower river over the past century (Figure 3-10). During the Phase 3 Study period, **daily mean flows peaked at** approximately 640 cfs in water year 2015 (December 12, 2014) and 560 cfs in water year 2016 (January 6, 2016), which were both relatively dry years (Figure 3-11). Flows for 2016 were measured immediately downstream of the Freeman Diversion, so the peak flow into the SCRE may be lower than 560 cfs due to uncertainty about the amount of flow percolating in the Oxnard Forebay reach. Overall the long term, for 90 percent of the time, daily mean flows in the lower river have been less than about 80 cfs (Figure 3-12). During water-years 2014–2016, daily mean flows have averaged only about 4 cfs, **indicative of the drought conditions**.

Annual peak flows have been considerably larger in comparison with the daily mean flows and usually span only a few hours to days, indicating the flashy nature of the river. The largest flood events exceeding 50,000 cfs are listed above in Table 3-1. Since water year 2011, the largest event recorded in the lower river (Victoria Ave bridge) occurred on March 20, 2011 (~44,000 cfs). The recent drought period between water-years 2012 and 2016 have yielded very few high-flow events; the annual peak flows have all been less than 4,000 cfs. Thus, the present study period experienced relatively few high-flow events capable of flooding the lower river corridor and naturally breaching the SCRE mouth berm (see additional details in Section 3.3.5, Mouth Breaching Dynamics).

Overall, the river and SCRE naturally experience a wide variation of flows, punctuated episodically by short-duration but intensive channel-/lagoon-adjusting flood events.

These traits are common to large, semi-arid riverine systems that periodically experience dramatic geomorphic change resulting from their flashy discharge dynamics (Graf 1978, Warrick and Mertes 2009, Downs et al. 2013). “

SRP Report, pages 16 through 18:

“Part of the rationale for allowing some amount of VWRF discharge to the estuary is that freshwater flows to the estuary have been diminished over time due to groundwater extraction and surface water diversion. In fact, much of the treated VWRF discharged to the estuary comes from either the Ventura River or its tributaries, Lake Casitas, or deep groundwater aquifers in the Santa Clara River watershed, and therefore would not have historically been a part of the estuary’s freshwater inputs were it not for the VWRF discharge into the SCRE.

Although both surface and groundwater use have affected hydrology of the lower Santa Clara River, Section 3.3.3 of the Final Phase 3 Report does not directly address the issue of “natural” dry season river flow to the estuary. As the report correctly states, natural flow patterns were highly variable over time, and dependent on water year type. However, Figure 3-10 does not adequately convey typical dry season flow to the estuary. Based on a review of source data used in the development of the Santa Clara River historical ecology analysis (Beller et al. 2011), we can conclude that the predominant historical pattern was little to no continuous surface flow from the Santa Clara River to the SCRE during summer and fall in most years, with the exception of groundwater inputs that provide trickle flows in the gaining reach downstream of Victoria Avenue Bridge and upstream of the SCRE. Although some portions of the Santa Clara River were naturally perennial during the dry season, most evidence from the 18th and 19th centuries suggest absence of surface flow in the lower reach (losing reach) before reaching the Victoria Avenue Bridge (gaining reach). In particular, the reaches downstream of Saticoy are characterized by deep, coarse alluvial material where most surface flow infiltrated. These reaches were devoid of wetland or riparian vegetation apart from a large willow swamp on the southern margin of the estuary that was supported by surfacing groundwater. Furthermore, most small tributaries in the lower river valley were discontinuous with the mainstem river except following large rain events, providing further evidence that surface flow quickly infiltrated.”

SRP Report, page 11:

“The SRP sees no need to “replace” natural hydrology as a rationale for discharge from the VWRF. Dry season discharge from the Santa Clara River was naturally low with the exception of very wet years, and the majority of freshwater input to the SCRE comes via groundwater flow (based on the Phase 3 hydrogeological study [Hopkins Groundwater Consultants Inc. 2018]).”

See also Response S6-17 and citations therein. This information regarding Santa Clara River surface flows into the SCRE, which reflects existing upstream diversions, was summarized in the DEIR (Section 3.9.1, pp. 3.9-2 – 3.9-4).

B. DEIR Consideration of Upstream Diversions of Santa Clara River Flow. Based on information in the SRP Report and TRT Report, the potential for changes in upstream freshwater surface flows as a result of planned changes by United Water Conservation District in operating the Vern Freeman Diversion Dam were considered in the cumulative impacts analysis of the DEIR (p. 4-11). As explained in the SRP Report and summarized in the DEIR, in the future, more water *may* be released during the descending limb of the watershed hydrograph (i.e., during the springtime) to support steelhead spawning habitat and migration. The proposed projects support and are consistent with these cumulative actions to enhance steelhead habitat. Both the SRP and the TRT Report conclude that, if the diversions are modified as anticipated in the future, it will improve conditions in the lower river and the SCRE for steelhead and provide some additional freshwater input, at least during the descending limb of the hydrograph (SRP 2018, p. 18; TRT March 2018, p. 17; DEIR p. 4-11). To assure that changes in diversion practices in the future, which currently cannot be quantified (TRT March 2018, p. 17 [“the amount of water flowing down the Santa Clara River could be more or less in the near future as a result of these processes”]), the MAAMP would be designed pursuant to BIO-5 and BIO-6 to consider Santa Clara Flow monitoring data collected by United Water Conservation District, Ventura County and others, and would integrate that flow data into the adaptive management process.

Response S6-21

Proposed “Mitigation Measure #3” proposes a 5-year “Pre-Construction SCRE Monitoring Program.” As shown in Figure 10.3, close to two decades of studies provide the basis for the EIR’s analysis. Additionally, Mitigation Measure BIO-5 requires the City to conduct a data collection program while the Phase 1a AWP is being constructed, to inform and allow development of the adaptive management program required by BIO-6. The additional monitoring information collected would be focused on further informing the understanding of the SCRE and, as necessary, developing appropriate adaptive management plan measures and protocols in coordination with USFWS, CDFW, NMFS, and the LA RWQCB. Annual reports would be provided to USFWS, NMFS, CDFW and the LA RWQCB pursuant to BIO-6, and if the MAAMP confirms the DEIR, SRP Report and TRT Report conclusion that further Phase 1b freshwater reductions may further enhance the SCRE and benefit the quality of habitat types and species using those habitats within and near the SCRE, then the City would permanently implement Phase 1b discharge reductions.

As discussed in BIO-5, the City will implement the SCRE monitoring program to confirm and update the status of existing conditions within the SCRE for a period of at least 3 years. Based on the proposed phasing of the Proposed projects, that monitoring program may be longer than 3 years, as suggested by the comment.

Also as discussed in BIO-5 and BIO-6, the monitoring program and resulting adaptive management program will collect information and data regarding the following parameters for

purposes of confirming baseline environmental conditions, and assuring that post-discharge conditions benefit quality of habitat types and sensitive species as compared to existing conditions as predicted based on the best currently available scientific information set forth in the record. The information to be collected and analyzed is consistent with the recommendations in the comment, as follows:

- **Water Quality:** Regular sampling and measurements of SCRE water quality, including temperature, salinity, dissolved oxygen, nutrients, salinity, pH and toxicity parameters, will be taken vertically via sondes or similar instruments where feasible (based on the limitations imposed on in situ monitoring by estuary accessibility, shallow depths, and high Santa Clara River flows in wet weather conditions), and by other approved monitoring methods. Samples and data will be captured periodically and over the course of all four seasons to capture variable conditions and to assure reliable and representative data. Information regarding algal blooms will also be recorded as observed/indicated by monitoring data. Sediment samples are not currently proposed for collection because relatively frequent periodic scouring of sediment within the SCRE by high Santa Clara River flows make such data collection uninformative. See Responses S6-6 and S6-7 above. Publicly available water quality information regarding nutrients from existing, accessible groundwater wells, and VWRf discharges will also continue to be collected and compared to updated receiving water quality measurements, as well as to water quality data set forth in the Phase 3 Survey Report.
- Surveys to collect information regarding distribution, acreages and depth of near shore and open water habitats, and to collect data regarding distribution and acreages of the following aquatic and terrestrial habitat types currently present within the SCRE, which is the only waterbody that could be potentially impacted by the proposed projects: foredune (including presence of wrack and dunes), willow riparian, riparian riverwash, mudflat, freshwater marsh, salt marsh, as well as non-native invasive vegetation types, including *Arundo*. The proposed projects do not propose any infrastructure that could potentially impact these habitat types; impacts would only potentially occur as a result of VWRf discharge reductions associated with the proposed projects, therefore no buffers for the proposed projects would be necessary. No buffer measurements for already existing infrastructure or existing facilities are required under CEQA.
- Surveys for aquatic species, birds, and nesting surveys to confirm and update information regarding occurrence of sensitive aquatic, avian and terrestrial sensitive species, persistence of nests, to document the ongoing habitat associations of sensitive species, and to provide information regarding the abundance and distribution of non-native invasive or predatory species. Occurrence and distribution of invasive species would also be recorded.
- Visual surveys to collect information regarding bathymetric and berm conditions, including berm heights, breaching events, and bathymetric changes.
- Coordination with United Water Conservation District and the County of Ventura to obtain ongoing information regarding Santa Clara River Surface flows, and continued flow and water quality monitoring of VWRf discharges.
- Coordination with the California Dept. of State Parks and other entities proposing restoration and preservation of habitats that support sensitive species in and near the SCRE.

- Continued Monitoring under the VWRf NPDES Permit, including discharge flow monitoring.

Also as recommended in the comment, BIO-6 requires that the MAAMP must include specific performance standards or thresholds that trigger implementation of specified control measures and/or adaptive management measures or courses of action, and must identify specified measures in the MAAMP that will be implemented in the event that average annual discharge reductions during Phase 1b to an average annual CDL of less than 1.9 MGD in closed-berm conditions, would result in conditions contrary to those predicted by the existing, best available science. Please see also Response F1-7.

Additional details of the monitoring programs prepared and implemented under BIO-5 and BIO-6, including details such as specifications for data collection instruments and equipment, appropriate sample sizes, frequency of sample collection, sample collection methods, and seasonal restrictions for data collection, will be determined based on input from the scientists that prepare the monitoring programs regarding appropriate and feasible specifications necessary to collect information in accordance with the standards and requirements specified in BIO-5 and BIO-6. These specifications will be determined in coordination CDFW, NMFS, USFWS and the LA RWQCB as required by BIO-5 and BIO-6.

Response S6-22

The EIR concludes that no habitat compensation is required to offset impacts of VWRf discharge reductions associated with the proposed projects on acreage reductions predicted for certain habitat types, since the discharge reductions would benefit SCRE habitat quality, function and value. The loss of acreage of open water habitat, freshwater wetlands, and mudflat habitat estimated in the Phase 3 Study as a result of VWRf discharge reductions would be offset by the benefits to quality of these aquatic habitat types, as well as increases in quantity and quality of the riparian habitat types. The Phase 3 Study, SRP, and TRT all concur that reducing discharges to a closed-berm average annual CDL of 1.9 MGD would be beneficial to values of aquatic habitat types, particularly those values most important to the listed species using the SCRE, as compared to existing conditions. The SRP and TRT further concluded that reducing discharges further to a closed-berm average annual CDL of 0-0.5 MGD would be more beneficial to values of the aquatic habitat types within the SCRE than retaining the current acreage of those habitat types. All scientists concluded that VWRf discharge reductions would increase riparian and riparian riverwash habitat types and would improve habitat values.

In response to CDFW's concerns regarding discharge reductions that reduce the closed-berm average annual CDL to less than 1.9 MGD, the City incorporated design features into the proposed projects to phase the implementation of those discharge reductions, and to require development and implementation of the MAAMP to confirm predicted benefits for the ecology of the SCRE before making Phase 1b discharge reductions permanent. These project design features are intended to guide the systematic implementation of the reductions in discharge to the level supported by the best available science, while providing the desired margin of safety suggested by CDFW in its December 18, 2018, letter to the LA RWQCB and this comment and its comment S6-9 and S6-10.

Given the benefits of the proposed projects and the project design features adopted by the City, the following suggested mitigation measures are inappropriate based on the conclusions of the Phase 3 Study, the SRP Report, and the TRT Report, which have been incorporated into the DEIR.

a) The proposed projects increase riparian habitat types for willow riparian by up to 52 acres, and riparian riverwash habitat by up to 39 acres, as well as improving its values (Stillwater Sciences 2018, Table 5.5 p. 237; DEIR Table 3.4-6, p. 3.4-49). Accordingly, no mitigation through Arundo removal is required for impacts to riparian habitat.

b) The proposed projects would not have any adverse impacts on the quantity of open beach for foredune habitat, and are not expected to affect dunes or wrack currently present within those habitat areas (Stillwater Sciences 2018, Table 5.5, p. 237; DEIR Table 3.4-6, p. 3.4-49). Further, the DEIR analysis explains that the proposed project would benefit the Western snowy plover and California least tern, notwithstanding reductions in aquatic habitat types, based on best available scientific information and expert opinion. As a result, no measures are required to maintain wrack in other areas outside of the SCRE, such as the sandy beach areas of McGrath State Park.

c.) The proposed projects would not have adverse impacts on Santa Clara River flows, or on perched aquifer groundwater flows into the SCRE. Consequently, the installation of new gauges to monitor surface water flows and groundwater infiltration into the SCRE would not assist in mitigating any potentially significant impact of the proposed projects. While mitigation measures are not required, it should be noted that implementation of the MAAMP would provide for assessment of the effects of reduced freshwater flow into the SCRE resulting from implementation of Phase 1a, and would guide further discharge reductions in Phase 1b based on confirmation of predicted benefits of the discharge reductions. External factors such as surface water flow and groundwater infiltration would be captured in the data collection program as described in Response S6-21.

d). The purpose of the proposed projects is to reduce discharges to the SCRE and protect beneficial uses of the SCRE as required by state law, i.e., the Enclosed Bays and Estuaries Policy, to assure enhancement of the quality of the SCRE. The purpose of the Enclosed Bays and Estuaries Policy is “to provide water quality principles and guidelines to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries.”¹⁰ It provides that the discharge of municipal wastewaters to enclosed estuaries, such as SCRE, **shall be phased out at the earliest practicable date**, unless the discharge enhances the **quality** of receiving waters.¹¹ Phasing out such discharges as required by state law will, inevitably and by design, result in habitat conversion when the phase out occurs, with the intent being that the conversion is beneficial to the ecology of bays and estuaries.

¹⁰ Enclosed Bays and Estuaries Policy at p. 1. The cited version is available at file:///C:/Users/jean_/Documents/Ventura/Policies/Enclosed%20Bays%20and%20Estuaries%20Policy%201995.pdf

¹¹ *Id.* at p. 2.

The DEIR concludes, based on the best available science and expert opinion, that impacts of reduced VWRP discharges on the aquatic habitat types, i.e., open water, freshwater, and mudflat habitat, resulting from compliance with the legal requirements imposed on all state and local agencies via State law pursuant to the Enclosed Bays and Estuaries Policy are not adverse. Consequently, mitigation is not required because, as described in more detail in the Responses above and materials cited therein, *inter alia*:

- With respect to **open water** habitat, the existing acreage of habitat created by current discharge represents an unnatural, freshwater condition that is deleterious to native species, including least tern, snowy plover, steelhead and goby. Reducing this acreage creates beneficial, not adverse impacts. Because reducing this acreage does not create a significant adverse impact, mitigation is not required.

First, the large open water area of the lagoon supports invasive aquatic species, including western mosquitofish and African clawed frog, which contribute to the decline of native and special-status species. Decreasing discharges from the VWRP to an average annual CDL of 0-0.5 MGD would promote more salinity and some stratification immediately following mouth closure and after overtopping events, since the reduced lagoon volume (reduced open water) would provide less freshwater dilution than under existing conditions. Increased salinity and stratification would benefit the listed species who are adapted to more salinity, and would competition and predation from nonnative invasive species because, unlike native species that are adapted to more saline conditions, invasive species have less tolerance for these conditions. Increased salinity is also expected to improve the diversity and quantity of BMI and native fish, providing a beneficial improvement in food sources for the least tern and snowy plover.

Second, lower SCRE water levels resulting from reduced VWRP discharges would protect against unseasonal breaching of the lagoon caused when the water level is too high, as under existing conditions. The impacts of an artificial breach can be catastrophic and lead to substantial take (injury or death) of fish species, including steelhead and tidewater goby, and have deleterious effects late in the nesting season on least tern and snowy plover. During the low water period of summer and early fall, tidewater goby lay their eggs in burrows in shallow areas of the lagoon, within the sandy substrate. Juvenile salmon reside in the lagoons until they are ready to migrate to the ocean. Closed-mouth conditions protect the lagoon from ocean tides. When dry-weather breaches occur, the lagoon rapidly drains. Current open water acreages contribute to rapid dewatering that can:

- (1) leave fish isolated in small pools or trapped on mud/sand flats that were previously shallow water habitats. Observations of the SCRE following an artificial breach have shown substantial mortality of stranded steelhead and tidewater goby; and
- (2) transport fish out of the estuary to the ocean before they are ready. Artificial breaching can transport goby out of the estuary to the coast during summer and fall, when freshwater plumes are not available to direct them to adjacent watersheds and increased salinity can be fatal. This unseasonal transport reduces the genetic exchange that can result from recolonization; and
- (3) rapidly increase the salinity within the estuary, when juvenile steelhead and tidewater goby are unable to tolerate salinity changes, especially in early stages of development.

With respect to steelhead in particular, even if the open water acreage of deeper pool areas decreases with project implementation, mudflat and shoreline refugia are expected to redevelop at lower elevations, similar to existing conditions. In addition, the reduction of non-native invasive species that prey on and compete with steelhead smolt under a reduced average annual CDL is important for steelhead survival and successful rearing. As a result, all experts conclude that reductions in discharge to a closed-berm average annual CDL of 1.9 MGD, would support beneficial uses of the SCRE, and the TRT and SRP conclude that further reductions in discharge to an average annual CDL of 0-0.5 MGD, would result in an improvement over existing open water habitat conditions, benefitting steelhead, tidewater goby, and snowy plover, and, although decreasing foraging habitat, improves nesting habitat for the California least tern, resulting in less than significant impacts to that species. (DEIR, pp. 3.4-51 – 3.4-54). The SRP and TRT further found that the total acreage of wetted habitat would provide more than enough habitat at the right depths to support all of the listed species and their recovery in the watershed (DEIR, p. 3.4-69).

- With respect to **mudflat** habitat type, as noted by the TRT Report, the area of mudflat identified in the Phase 3 Study is simply the floor of the open water area during an open-berm condition. Exposed mudflat only occurs periodically, seasonally and temporarily when the berm is breached due to natural Santa Clara River flows and the estuary is drained. The acreage for this habitat would decrease because artificial breaches would be reduced, to the significant benefit of native species such as steelhead and goby. The more natural condition of the SCRE supported by the proposed projects would still provide mudflat habitat during open-berm conditions similar to historic and more natural conditions, but that habitat would be provided seasonally and not due to deleterious unseasonal breaches. During closed mouth conditions, exposed mudflat acreage would be similar to existing conditions.

Mudflat provides foraging habitats for shorebirds when exposed (DEIR, p. 3.4-10). Ample feeding opportunities for shorebirds, most notably, the western snowy plover, still exist within this habitat and the adjacent open beach. Loss of the exposed mudflats during open mouth conditions would be less than significant, and no mitigation is needed (DEIR, p. 3.4-70).

- With respect to **freshwater wetland** within the SCRE, the amount of freshwater wetland habitat has varied considerably over the years reflecting the dynamic nature of the system, while discharges to the SCRE from the VWRP have remained relatively constant since at least 1984. The freshwater wetlands currently in the SCRE are associated with the channel conveying VWRP discharges into the SCRE. To the extent that freshwater wetlands would be reduced, they would be replaced by other habitat types in the SCRE such as riparian woodland resulting in better quality Southern California Coastal Lagoon and Southern California Steelhead Stream habitats. As a result, the reduced acreage of freshwater wetlands would not diminish the functions and values of the designated sensitive community types (DEIR, pp. 3.4-70 – 3.4-73). The EIR concludes that the habitat values are not essential to support the four California species of special concern that may be supported by (but have not been documented in) the SCRE. Impacts to sensitive communities would be less than significant (DEIR, 3.4-74).

Based on the information above set forth in the EIR, mitigation is not required under CEQA for any of these aquatic habitat type acreage reductions because no significant adverse environmental impacts have been identified as a result of those reductions. Even if such mitigation were desired despite the absence of significant adverse impacts, it is not feasible or even possible to provide

the amount of aquatic habitat acreage suggested by the comment. In addition, both onsite and offsite mitigation approaches are infeasible to implement because they are contrary to state water quality laws.

The current acreage of open water, freshwater wetlands, and mudflats in the SCRE all depend on the continued discharge of treated wastewater from the VWRf and/or continuing unseasonal breaches. On-site mitigation would require the creation of new estuarine open water habitat, freshwater habitat, and mudflats at the SCRE using inundation by freshwater flow, creating the same impairments to habitat values and risks to sensitive species as identified by the SRP in the existing condition. No legal approach to on-site mitigation for areal losses in these aquatic habitat types is apparent; such mitigation would only be possible by maintaining or increasing discharge from the VWRf, or by directing VWRf or similar freshwater flows to another estuarine location, contrary to the consensus of scientific opinion, the Enclosed Bays and Estuaries Policy promulgated under State law, and the Consent Decree.

Further, if off-site open water and mudflat habitats could be created in a different (offsite) estuary, these habitats could not be assured to support the sensitive species that have come to depend on SCRE habitat. Furthermore, because of severe constraints on water supply in the vicinity of the proposed projects, it is not clear how available freshwater could be diverted to new offsite habitat creation. Perhaps the comment assumes that the recycled water from the proposed projects could be shipped offsite to create habitat at another estuary. However, the creation of offsite habitat using recycled water sources in a different location contradicts another state law policy: the California Recycled Water Policy. The State Water Resources Control Board's Water Quality Control Policy for Recycled Water (Recycled Water Policy, April 8, 2019) requires the reuse of all dry weather direct discharges of treated wastewater to enclosed estuaries that can viably be put to a beneficial use (Section 3.1.2, p.2), and does not identify reuse of recycled water for purposes of creating new freshwater habitat in enclosed bays and estuaries as a beneficial use (Section 3.2.4.2, p. 3). This reflects the state law goals of the Enclosed Bays and Estuaries Policy requiring reductions in discharges of even highly treated effluent enclosed estuaries in order to enhance the habitat values and water quality of those water bodies.

Response S6-23

The DEIR identifies "all perennial, intermittent, and ephemeral stream features, and any associated biological resources/habitats present within the entire Project footprint (including access and staging areas)," as requested by the comment. It is anticipated that construction activities would avoid activities within the bed and bank of these stream features such that a Section 1600 Streambed Alteration Agreement would not be required.

- The water conveyance pipelines would be located within existing roads and bridges within public rights of way and would not cross the drainages referenced in the comment.
- The DEIR (p. 3.4-65) states that the Calleguas SMP connection pipeline would pass under the Santa Clara River, along Harbor Boulevard. A Santa Clara River cut and cover crossing is thus avoided. Mitigation Measure BIO-7 would require a plan to control drilling fluids during construction of the underground pipeline segment. With

implementation of Mitigation Measure BIO-7, impacts to the Santa Clara River related to construction and operation of the Calleguas SMP would be less than significant.

- The discharge pipeline for RO concentrate will not impact the Arundell-Barranca drainage based on design of that facility, avoiding impacts to that channel and the necessity to obtain a Streambed Alteration Agreement. It is anticipated that either connection for the Calleguas SMP that cross the Bubbling Springs drainage will be installed using directional drilling methods to avoid impacts to the streambed.
- The Advanced Water Treatment Water Pipeline will not impact the Brown Barranca and the Harmon Barranca, due to use of horizontal directional drilling methods, avoiding impacts to those channels and the necessity to obtain a Streambed Alteration Agreement.
- Groundwater pumping would not have an impact on water surface elevation or the width of stream surface flow because it involves injection and extraction into the deep aquifer, separated from the confined, perched aquifer that provides flow within the lower Santa Clara River by 500 feet of depth, and a clay layer. Please see Responses S6-4 through S6-6, addressing the fact that the groundwater table supporting GDEs is isolated.

Response S6-24

Environmental impact reports must discuss a reasonable range of feasible project alternatives that eliminate, avoid, or substantially reduce significant impacts (CEQA Section 21002; CEQA Guidelines Section 15126.6(a)-(b)). Only alternatives that would reduce significant impacts and attain most of the proposed projects' objectives must be considered (CEQA Guidelines Section 15126.6(a)). VWRF discharge reductions under the proposed projects would not result in significant adverse environmental impacts on the SCRE. Nor would the alternative proposed in the comment reduce any significant adverse effects of the proposed projects or augment local water supply or make local water supply more reliable in drought conditions. Because adopting an alternative that would change the discharge location would not reduce any significant environmental impacts of the proposed projects, it need not be considered in the DEIR.

The suggested change in the discharge location also is likely infeasible due to federal Clean Water Act and state Porter Cologne Water Quality Control Act limitations on new wastewater effluent discharges to the Santa Clara River, and restrictions imposed on new discharges of recycled water, including those imposed by the Recycled Water Policy discussed in Response S6-17 above.

Response S6-25

The comment requests development of the following additional information that the SRP Report identifies in its discussions of "Caveats and Additional Considerations" (SRP 2018, p. 14):

A) Inclusion in the water balance model of:

- saltwater overwash;
- identification of the rate and contributions for filling of the SCRE (e.g., water-surface elevations relative to tides, wave action, stratification, limits of inundation);
- changes to the bathymetry of the estuary following large storm events;

- changes to the breaching dynamics associated with dredge spoil placement (referring to dredge deposits from Ventura Harbor that alter the morphology of the SCRE berm, as identified on page 2 of the SRP Report); and
- quantification of the effect of groundwater extraction and groundwater discharge.

(B) Changes to SCRE hydrology, flows from United Water Conservation District's water management practices, and proposed restoration action at McGrath State Park.

As an initial matter, it should be noted that the SRP's caveats and considerations do not constitute information necessary to identify impacts associated with VWRP discharge reductions associated with the proposed projects, nor proposed mitigation measures for the effects of the proposed projects. Rather, the SRP identified the information that could be refined as implementation of discharge reductions occurs to further "improve the scientific understanding of the SCRE... without identifying specific entities" that would most appropriately undertake these studies. SRP Report at p. 13.

A. The fact that the SRP made recommendations to continue to collect and improve monitoring information during implementation does not mean that the current information or water balance model is deficient. The information and water balance model set forth in the Phase 3 Report, and further augmented by the SRP Report and TRT Report, address the following in determining baseline conditions currently existing hydrology within the SCRE, and assessing impacts of proposed VWRP discharge reductions:

- **Saltwater Overwash:** The SRP's recommendation that the water balance model be enhanced to better characterize the effects of wave overwash addresses the issue of uncertainty in implementing a final closed-berm average annual CDL in the 0-0.5 MGD range. The SRP did not conclude that these modeling and data collection efforts were needed before reducing the effluent discharges to no more than 0.5 MGD.
 - Saltwater overwash is factored into the Phase 3 Study report analysis of water balance and water quality model results as part of study's analysis of tidal influence, calibration of the water quality model with actual conditions in 2014 and 2016, and analysis of water quality specific conductivity and salinity (Stillwater Sciences 2018, Section 3.3.3.3 pp. 57-58; Section 3.4.1.2, p. 86; Section 3.4.1.3, p. 88; Section 4.1.10, pp. 205-210; Section 4.2.1, pp. 206-209). The Phase 3 Study Report concluded that most saltwater was contributed to the SCRE during open-berm conditions, but that periodic wave overwash events introduce ocean water even in the absence of documented breach events (Stillwater Sciences 2018, Section 3.4.1.3, p. 88). Calibration of the model identified that significant filling of the SCRE due to wave overwash occurs, particularly in "extreme tide" or "king tide" conditions (Stillwater Sciences 2018, Section 4.2.1, p. 209). The Phase 3 Report identified wave overwash as a complex process that introduces a bit of uncertainty in estimating sources of inflow to the SCRE, but concluded that water balance model was sufficiently calibrated by the Phase 3 Study analysis to be representative of, and to capture existing baseline conditions within the SCRE (Stillwater Sciences 2018, Section 4.2.2, p. 213). Both the SRP and TRT criticized the water balance model as calibrated because it under-predicts the important and beneficial variations in salinity that are likely produced by wave overwash in reduced discharge/higher stage full estuary surface water elevations, and therefore biases the Phase 3 Study analysis

towards retaining higher levels of discharge as recommended in the Phase 3 Study Report. The SRP Report remedied this problem by its analysis of seasonality of wave overwash (SRP 2018, pp. 18-20). The SRP determined that seasonal changes in wave overwash due to height, direction, and period of wave run-up, together with seasonally high tides, would allow for greater contributions of saline ocean waters, improving salinity conditions within the SCRE, if VWRf discharges are reduced substantially (SRP 2018, p. 20). The TRT concurred in this analysis, and found that with the adjustments in analysis made by the SRP Report and described in the DEIR (p. 3.4-49) current conditions, including existing impairments to open water habitat quality, within the SCRE are adequately represented (TRT June 2018, p. 1).

- With lower volumes of freshwater effluent being discharged into the estuary, the salinity of the lagoon may increase slightly in response to wave overwash. However, by reducing the probability of unseasonal breaching, the overall risk of salinity-induced toxicity is much lower. The SRP Report was clear as to this conclusion. Unseasonal breaching represents the greatest threat to endangered and threatened species inhabiting the estuary. The salinity potentially added by some wave overwash is minuscule compared to the salinity added by a total breach of the berm.
- **Rate and contributions for filling of the SCRE (e.g., water-surface elevations relative to tides, wave action, stratification, limits of inundation).** Based on the best available monitoring data and information, the Phase 3 Water Balance does predict the contributions to filling from various sources (Stillwater Sciences 2018, Sections 3.3.1-3.3.4.6, pp. 49-77), and using that information, predicts stage full estuary surface water elevations and the limits of inundation (Stillwater Sciences 2018, Sections 4.1-4.2, pp. 186-213), then superimposes habitat successional rules on changes in SCRE water elevation and lagoon inundation area produced by varying VWRf discharges to predict changes in habitat type and area likely to be associated with various discharge reduction scenarios (Stillwater Sciences 2018, Section 5.3.1, pp. 230-237). As noted above, the SRP and TRT were critical of the degree to which the model failed to capture wave action and related salinity stratification because it ignores the adverse effects of current VWRf freshwater discharges on salinity in the SCRE during closed-berm condition. However, both the SRP and TRT accepted the Phase 3 Study predictions of changes in area for various habitat types and limits of inundation produced by the modeling results as an acceptable means of calculating change in quantity of habitat. The SRP and TRT simply disagreed with the Phase 3 Study Report's conclusion regarding the potential for adverse effects based primarily on reductions in aquatic habitat quantity because reductions in quantity do not reflect improvements in habitat quality anticipated to result from reducing VWRf discharges to a closed-berm average annual CDL of 0-0.5 MGD.
- **Changes to the bathymetry of the estuary.** The Phase 3 Study and water balance considered historical and current morphology and bathymetry of the SCRE in existing conditions, including location of the berm length of the berm, and shape, elevations, topographic and bathymetric data for the SCRE (Stillwater Sciences 2018, Section 3.2.2). A key component of the water balance model was to use calculated and water surface elevation and water surface area by using stage-area and stage- volume relationships observed in current conditions and based on current morphology, including bathymetry, to derive and predict water surface elevations and areas when inflow sources in the water balance model representing the VWRf discharges were reduced incrementally (Stillwater Sciences 2018, Sections 4.1.1 - 4.1.2, pp. 189-190). As noted by the Phase 3 Study, the TRT and the SRP, this approach resulted in a water balance calibrated for current

morphological conditions in the SCRE, meaning that future changes in morphological conditions would require recalibration of the water balance model (Stillwater Sciences 2018, Section 4.2.1, p. 213). However, the water balance model and resulting Phase 3 Study Report conclusions based thereon adequately reflect current morphology of the SCRE. The recommendation to evaluate the changes to the SCRE's bathymetry following large storm events may lead to interesting information, but it is unrelated to the effects of the proposed projects. The proposed projects would have no effect on the SCRE's bathymetry following large storm events.

- **Changes to the breach dynamics.** The Phase 3 water balance model does consider breaching dynamics historically and under current conditions, and integrates breaching dynamics into the water balance model (Stillwater Sciences 2018, Section 3.3.5, pp. 73-77, Section 3.3.6, pp. 77-79, Section 4.1.10, pp. 205-206). Further, in calibrating the water balance model, Stillwater Sciences determined that the model would under-predict maintenance dredging/discharge of spoils because those events are anthropogenic and infrequent, and are not representative of existing environmental conditions. Impacts of this 2015-2016 event were considered qualitatively during calibration (Stillwater Sciences 2018, Section 4.2.1, p. 208). Since the overall water elevation in the SCRE would be lower following project implementation, the estuary would "fill" at a slower rate than it does under current discharge conditions. Therefore, as the SRP noted, it would also take somewhat longer for berm breaches to occur. In addition, since the effluent would no longer be pre-filling the lagoon, it is far less likely that non-seasonal breaching will occur as people artificially remove the sand barrier to prevent flooding. Because dredging/discharge of spoils is not an ongoing influence on SCRE dynamics, it should be incorporated into analysis in the future when and if it occurs, but would not be appropriately incorporated into baseline conditions when such activities were and currently are not ongoing.
- **Quantification of the effect of groundwater extraction and groundwater discharge.** Groundwater inputs are incorporated into the Phase 3 Study water balance model based on best available current measurements of volume and flow direction derived from monitoring data, including that set forth in the Hopkins Groundwater Study (2018). As a result, all scientists concurred that current groundwater inflows are reasonably represented in the Phase 3 Study. However, the TRT and SRP disagreed with the Phase 3 Study conclusion that groundwater inflows would be insufficient freshwater inputs to the SCRE when VWRP discharges are reduced to a closed-berm average annual CDL of less than 1.9 MGD. The TRT and SRP disagreed with this conclusion not based on the prediction of groundwater inflow, but instead because they determined that the preferable hydrological condition for the SCRE is the historical, natural condition where total freshwater inflows to the SCRE are limited during dry weather, closed-berm conditions. In contrast, the Phase 3 Study Report assumed that the current level of freshwater inflow provided by the VWRP is ecologically preferable and should be replaced.

Notwithstanding, the fact that the Phase 3 Study analysis, including the water balance model, sufficiently incorporated all of the parameters mentioned in the comment, all scientists noted that these parameters are difficult to measure accurately, and can change over time in the very dynamic and complex ecological system that characterizes the SCRE. Accordingly, all scientists recognized that these parameters introduced uncertainty into the scientific analysis of the effects of reductions in VWRP discharges on the habitats and species of the SCRE. Therefore, all scientist recommended development and implementation of an adaptive management plan to address the scientific uncertainty, and assure that the predictions of

ecological benefits predicted to result from discharge reductions occur. Specifically, the SRP concluded:

“1. There is a need for ongoing **monitoring and adaptive management**. The SRP recommendations should be periodically revisited as conditions change and additional knowledge is gained through monitoring. Focus areas for ongoing monitoring should include [all of the parameters listed in the comment letter] (SRP 2018, p. 14, emphasis added).

As required by BIO-5 and BIO-6, the MAAMP would measure and monitor changes in the listed parameters, as well as effects of reduced discharge on the SCRE. The MAAMP studies are appropriately scaled to ensure that the proposed projects’ impacts on the environment are not significant, as the DEIR has concluded based on best available science.

- B. Changes to SCRE hydrology, flows from United Water Conservation District’s water management practices, and proposed restoration action at McGrath State.** These parameters all relate to future predicted changes unrelated to the proposed projects and outside of the control of the City that may impact freshwater inflows to the SCRE, and habitat conditions and types near the SCRE. Because these are future predicted changes, they have not been considered in the existing, baseline condition for purposes of assessing the impacts of the proposed projects. The SRP Report identifies in its discussions of “Caveats and Additional Considerations” (SRP 2018, p. 14) and recommends that these future changes should be observed and monitored as part of an adaptive management program, stating, emphasis added:

“There is a need for ongoing **monitoring and adaptive management**. The SRP recommendations should be periodically revisited as conditions change and additional knowledge is gained through monitoring. Focus areas for ongoing monitoring should include:

- i. **Changes associated with modification in the water management practices of United Water Conservation District** that result in **changes to river hydrology**, affecting water quality and water surface level predictions.
- ii. Altered conditions associated with **proposed restoration actions in the river and estuary related to McGrath State Park**.

As discussed above, BIO-5 and BIO-6, the MAAMP would measure and monitor changes in the listed parameters, as well as effects of reduced discharge on the SCRE. The MAAMP studies are appropriately scaled to ensure that the proposed projects’ impacts on the environment are not significant, as the DEIR has concluded based on best available science.

Further, the DEIR evaluates cumulative impacts in Chapter 4.0. Current upstream diversions and releases are considered part of the baseline condition, and the DEIR recognizes that in the future, more water may be released in the springtime during the descending limb of the hydrograph to support steelhead habitat and migrations. The

DEIR concludes that proposed projects support, would benefit from, and are consistent with United's planned future actions to enhance steelhead habitat (DEIR p. 4-11). This conclusion is supported by the SRP, TRT, and Phase 3 Study.

Similarly, the DEIR recognizes that in the future, wetland and river restoration related to McGrath State Park may improve habitat conditions within and near the SCRE. The DEIR concludes that the proposed projects support, would benefit from, and are consistent with the future SCRE and river enhancement project as planned. (DEIR page 4-11) This conclusion is supported by the SRP, TRT, and Phase 3 Study.

Response S6-26

The DEIR evaluates ocean water intakes for Phase 2 desalination at a program level. Potential impacts from entrainment and impingement are discussed on pages 3.11-51, 3.11-58, 3.11-59, and 3.11-60. As noted on page 3.9-34, the California Ocean Plan Amendment pertaining to ocean water desalination projects requires subsurface intakes unless proven to be infeasible. The program level evaluation requires installation of a subsurface intake, and assesses likely impacts of such an intake, but notes that additional work is required to confirm feasibility. In the event that a subsurface intake is infeasible, as explained in the EIR, the BMPs and measures identified in the Ocean Plan would have to be implemented pursuant to state law. Subsequent CEQA analysis would be required prior to installing any ocean water intake system, and the City would further evaluate all options for subsurface intakes, including slant wells, at that time.

Response S6-27

The DEIR evaluates impacts to ocean water quality from the discharge of brine (pp. 3.9-62 through 3.9-68; see also Appendix D). Following the California Ocean Plan recommended assessment methods, the DEIR summarizes results of plume dispersion modeling conducted to evaluate whether the anticipated brine would comply with Ocean Plan salinity mixing zone requirements. The DEIR (p. 3.9-66) concludes that brine from the advanced wastewater treatment process could be discharged in compliance with the Ocean Plan. As noted in the DEIR, the City would also be required to obtain a NPDES permit for the discharge, which pursuant to the federal Clean Water Act and Porter Cologne Water Quality Control Act must contain a monitoring and reporting program to confirm that brine waste is fully mixed and properly diluted as predicted by the plume dispersion modeling conducted to evaluate potential impacts for purposes of the DEIR. A similar process was conducted to evaluate the consistency of the ocean water desalination brine discharge with the Ocean Plan (DEIR, p. 3.9-62). Potential impacts to marine biology from the discharge of brine is evaluated at pages in the DEIR on pages 3.11-41 through 3.11-51. The EIR concludes that discharges of brine would be conducted in a manner protective of marine biology and in compliance with California and federal regulations including the California Ocean Plan, resulting in less than significant impacts.

Response S6-28

Parking, driving, lay-down, stockpiling and vehicle and equipment storage and staging areas required for construction of the infrastructure to be implemented pursuant to the proposed projects, including AWPf, groundwater wells, pipelines and pump stations, would be installed in

compacted and developed areas whenever feasible, or in areas with no sensitive habitats, and access and vehicles will be appropriately limited as recommended. Once construction is complete, construction areas will be returned to pre-construction conditions.

Response S6-29

All data summarized in the Phase 3 Study, TRT Reports, and SRP Report is publicly available and/or has been properly submitted to the California Natural Diversity Database (CNDDDB). The development and implementation of the MAAMP will result in collection of monitoring data. The City would share data collected with agencies, including CDFW, and would report any special status species and natural communities detected during surveys to the CNDDDB as required.

Response S6-30

The City will comply with the fee requirements associated with filing the CEQA Notice of Determinations.

Los Angeles Regional Water Quality Control Board

Response S7-1

The comment describes the project description, phased implementation, and ongoing monitoring and assessment proposed as project design features (BIO-5 and BIO 6), and provides background information. The comment accurately summarizes the recommended CDLs from three reports, except that the timing component and a few other details of the recommendation were left out of the abbreviated description, as follows:

- The Phase 3 Study recommends an average annual CDL of 1.9 MGD during dry weather conditions.
- The TRT Report (March 9, 2018) recommended an average annual CDL of 0.9-1.4 MGD during closed-berm conditions, and additional discharges during conditions when the berm is open seasonally due to Santa Clara River flows to better mimic natural watershed hydrology.
- The SRP Report (June 2018) recommended an average annual CDL of 0 to 0.5 MGD during closed-berm conditions, with greater flows being permitted when necessary if the berm is open due to high Santa Clara River flows to better mimic natural watershed hydrology.

Please note that the TRT subsequently reviewed the SRP Report (TRT Comment, June 6, 2016) and concluded:

[R]ecognizing that the RARE beneficial use is, by definition, the most important to preserve and enhance, the TRT supports the SRP recommendation to provide the best protection for these species. The TRT notes that other beneficial uses, such as wetlands, riparian vegetation, and open water habitat that have evolved in response to the City's discharges may not be met to the full extent they are today. The TRT agrees with the SRP that the quality of the various habitats is more important than the quantity. . . The TRT believes the SRP's recommended MEPDV and Continued Discharge Level would afford

sufficient habitat area for the four endangered species and is expected to improve the quality of available habitat. (TRT Comment, p. 2.)

Also, please note that the City proposes that the closed-berm discharge limitation corresponding with the recommended average annual, closed-berm CDL should be calculated based on a water year (September 30 to October 1) for practical purposes.

Response S7-2

The comment describes the project description, phased implementation, and ongoing monitoring and assessment. The project design features describing preparation and implementation of the MAAMP set forth in Mitigation Measures BIO-5 and BIO-6 provide for ongoing monitoring and assessment referenced by the comment. As noted in response to comments submitted by the CDFW, it is not clear that Water Code Section 1211 applies to discharges to the SCRE, which is not a “waterway” regulated by that statute, but the City acknowledges and agrees that the ongoing monitoring and assessment required by BIO-5 and BIO-6 are also likely to be required as conditions of other permits that must be obtained by the City from Responsible Agencies.

Response S7-3

Mitigation Measure BIO-6 is intended to ensure that the proposed projects’ benefits to sensitive species and habitats, as supported by best available science set forth in the Phase 3 Study, TRT Reports, and SRP Report, are implemented as predicted. These benefits include ensuring that any adverse effects to listed species are minimized, while further implementing the benefits of the proposed projects.

Mitigation Measure BIO-6 requires the annual submission of monitoring reports to state and federal wildlife agencies (NMFS, CDFW, and USFWS), and requires the City to consult with these agencies to evaluate the data and trends shown in the monitoring data. If any of the agencies determines that reducing the average annual discharge flows below 1.9 MGD in closed-berm conditions would result in an authorized “take” of one or more listed species contrary to permits or authorizations, then measures specified in the MAAMP would be implemented and reduced discharge would not occur until and unless the Regional Board and wildlife agencies authorize discharge reduction.

Response S7-4

In response to the comment the following modifications have been made to the last sentence of Section 2.4 of the DEIR on page 2-17:

During Phase 1A, an average annual continued discharge level (CDL) of 1.9 MGD (calculated on the basis of a water year, i.e., September 30 to October 1) to the SCRE will be maintained during closed-berm conditions pursuant to recommendations of USFWS, NMFS, and CDFW, based upon their review and analysis of the Phase 3 Estuary Study, the SRP Report, and the TRT recommendations. It is anticipated that ~~the compliance schedule in the VWRF NPDES permit renewal (scheduled for issuance this year) will require the City to limit~~ establish an interim discharge limitation for flows discharges to

the SCRE during closed-berm conditions to a CDL of 1.9 MGD on an average annual basis, to be attained as soon as practicable, but not later than the end of 2025, based on the recommendations of USFWS, NMFS, and CDFW. During Phase 1B, by 2030, a reduction in during closed-berm conditions to the a CDL to of 0 to 0.5 MGD on an average annual basis would be attained, based on the combined recommendations of the SRP, TRT, USFWS, NMFS, and CDFW, and subject to oversight by USFWS, NMFS and CDFW. It is anticipated that the impending updated NPDES permit renewal when issued by the RWQCB, would address discharge reductions on this schedule through the City's preparation and submission to the Regional Board of a "transition plan" and/or "discharge reduction monitoring and implementation plan," which would require approval from the RWQCB Executive Officer, and would include periodic progress reports towards discharge goals, as well as any environmental issues encountered in reducing discharges, as described in BIO-5 and BIO-6. in the updated NPDES permit that will authorize implementation of Phase 1A the compliance schedule in the VWRf NPDES permit renewal (scheduled for issuance this year) will establish a final discharge limitation for flows to the SCRE not to exceed 0.5 MGD on an average annual basis, to be attained as soon as practicable, but not later than the end of 2030, based on these recommendations and subject to such

Response S7-5

As described on page 2-7, the proposed projects would include 4.5 MG of storage within the AWPf facility to detain high flows that may be experienced at the VWRf during naturally closed-berm conditions due to a rainfall event that is not significant enough to breach the berm. The wet well and storage tank would be sized to mitigate peak flow periods associated with closed-berm, wet weather events, and capture water for reuse (DEIR, p. 2-12). Higher discharges of tertiary-treated flow in excess of the CDL would occur (except in the case of emergency) during open-berm conditions. Even during open-berm conditions, higher discharges would occur in limited circumstances when necessary to create or maintain maximum storage capacity within the system for purposes such as: protecting system operations during exceptional or multiple rain events; preventing spills or bypass, or drawing down stored flows to ensure sufficient storage capacity during closed-berm conditions. Excess effluent would be discharged to the SCRE when the berm is open due to Santa Clara River flows, and during months reflecting the steelhead migratory period (DEIR, p. 2-16).

Each of the new outfall options would be designed to accommodate some tertiary-treated flows in the event that flows might exceed the AWPf capacity during closed-berm wet weather events, or during times of emergency shut down (DEIR, p. 2-34). If the option of a discharge pipeline to the Calleguas Salinity Management Pipeline is selected, the City would construct a new 8- to 14-inch-diameter concentrate pipeline and pump station to convey concentrate (and occasional tertiary-treated flows) from the proposed AWPf/VWRf to the existing Calleguas SMP ocean outfall (Figure 2-14). The concentrate would be discharged to the ocean through the existing SMP ocean outfall, subject to SMP capacity availability and approval from Calleguas MWD (DEIR, p. 2-35).

Response S7-6

The EIR identifies the proposed pipeline alignment routes in Figure 2-9. As noted in Table 2-9, the City will obtain easements for these pipelines with local jurisdictions. The importance of initiating any easements needed for private properties, in order to avoid construction delays, is noted.

Response S7-7

Please note that the DEIR concludes that the proposed projects are environmentally superior to the alternatives (DEIR, p. 6-42.), including Alternative 4, in part because Alternative 4 does not provide for phasing discharge reductions. Of the alternatives to the proposed projects, the DEIR identifies Alternative 4 as the environmentally superior alternative ((DEIR, pp. 6-41, 6-42), but the DEIR does not conclude Alternative 4 is environmentally superior to the proposed projects.

If phased implementation were added to Alternative 4, it would very closely resemble the proposed projects, which incorporate phased implementation before reaching a CDL of 0 to 0.5 MGD. Alternative 4 helps to provide a reasonable range of alternatives to the proposed projects. In response to this comment and amendments to the CEQA Guidelines adopted after preparation of the DEIR, the benefits of the proposed projects, including phased discharge reductions, are further discussed in Chapter 9 of the FEIR.

Response S7-8

A detailed evaluation of Alternative 6: Existing Outfall is provided in Chapter 6, pages 6-22 through 6-25. One pipe is 20 inches in diameter, but appears too corroded to be repurposed. The second outfall includes a 30-inch pipeline that is exposed across the nearshore zone during low tide and was mostly full of sediment at the seaward end in 1993. The EIR concludes that the refurbishing and use of an existing outfall would result in greater impacts from construction and operation compared to the new outfall identified in the proposed project.

Response S7-9

The Final SRP Report (Kramer 2018) is provided on the City's website: <https://ca-ventura.civicplus.com/1081/6635/Library-of-Reports?activeLiveTab=widgets>. The Final Report does not change the referenced information. No changes to the EIR are required.

Response S7-10

In response to the comment the following modifications to the text have been made to page 3.9-60:

Turbidity

... As part of the proposed projects and as required by the USACE Section 10 requirements and RWQCB 401 Certification, dredge BMPs such as silt curtains,¹²

¹² Floating impermeable barrier intended to allow suspended sediment at a dredging site to settle out of the water column in a controlled area, minimizing the area that is affected by the increased suspended sediment.

gunderbooms,¹³ operational controls, and in-water work-windows would be employed to minimize turbidity and suspended sediment. Silt curtains and gunderbooms reduce dispersal of suspended sediment and increased turbidity beyond the dredge site. Operational controls would be specific to the dredging method and would represent protocols that minimize bottom disturbance and the potential for resuspending sediment. Work windows are periods of time when special-status or listed species are not present in the area (see Section 3.11, Marine Biology). The BMPs would also be incorporated into Section 10 permit conditions and Section 401 Certification conditions.

Response S7-11

In response to the comment, the following modifications have been made to the EIR on page 3.9-62:

Dredge-Material Stockpiling, Transport, and Disposal

...Approval to dispose of dredge material at LA-2 would require testing of the material to ensure compliance with the LA-2 requirements. Sediments from the proposed dredging area would be tested using standard USEPA protocols (according to an approved sampling and analysis plan) prior to dredging to determine the suitability of the material for unconfined, aquatic disposal or other disposal alternatives. If determined to be suitable for open ocean disposal, the dredged material could be disposed of at a designated ocean disposal site with approval from the USACE and USEPA's designated Contaminated Sediment Task Force and Southern California Dredged Material Management Team. Mandatory compliance with Section 10 permit requirements, RWQCB water quality certification, and Waste Discharge Requirements as well as disposal of dredged materials would ensure the proposed projects are consistent with relevant regulations, plans, and policies. Water quality impacts relating to dredge-material transport and disposal would be less than significant.

Response S7-12

In response to the comment, Table 3.9-10 has been modified as follows to incorporate updated effluent limitation for the Calleguas SMP NPDES Permit, Order No. R4-2014-0033-A01.

¹³ Similar to silt curtains but constructed of permeable geotextile fabrics. Designed to extend from the water surface to the project bottom and allow water to flow through the curtain while filtering suspended dredged sediment from the flow.

**TABLE 3.9-10
PROPOSED OPERATIONAL DISCHARGE EFFLUENT WATER QUALITY
VS. CALLEGUAS SMP NPDES PERMIT EFFLUENT LIMITATIONS**

Water Quality Constituent	Units	Calleguas SMP Ocean Discharge NPDES Daily Max Effluent Limitations¹	VWRF Effluent discharged to SCRE	RO Concentrate
Copper	µg/L	730	6.1	9
Selenium	µg/L	4,400	2.9	18.2
Lead	µg/L	580	7	0.7
Nickel	µg/L	1,500	7.2	7.6
Ammonia (May to October)	µg/L	180,000	-	2
Ammonia (November to April)	µg/L	180,000	-	2

¹ The parameters listed within this table do not have average monthly limits for the Calleguas Salinity Management Pipeline NPDES Permit. Daily Max. limits are used for comparison.

SOURCE: Carollo 2016

Response S7-13

Contact information for the Los Angeles Regional Water Quality Control Board is noted.

Los Angeles Regional Water Quality Control Board

Response S8-1

The commenter identifies a typographical error. The date of the final Consent Decree is February 2012, not 2017. The text on page 1-9 has been corrected in the EIR.

10.4 Local Agency Responses

The following comment letters were received from local agencies on the Ventura Water Supply Projects Draft Environmental Impact Report (DEIR). The comment letters are grouped together and are followed by all responses as indicated in Table 10-4.

TABLE 10-4
LIST OF DEIR COMMENT LETTERS: LOCAL AGENCY

Letter Code	Commenting Party	Letter Page Number	Response Page Number
LA1	Ventura County Public Works Agency – Transportation Department	10.4-2	10.4-17
LA2	Ventura County Watershed Protection District	10.4-6	10.4-20
LA3	Ventura County Planning Division – Long Range Section	10.4-10	10.4-23
LA4	Ventura County Air Pollution Control District	10.4-12	10.4-29
LA5	Fox Canyon Groundwater Management Agency	10.4-15	10.4-31



County of Ventura
PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division
MEMORANDUM

DATE: 4/16/2019

TO: RMA Planning Division
Attention: Anthony Ciuffetelli

A handwritten signature in blue ink, appearing to read "Anitha Balan", is written over the "TO:" field.

FROM: Anitha Balan, Engineering Manager II

For Anitha Balan

SUBJECT: REVIEW OF DOCUMENT 17-025-1 DEIR

Project: **Ventura Water Supply Project**

Lead Agency: **Ventura Water**

The proposed projects would protect the ecology of the Santa Clara River Estuary (SCRE) while augmenting local potable water supplies and providing a drought- and disaster-resilient water supply.

Pursuant to your request, the Public Works Agency - Transportation Department has reviewed the DEIR for the Ventura Water Supply Project.

The City of San Buenaventura (Ventura or City), as the lead agency pursuant to the California Environmental Quality Act (CEQA) and State CEQA Guidelines, has prepared this Draft Environmental Impact Report (EIR) to provide the public and pertinent agencies with information about the potential effects on the local and regional environment associated with the proposed Ventura Water Supply Projects (proposed projects). The proposed projects would protect the ecology of the Santa Clara River Estuary (SCRE) while augmenting local potable water supplies and providing a drought- and disaster-resilient water supply.

LA1-1

The proposed projects would be implemented in two phases. The first phase, evaluated at the project level in this EIR, would treat water for potable reuse through implementation of the Ventura Water Pure Project.¹ The second phase, evaluated at the program level, would address the water needs resulting from planned future growth by providing for the increased water supply that will be needed by 2030. This increased water could be provided either by consistent diversion of 100 percent of the water currently discharged to the Santa Clara River Estuary (SCRE) for potable reuse or by ocean desalination. The second phase would only be implemented following project-level CEQA review.

We offer the following comment(s):

LA1-2

1. The cumulative impacts of the construction of this project, when considered with the

Commenter LA-1: VC

cumulative impact of all other approved (or anticipated) projects in the County, will be potentially significant. To address the cumulative adverse impacts of traffic on the Regional Road Network, Ventura County General Plan Goals, Policies, and Programs Section 4.2.2-6 and Ventura County Ordinance Code, Division 8, Chapter 6 require that the PWATD collect a Traffic Impact Mitigation Fee (TIMF). The appropriate Traffic Impact Mitigation Fee (TIMF) should be paid to the County prior to start of construction. The TIMF may be adjusted for inflation at the time of deposit in accordance with the latest version of the Engineering News Record Construction Cost Index.

Based on the information provided in the Public Draft Environmental Impact Report for the Ventura Water Supply Project this project will generate Average Daily Trips (ADT) exceeding 200 ADT. In accordance with the reciprocal agreement between the City of Ventura and the County of Ventura a reciprocal fee is due. The City should deposit the TIMF reciprocal fee with the PWATD. The applicant/permittee may choose to submit additional information or provide an updated traffic analysis to supplement the information currently provided to establish the TIMF fee.

a) The TIMF due to the PWATD for Phase 1 would be:

$$\$37,383.36 = 672 \text{ ADT} \times \$55.63(1) \text{ per ADT}$$

Total ADT Option 1 (New Outfall Discharge Option) Use for TIMF Fee

$$672 \text{ ADT} = 390 \text{ ADT} + 46 \text{ ADT} + 66 \text{ ADT} + 66 \text{ ADT} + 21 \text{ ADT} + 83 \text{ ADT}$$

Total ADT Option 2 (Discharge Pipeline to Calleguas Discharge Option)

$$632 \text{ ADT} = 390 \text{ ADT} + 46 \text{ ADT} + 66 \text{ ADT} + 66 \text{ ADT} + 21 \text{ ADT} + 43 \text{ ADT}$$

Advanced Water Purification Facility

$$390 \text{ ADT} = (\text{Avg. 148 Workers Vehicles} + 4 \text{ Traffic Control Workers} \\ + \text{Avg. 43 Vendor Vehicles}) / \text{day} \times 2 \text{ trips / vehicle}$$

Water Conveyance System

$$46 \text{ ADT} = (\text{Avg. 16 Workers Vehicles} + 4 \text{ Traffic Control Workers} \\ + \text{Avg. 3 Trucks}) / \text{day} \times 2 \text{ trips / vehicle}$$

Groundwater Wells

$$66 \text{ ADT} = (\text{Avg. 20 Workers Vehicles} + 4 \text{ Traffic Control Workers} \\ + \text{Avg. 9 Trucks}) / \text{day} \times 2 \text{ trips / vehicle}$$

LA1-2

Wildlife/Treatment Wetlands

$$66 \text{ ADT} = (\text{Avg. 14 Workers Vehicles} + 4 \text{ Traffic Control Workers} + \text{Avg. 15 Trucks}) / \text{day} \times 2 \text{ trips / vehicle}$$

VWRF Treatment Upgrades

$$21 \text{ ADT} = (\text{Avg. 10 Workers Vehicles} + \text{Avg. 0.5 Trucks}) / \text{day} \times 2 \text{ trips / vehicle}$$

Concentrate Discharge Facility

Option 1 - New Outfall

$$83 \text{ ADT} = (\text{Avg. 35 Workers Vehicles} + 4 \text{ Traffic Control Workers} + \text{Avg. 2.5 Truck Loads}) / \text{day} \times 2 \text{ trips / vehicle}$$

Option 2 - Discharge Pipeline to the Calleguas SMP

$$43 \text{ ADT} = (\text{Avg. 15 Workers Vehicles} + 4 \text{ Traffic Control Workers} + \text{Avg. 2.5 Truck Loads}) / \text{day} \times 2 \text{ trips / vehicle}$$

Notes

(1) County of Ventura TIMF for the Average Daily Trips in the Ventura Area District # 10

(2) The Worker Trips and Truck Trips specified in the Draft EIR are only one-way values, the Draft EIR should have multiplied the trips by two. For example, 1 worker trip equals 1 trip going to the site and 1 trip leaving the site, 2 total trips. The Draft EIR should clarify and correct this to eliminate confusion on the number of trips the project is generating.

2. The Draft EIR does not have trip generation information about phase 2 of the project, AWPf Expansion and Ocean Desalination. The Draft EIR should be revised to have a full trip generation break down similar to what is show in phase 1 for the Draft EIR. Once this is done the County of Ventura, Public Works Agency, Transportation Department (PWATD) can comment on the impact and trips generated by this phase.

3. According to the County policy, trenching shall not be permitted on any street that was rehabilitated within the last five years, unless a full width overlay is provided after trenching is completed. The Ventura Water should be made aware that the County section of Olivas Park Drive and Victoria Avenue are listed as Priority 1 in

LA1-2

LA1-3

LA1-4

Commenter LA-1: VC

- the County's Multi-Year Pavement Plant for completion in FY2019. The Ventura Water shall repair any damage to County roads due to trenching and the traffic generated by this project up to and including providing a new overlay as determined by the Transportation Department. The overlay shall be done in accordance with the County of Ventura, Public Works Agency, Road Standards, in particular plate E-11. LA1-4
4. Prior to any work conducted within the County right-of-way, the developer/project proponent shall obtain an encroachment permit from the Transportation Department. This project will require an encroachment permit from the Transportation Department for work done within the road right-of-way as shown in the Proposed Project and Figure 2-9 Phase 1 Water Conveyance Pipeline. The applicant shall contact (805) 654-2055 for the requirements of this permit. LA1-5
5. This project as proposed will generates significant truck traffic on the County of Ventura Regional Road Network and local public roads, the developer/project proponent should identify the proposed truck routes for the project. Furthermore, if county roads are anticipated to be used during construction, then a truck route plan/map should be submitted to the Transportation Department for review and approval. LA1-6
6. The applicant should provide a Traffic Management Plan (TMP) to identify the construction-related vehicle route, especially for trucks. The TMP should be submitted to Transportation Department for review and approval. If the applicant uses the County roads for truck and construction related trips, proper precautions shall be taken to protect all pavements, curb and gutter, sidewalks, and drainage structures from damage. Any portion damaged by the project's operations, in the opinion of the Transportation Department or designee, shall be replaced in accordance with current Standard Construction Details and/or in a manner acceptable to the Transportation Department or designee. Of particular interest are Olivas Park Drive and Victoria Avenue. LA1-7
7. The proposed project would require construction in local roadways, including temporary closures of traffic lanes. Construction would cause driver inconvenience and could occur in proximity to homes and schools therefore, construction activity is recommended to take place during off-peak hours. LA1-8
8. The County of Ventura, Public Works Agency, Transportation Department would like to receive a copy of the Revised Draft EIR and Final EIR. LA1-9
- Our review is limited to the impacts this project may have on the County's Regional Road Network.



WATERSHED PROTECTION
WATERSHED PLANNING AND PERMITS DIVISION
800 South Victoria Avenue, Ventura, California 93009
Sergio Vargas, Deputy Director – (805) 650-4077

MEMORANDUM

DATE: April 18, 2019

TO: Anthony Ciuffetelli, RMA Planner
County of Ventura

FROM: Sergio Vargas, Deputy Director *S.V.*

SUBJECT: RMA17-025 Ventura Water Supply Projects
Draft Environmental Impact Report, Zone 2
Watershed Protection Project Number: WC2019-0019

Pursuant to your request dated March 11, 2019, this office has reviewed the submitted materials and provides the following comments.

PROJECT LOCATION:

City of Ventura, CA

PROJECT DESCRIPTION:

The Ventura Water Supply Projects would divert tertiary-treated water discharge before it enters the Santa Clara River Estuary (SCRE) and develop new water supplies to augment the City of Ventura (City) water supply portfolio and meet future water demands described in the 2015 Urban Water Management Plan (UWMP) and 2018 Comprehensive Water Resources Report (CWRR). Consistent with the City's 2015 UWMP, approximately 5,400 acre feet per year (AFY) of new water supply is needed by 2035 to meet the projected water demand. Ventura Wastewater Reclamation Facility (VWRF) effluent flows have varied historically based on hydrologic condition, season, and level of conservation. The new treated water supply is based conservatively on the 2016 (drought condition) flow condition used for the Phase 3 studies, and the required Continued Discharge Levels (CDLs) for Phase 1a, 1b and 2. However, to meet the CDL requirements the capacity of the Advanced Water Purification Facility (AWPF) must be greater to accommodate the variation in wastewater flows that have been observed in the historical record. The estimated total capacity for diversion and discharge to the SCRE (CDL) needs to be approximately 6.5 million gallons per day (mgd). Therefore, at a CDL of 0.5 mgd, the required AWPF capacity is 6 mgd. A 6 mgd AWPF would have the capacity to produce up to 5,400 AFY even though the available flows to divert may not always reliably provide that much supply.

LA2-1

RMA17-025 VENTURA WATER SUPPLY PROJECTS

April 18, 2019

Page 2 of 3

WATERSHED PROTECTION DISTRICT COMMENTS:

Flood Control Facilities / Watercourses – Ventura County Watershed Protection District

- | | |
|---|--------------|
| <p>1. The proposed project pipeline alignments in Figure 3.10-2 of the Draft EIR prepared by ESA, dated March 2019, proposes to either run parallel or cross Ventura County Watershed Protection District (District) jurisdictional watercourses, channels and/or levee facilities. The project proponent is hereby informed that it is the District's standard that a project cannot impair, divert, impede, or alter the characteristics of the flow of water running in any District jurisdictional redline channel. Additionally, all proposed activities that are within, over, or under the bed or banks of a District jurisdictional channel would require an Encroachment Permit under the requirements of Ordinance WP-2, prior to ground disturbance. The Arundell Barranca, Clark Barranca, Hueneme Drain, and Harmon Barranca are District jurisdictional watercourses.</p> | <p>LA2-2</p> |
| <p>2. The use of any District Right-of-Way (ROW) at Moon Ditch, Sudden Barranca, Oxnard West Drain and Oxnard West Drain-North would be subject to District approval. Please provide a conceptual design of the trench and a cross section of the pipelines relative to all District jurisdictional channels, facilities, and right-of-way.</p> | <p>LA2-3</p> |
| <p>3. Table 2-9 of the Draft EIR should list the Ventura County Watershed Protection District as a regulating agency.</p> | <p>LA2-4</p> |
| <p>4. Directional drilling or jack and bore methods are proposed as a method for construction of the pipeline to cross beneath the Santa Clara River, which is a District jurisdictional redline channel. Construction of a pipeline below this feature would be required to ensure the riverbed would not be compromised or impacted. The District requests potential vibration-related impacts to District facilities resulting from horizontal directional drill (HDD) vibration (e.g., liquefaction) be addressed in the Final EIR. Please note, this is an area of high groundwater and would likely prove difficult to cross beneath. The Final EIR should address the effects of dewatering on District facilities or jurisdictional watercourses crossed by the project.</p> | <p>LA2-5</p> |
| <p>5. The District's Operations and Maintenance crews routinely service District facilities on both a scheduled and as needed basis. Projects that would utilize District facilities in any way would need to schedule work well in advance to construction to ensure the District's operations are not impacted. Further, if any maintenance were required to the pipeline within the operations phase, the District's Operations and Maintenance crews would need to be notified well in advance to ensure the District's operations are not impacted.</p> | <p>LA2-6</p> |
| <p></p> | <p>LA2-7</p> |

RMA17-025 VENTURA WATER SUPPLY PROJECTS

April 18, 2019

Page 3 of 3

6. All construction activities and staging within the District ROW shall be coordinated with the District Operations and Maintenance staff. At no time shall these activities obstruct access to District facilities during storm events.
7. Permanent above ground features would be included in the proposed projects. The final EIR should consider mitigation measures to address potential cumulative impacts due to potential increases in imperviousness. It is the District's policy that Projects shall not increase storm runoff in all frequencies of storm events consistent with WP-2 Ordinance.

LA2-8

LA2-9

Hydraulic Hazards - FEMA

8. Potential well sites 2 and 3 are within an area the Federal Emergency Management Agency (FEMA) has identified as a Special Flood Hazard Area "Zone AE." This is evidenced on Flood Insurance Rate Map (FIRM) Panel No. 06111C0905E, effective January 20, 2010. A Floodplain Development Permit from the Ventura County Public Works Agency (VCPWA) is required prior to ground disturbance.
9. Calleguas Salinity Management Pipeline (SMP) Potential Connection 1 crosses multiple locations identified by FEMA as Special Flood Hazard Area Zones AE and X shaded, including a regulatory floodway. This is evidenced on FIRM Panel Nos. 06111C0885E and 06111C0905E, both effective January 20, 2010. A Floodplain Development Permit from the Ventura County Public Works Agency (VCPWA) is required prior to ground disturbance. A No Rise Certificate will be required for work within the Regulatory Floodway.
10. The proposed Brine Discharge Pipeline is located within a FEMA designated Special Flood Hazard Area "Zone VE," a coastal area with a 1% or greater chance of flooding. This is evidenced on FIRM Panel No. 06111C0745E, effective January 20, 2010. A Floodplain Development Permit from VCPWA is required prior to ground disturbance.

LA2-10

LA2-11

LA2-12

Biological Resources – Ventura County Watershed Protection District

11. Endangered southern steelhead (*Oncorhynchus mykiss*) are known to occur in the Santa Clara River. If drilling activities have a potential to effect surface water levels in the Santa Clara River (i.e. drawdown of groundwater from dewatering), avoidance measures to southern steelhead, such as temporal construction restrictions, should be discussed in the Final EIR.

LA2-13

END OF TEXT

RESOURCE MANAGEMENT AGENCY
county of ventura

PLANNING DIVISION
Kimberly L. Prillhart
Director

April 22, 2019

Gina Dorrington
City of Ventura
501 Poli Street
Ventura, CA 93002-0099

Subject: Draft Environmental Impact Report for Ventura Water Supply Projects

Dear Ms. Dorrington:

Thank you for the opportunity to provide input and comments on the Draft Environmental Impact Report for Ventura Water Supply Projects. The Long Range Section of the Ventura County Planning Division reviewed the Draft Environmental Impact Report for the proposed project and provides the following response:

LA3-1

1. **Annexation.** Three sites are identified in the Draft Environmental Impact Report as potential Advanced Water Purification Facility (AWPF) locations. Two of the three sites are located in unincorporated Ventura County; the Portola Road site and the Harbor Boulevard site. The Portola Road site is located on southeast corner of the logical extensions of Portola Road and Colt Street and has a Ventura County land use designation of Agricultural within the Urban Reserve overlay. The Harbor Boulevard site is located on the southeast corner of Harbor Boulevard and Olivas Park Drive within the Coastal Zone and has a Ventura County land use designation of Open Space within the Urban Reserve overlay.

LA3-2

The Ventura County Long Range Planning Section concurs with the determination in the Draft Environmental Impact Report that these sites are required to be annexed prior to development. Should one of the above sites be selected for development of the project and annexation fail to occur, the Draft Environmental Impact Report shall be revised and re-distributed to our agency. The development as proposed would not be compatible with the Ventura County General Plan and Zoning Ordinance(s). We are in support of annexation for either of these sites prior to development which is consistent with the Guidelines for Orderly Development.

2. **Agricultural/Urban Buffer Policy.** On July 19, 2006, the Ventura County Agricultural Commissioner's office published a document titled "Agricultural/Urban Buffer Policy". The publication provides guidelines for new non-farming development adjacent to or on land zoned AE, OS or RA. The Draft Environmental Impact Report should address potential land use compatibility conflicts between the proposed project and nearby existing agricultural operations. The Draft Environmental Impact Report shall also include a discussion of the

LA3-3



Agricultural/Urban Buffer Policy and an analysis of the distance and type of buffer(s) between the proposed project and adjacent farming activities. The proposed development should provide buffers and screening in accordance with the Agricultural/Urban Buffer Policy and shall be identified as mitigation measures in the Agriculture and Land Use sections of the Draft Environmental Impact Report. This policy document can be found on the web at this link

http://vcportal.ventura.org/AgComm/onestoppermitting/docs/APAC_AgriculturalUrban_Buffer_Policy.pdf

LA3-3

3. **Save Open-space and Agricultural Resources (SOAR).** The County of Ventura has adopted provisions for SOAR. The Draft Environmental Impact Report (Chapter 3, Section 3.10 Land Use and Planning on page 3.10-29) provides a discussion on policies related to SOAR and how a non-agricultural use would conflict with goals and policies of both the City of Ventura and County of Ventura. It is unclear how the requirement of an agricultural conservation easement to mitigate for the loss of Prime Farmland would ensure consistency with the Ventura County SOAR program for the Portola Road site. The environmental document should consider Ventura County SOAR provisions which do not allow for non-agricultural uses on sites within SOAR boundaries absent a vote of the people. Further discussion is needed on how the project will mitigate loss of Prime Farmland and develop non-agricultural uses on land within Ventura County SOAR boundaries. This analysis is needed to determine the level of significance for this impact.

LA3-4

4. **Discretionary Approvals Required for the Project.** Table 2.9 provides a list of agencies that have permitting authority over the project. Local Agency Formation Commission (LAFCo) is identified as a permitting authority for annexation of the Harbor Boulevard site. This shall also include annexation for the Portola Road site.

LA3-5

Thank you again for the opportunity to comment. Should you have any questions about the contents of this letter, please contact me at 805-654-3327 or via email at linda.blackburn@ventura.org

Sincerely,



Linda Blackburn, Senior Planner
Long Range Planning Section
Ventura County Planning Division



**Ventura County
Air Pollution
Control District**

669 County Square Dr
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

Michael Villegas
Air Pollution Control Officer

**VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT**
Memorandum

TO: Gina Dorrington, City of Ventura- Ventura Water

DATE: April 22, 2019

FROM: Nicole Collazo, Planning Division

SUBJECT: Request for Comments on Draft Environmental Impact Report (DEIR) for the Proposed Ventura Water Supply Projects (RMA 17-025-1)

Air Pollution Control District (APCD) staff has reviewed the DEIR for the project referenced above. The proposed project is a construction project that would be implemented in two phases. Phase I would divert tertiary-treated water to the “VenturaWaterPure” Project for additional treatment, protecting the ecology of the Santa Clara River Estuary (SCRE) and providing a new water supply by construction an Advanced Water Purification Facility (AWPF). Phase II would provide additional needed water supply if Phase I is insufficient to meet the needs of the planned growth by establishing an ocean desalination facility wherever the Phase I AWPF gets built (3 locations proposed). If Phase II is needed to meet future water demands, then additional project-level CEQA review would be required. The project location is within the City of Ventura or along unincorporated Ventura County just south of the city jurisdiction between the SCRE, Gonzales Rd., and Victoria Avenue. The Lead Agency for the project is the City of Ventura.

LA4-1

GENERAL COMMENTS

As a recommending agency for the CEQA review of the DEIR, APCD concurs with the air quality impact and greenhouse gas emissions determinations. APCD requests the following changes and additions to the DEIR:

LA4-2

Air Quality Section

Item 1- Page 3.3-6, Monitoring Stations. The VCAPCD air monitoring stations no longer include the San Nicolas Island and Ventura sites. Please update this statement.

LA4-3

Item 2- Impact AQ 3.3-2, Construction Mitigation. The proposed construction mitigation measures are rightly taken from the AQAG, but the guidance document hasn’t been updated in 16 years and more modern mitigation measures can be proposed that will minimize pollutant exposure to sensitive receptors within the vicinity of the project site. The AQAG states “construction-related emissions should be mitigated if estimates of ROC and NOx emissions from the heavy-duty construction

LA4-4

equipment anticipated to be used for a particular project exceed the 5 pounds per day threshold in the Ojai Planning Area, or the 25 pounds per day threshold in the remainder of the county” (Page 5-3). According to the DEIR estimated construction emissions per phase, the unmitigated emissions for NOx are above the recommended threshold for all components of Phase I construction with the exception of the Groundwater Wells component (Tables 3.3-5 through 3.3-11), with some construction components operating simultaneously for months to years at a time (Table 2-5, Construction Schedule). In addition to the mitigation measures proposed for the reduction of ozone precursors and diesel particulate matter from construction equipment, we recommend at least one item added to the AQ-1 and/or AQ-2. This is mainly due to the construction timelines of years to decades and the proximity of such construction emissions to sensitive receptors such as residences 300 ft away from the wetlands construction component, 25 ft from the water conveyance system component, and an elementary school 100 ft away from the ocean outfall construction site. The schools and parks (Marina Park proposed as one of construction staging areas, Table 2-7) are considered sensitive receptors by the AQAG and the California Air Resources Board (CARB), because children are in the developing stage and are more prone to respiratory illnesses and have higher breathing rates.

LA4-4

Some examples of mitigation measures for construction equipment beyond what is recommended in the AQAG is using Tier 3 or greater for every off-road diesel equipment. We note compliance with the Off-Road state regulation already prohibits use of Tier 0, 1, and Tier 2 additions for medium and large fleets and Tier 2 phase-outs by 2023 for smaller fleets. This recommended measure is quite feasible due to the compliance requirements of the state Off-Road Diesel-Fueled Regulation. California Air Resources Board (CARB), which regulates mobile source emissions, has been mandated by the EPA to phase out older, dirtier on-road and off-road heavy-duty equipment via the Off-Road Diesel-Fueled Fleets Regulation and the On-Road Heavy-Duty Diesel Vehicles Regulation (more information for “[Off-Road](#)” and “[On-Road](#)” regulations). Some older-tiered equipment can still comply with the new air standards by retrofitting their equipment with DPM particulate filters and catalyst-based filters that incinerate NOx and other pollutants.

The CARB has recommended a buffer distance of 500 feet between sensitive land uses and sources of TACs (CARB 2005 Land Use Handbook). Another possible mitigation measure is requiring all on-road construction vehicles to be model year 2010 or greater. More information on this is found in the On-Road regulation found in the above link. The regulation requires a phasing out of pre-2010 diesel truck engines with full compliance for applicable trucks and buses by January 1, 2023. Newer models will have PM filters installed on them, which can effectively reduce DPM emissions by 85% or more, according to CARB.

LA4-5

Another possible mitigation measure would be to perform the construction activities that are near the schools mentioned in the DEIR during off-school hours or during the summer months while school is not in session or creating temporary vegetative barriers between the pollutant sources and the sensitive receptors identified.

LA4-6

Greenhouse Gas Emissions Section

Item 1, Pages 3.7-1 and 3.7-8. Please change the “Central South Coast Air Basin” to “South Central Coast Air Basin” or SCCAB.

LA4-7

Thank you for the opportunity to review this project's air quality impacts. If you have any questions, please call me at (805) 645-1426 or email nicole@vcapcd.org.

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

A STATE OF CALIFORNIA WATER AGENCY



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EXECUTIVE OFFICER

Jeff Pratt, P.E.

April 22, 2019

City of Ventura
Attn: Gina Dorrington
501 Poli Street
Ventura, CA 93002-0099

SUBJECT: Comments on Ventura Water Supply Projects, Draft Environmental Impact Report SCH No. 2017111004

Dear Ms. Dorrington:

Thank you for the opportunity to review and comment on the City of San Buenaventura (City)'s *Ventura Water Supply Projects Draft Environmental Impact Report* (DEIR) dated March 2019 and prepared by ESA. According to the DEIR, the proposed projects are designed to *protect the ecology of the Santa Clara River Estuary (SCRE), develop additional water supply sources to meet demands for planned future growth, and enhance supply reliability even in drought years*. The proposed projects are to be implemented in two phases. The combined Phase 1 and 2 projects are designed to produce 7,400 AFY, including 5,400 AFY of new water supply and 2,000 AFY treated groundwater (which is part of the existing supply). Per the DEIR, the groundwater supply is to be limited to the City's groundwater allocation (page 2-19).

Based on information provided in the DEIR, Phase 1 would divert tertiary-treated wastewater to the *VenturaWaterPure* Project advanced water purification facility (AWPF) to provide a new potable water supply via indirect potable reuse as part of a groundwater replenishment reuse project. This phase incorporates a proposed Aquifer Storage and Recovery (ASR) project utilizing three existing and three new groundwater supply wells located in the Oxnard groundwater Subbasin (see Figure 3.9-1 and page 3.9-13 of the DEIR). The AWPF will be *designed to deliver a minimum reliable supply of 4,000 AFY* and will have additional capacity to desalt and treat 1,400 AFY of groundwater from the Oxnard Subbasin (page ES-5). Phase 2 would be to either increase diversion of tertiary-treated wastewater or construct an ocean desalination facility which would add *1,400 AFY of new reliable water supply* and be designed to treat an additional 600 AFY of groundwater (page ES-6).

The Oxnard Subbasin is within the jurisdiction of the Fox Canyon Groundwater Management Agency (Agency) which is also the Groundwater Sustainability Agency (GSA) for the Oxnard Subbasin in which the subject groundwater extraction wells and proposed ASR project are located. We have the following comments:

City of Ventura
April 22, 2019
Page 2 of 2

1. Table 2-9- *Permits, Approvals, and Regulatory Requirements* is missing approval of the ASR project by the Agency (see page 2-61).
2. It is not clear from the document if the City proposes to extract the injected AWPf water as part of its groundwater extraction allocation or if the City plans to request injection credits from the Agency to account for extraction of injected water. Please clarify.
3. The discussion on the Sustainable Groundwater Management Act (SGMA) on page 3.9-47 and 3.9-48 mentions the Mound Basin but fails to mention the Oxnard Subbasin including that it is a high priority basin designated in critical overdraft. Because the project includes a proposed ASR operation and six extraction wells in the Oxnard Subbasin and extraction of groundwater allocation from the Oxnard Subbasin, the DEIR discussion should include the Oxnard Subbasin.
4. The DEIR states that City's groundwater supplies would be from existing groundwater allocation (page 2-19). A new allocation system is in the process of being developed. The DEIR should note that the Agency is in the process of changing to a new allocation system which will affect the City's allocation.
5. In Table 5-3 – *Summary of Ventura Water Supplies* (page 5-5), the City's water supply from the Oxnard Subbasin is listed as 4,100 AFY during a normal year. The volume stated exceeds the City's current groundwater extraction allocation. Please clarify why a volume exceeding the City's extraction allocation is included in the table.

LA5-2
LA5-3
LA5-4
LA5-5
LA5-6

If you have any questions, please call me at (805) 654-2954.

Sincerely,



Kathleen Riedel, CEG
Groundwater Specialist

cc: Jeff Pratt, Executive Officer

KR/kr/F:\gma\BusinessAdministration\Correspondence\2019\190422_Response_Cityof
Ventura_DEIR Water Supply Projects.docx

County of Ventura Public Works Agency Transportation Department

Response LA1-1

The comment describes the projects.

Response LA1-2

The comment describes the Traffic Impact Mitigation Fee required for cumulative impacts on county roads. The City will coordinate with the County to ensure that the City complies with its agreement with the County regarding road use and associated fees.

The Draft EIR (DEIR) estimates daily worker commute trips and total truck trips required during construction in Table 2-6. These trips would be limited to the construction period and would be spread out over the construction period. The table shows truck trips as roundtrips. The table heading has been revised to clarify this, as shown below:

**TABLE 2-6
CONSTRUCTION ASSUMPTIONS FOR THE PROPOSED PROJECT**

Project Site/Component	Estimated Construction Equipment (Quantity)	Daily Construction Vehicle Trips, <u>Total</u> Truck Trips (<u>roundtrips</u>)	Estimated Construction Duration
-------------------------------	--	---	--

The DEIR concludes on page 3.17-13 that the total trips (roundtrips) during construction would not result in significant impacts to traffic congestion after implementation of Mitigation Measure TRAF-1, which requires the preparation of a traffic control plan. Furthermore, operational trips would be far less than 200 average daily trips (ADT) and would be less than significant. The actual ADT required during construction of the individual components would depend on the duration of each construction phase. The estimates provided in the comment are based on total trips identified in the DEIR and construction durations and, as such, present a reasonable prediction. Converting the truck trips from roundtrips to one-way trips does not change the conclusions in the EIR since the ADT and vehicle miles traveled remains small compared to existing traffic and roadway capacities. Finalization of the ADT and Traffic Impact Mitigation Fee (TIMF) for purposes of determining the City's obligations to the County, will be conducted by the City prior to construction.

Response LA1-3

The comment letter states that the DEIR does not include trip generation information for Phase 2. The Phase 2 components, Advanced Water Purification Facility (AWPF) expansion and ocean desalination, are analyzed at a programmatic level and not a project level within this DEIR. To implement the Phase 2 components, future California Environmental Quality Act analysis would be required, including an updated project-level transportation and traffic information. The EIR has been amended on page 2-44 to include an estimate of trip generation information for Phase 2, as shown below.

TABLE 2-6A
CONSTRUCTION ASSUMPTIONS FOR PHASE 2 OF THE PROPOSED PROJECT

<u>Project Site/Component</u>	<u>Estimated Construction Equipment (Quantity)</u>	<u>Daily Construction Vehicle Trips, Total Truck Trips (roundtrips)</u>
Phase 2 VenturaWaterPure		
<u>Upgrades to Advanced Water Purification Facility</u>	<u>Construction:</u> <ul style="list-style-type: none"> • <u>Crane (1)</u> • <u>Forklifts (3)</u> • <u>Generator (1)</u> • <u>Tractors/Loaders / Backhoes (3)</u> • <u>Welder (1)</u> 	<u>Construction:</u> <ul style="list-style-type: none"> • <u>Worker (50)</u> • <u>Truck Trips (750)</u>
	<u>Architectural Coating</u> <ul style="list-style-type: none"> • <u>Air Compressor (1)</u> • <u>Scissor Lift</u> • <u>Concrete Delivery Truck</u> • <u>Wiring Pulling Machine</u> 	<u>Architectural Coating</u> <ul style="list-style-type: none"> • <u>Worker (60)</u>
<u>Ocean Desalination Intake Facility</u>	<u>Intake Installation</u> <ul style="list-style-type: none"> • <u>Concrete/Industrial Saw (1)</u> • <u>Excavators (3)</u> • <u>Grader (1)</u> • <u>Rubber Tired Dozers (2)</u> 	<u>Excavation/Trenching</u> <ul style="list-style-type: none"> • <u>Worker (25)</u> • <u>Haul (500)</u>
	<u>HDD</u> <ul style="list-style-type: none"> • <u>Drill Rig (1)</u> 	<u>HDD</u> <ul style="list-style-type: none"> • <u>Worker (10)</u> • <u>Haul (500)</u>
		<u>Total Truck Trips - 1,545</u>

Response LA1-4

Thank you for providing information on trenching and pavement plans and requirements. The City of Ventura will coordinate with the County of Ventura Public Works Agency Transportation Department when trenching operations impact county roads. As noted in Table 2-9, encroachment permits from local jurisdictions would be required to install infrastructure in public rights of way and would ensure that all construction work in the public right-of-way complies with County's adopted codes and engineering standards.

Response LA1-5

The comment states that any work conducted within the county rights-of-way would require an encroachment permit. As noted in Table 2-9, prior to construction within the right-of-way of a county roadway, the City of Ventura would coordinate with the County of Ventura Public Works Agency Transportation Department to obtain an encroachment permit.

Response LA1-6

The comment letter requests a truck plan/map. Mitigation Measure TRAF-1 (DEIR pp. 3.17-13 through 3.17-14) requires the preparation of a Traffic Control Plan. In response to this comment,

Mitigation Measure TRAF-1 has been amended to state that the plan will identify truck routes during construction in both the City and the County, and that the Traffic Control Plan will be submitted to the County of Ventura Public Works Agency Transportation Department for review prior to construction.

TRAF-1: Prior to the start of construction facilities that would occur within a roadway right-of-way, the City of Ventura shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations, and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City's Public Works Director and Fire and Police Chiefs. The Traffic Control Plan shall be provided to the County Transportation Department for review prior to commencement of construction. When construction activities disrupt travel on major collectors or arterials, electronic signs shall be used to provide the public, on all transportation modes, with current construction information and the availability of alternate travel routes.

The Traffic Control Plan shall be prepared in accordance with the City of Ventura's traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties and that emergency access will not be restricted. Additionally, the Traffic Control Plan shall also include a scheduling plan showing the hours of operation to minimize congestion during the peak hours and special events. Haul routes will be identified based on County-approved truck routes. The scheduling plan will ensure that congestion and traffic delay are not substantially increased as a result of the construction activities. Further, the Traffic Control Plan will include detours or alternative routes for bicyclists using on-street bicycle lanes as well as for pedestrians using adjacent sidewalks.

In addition, the City shall provide written notice at least 2 weeks prior to the start of construction to owners/occupants along streets to be affected during construction. During construction, the City will maintain continuous vehicular and pedestrian access to any affected residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time. Access will be reestablished at the end of the workday. If a driveway needs to be closed or interfered with as described above, the City shall notify the owner or occupant of the closure of the driveway at least 5 working days prior to the closure. The Traffic Control Plan shall include provisions to ensure that the construction of the proposed projects do not interfere unnecessarily with the work of other agencies such as mail delivery, school buses, and municipal waste services. The Traffic Control Plan shall identify that damage to the condition of the roadways due to the use of construction related vehicles including soil haul trucks be repaired pursuant to County Transportation Department standards.

The City shall also notify local emergency responders of any planned partial or full lane closures or blocked access to roadways or driveways required for construction of the proposed project facilities. Emergency responders include fire departments, police departments, and ambulances that have jurisdiction within the proposed project area. Written notification and disclosure of lane closure location must be provided at least 30 days prior to the planned closure to allow for emergency response providers adequate time to prepare for lane closures.

Response LA1-7

Mitigation Measure TRAF-1 requires the preparation of a Traffic Control Plan. The plan will show all signage, striping, delineated detours, flagging operations, and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation. When construction activities disrupt travel on major collectors or arterials, electronic signs shall be used to provide the public, on all transportation modes, with current construction information and the availability of alternative travel routes. Any damage to roadways attributable to the projects would be repaired pursuant to County standards. As noted in Response LA1-6, the mitigation measure TRAF-1 has been revised to specify that, prior to construction, the Traffic Control Plan will be submitted to the County Transportation Department for review.

Response LA1-8

The comment letter recommends that construction within roadways occur during off-peak hours. In compliance with local regulations intended to reduce noise impacts, construction would occur mainly Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m. See DEIR page 3.13-16. Mitigation Measure TRAF-1 requires a Traffic Control Plan that would identify alternative routes to avoid circulation impacts during construction.

Response LA1-9

The City will provide the County of Ventura Public Works Agency Transportation Department with a copy of the Final EIR.

County of Ventura Public Works Watershed Protection**Response LA2-1**

The comment describes the projects.

Response LA2-2

The comment notes that project pipelines run under, over, or adjacent to Watershed Protection District (District) jurisdictional watercourses, channels, and/or levee facilities. Table 2-9 on page 2-61 provides that encroachment permits will be obtained for public rights-of-way, including County jurisdictional watercourses. Prior to the construction of the conveyance pipelines, the City will coordinate with the District to obtain an encroachment permit for any work within, over or under the bed or bank of a District jurisdictional channel.

Response LA2-3

As noted in Table 2-9, prior to the construction of the conveyance pipelines, the City will obtain an encroachment permit for use of local jurisdiction's rights-of-way. Encroachment permits will be required for work within District-owned properties.

Response LA2-4

Table 2-9 identifies Local Jurisdictions as having approval authority over various components of the projects. Table 2-9 has been revised to specifically include the District as a regulating agency. See the text revision in responses LA2-10 through LA2-12 below.

Response LA2-5

The comment is concerned with directional drilling vibration impacts to District facilities. The DEIR evaluates structural damage from vibration on page 3.13-28. Vibration velocities for drilling activities are shown in Table 3.13-13. The DEIR concludes that vibration velocities as high as 0.089 VdB at 25 feet distance would not be strong enough to result in structural damages. Liquefaction occurs when saturated soils are subject to strong vibration such as earthquakes. As shown in Table 3.13-13, the anticipated level of vibration from construction would not be strong enough to result in structural damage even in liquefaction zones. The City recognizes the District's concerns regarding existing infrastructure and would comply with requirements to monitor and compensate for vibration damage as part of the encroachment permit.

Response LA2-6

The comment letter notes that there is high groundwater in the vicinity of the Santa Clara River. The EIR includes Mitigation Measure GEO-1 that requires the preparation of a soils report and geotechnical investigation report for all facilities with potential to encounter shallow groundwater or expansive soils. As noted on page 3.9-78, dewatering activities would require a dewatering permit from the Regional Water Quality Control Board (RWQCB). The City will coordinate with the District if dewatering is required for any component located within the District's jurisdiction requiring an encroachment permit or floodplain development permit.

Response LA2-7

The District is concerned that project construction will interfere with District operation and maintenance activities. Prior to scheduled work within or adjacent to a District facility, the City will obtain an encroachment permit or floodplain development permit that will require the appropriate coordination with the District to avoid impacting the District's ability to maintain its facilities.

Response LA2-8

As noted in Table 2-9, prior to the construction of the conveyance pipelines, the City will obtain an encroachment permit for use of local jurisdiction's rights-of-way. Encroachment permits will be required for work within District-owned facilities. These permits would ensure that construction activities and staging are coordinated with the District and would not obstruct access to District facilities during storm events.

Response LA2-9

The DEIR discusses the potential impacts of increased impervious surfaces on pages 3.9-76 through 3.9-77 and on pages 3.19-21 through 3.19-24. Impact UTIL 3.19-3 specifically addresses the potential impacts of increased impervious surfaces on stormwater. Construction of the AWPf,

the Ventura Wastewater Reclamation Facility (VWRF) treatment upgrade, and construction of groundwater wells would result in increased impervious surfaces. As stated on page 3.9-76 of the DEIR, rainwater falling on the AWPf would be captured on-site. Once captured, the rainwater would be routed to on-site infiltration systems (e.g., infiltration swales) or to the storm drain system and returned to the environment pursuant to the General Industrial Stormwater Permit. As stated on page 3.19-22, the pump station within the VWRF, and the groundwater well pads and buildings, would be designed so runoff would be captured by the existing stormwater system. Groundwater wells would be designed to comply with the County Municipal Separate Storm Sewer System (MS4) Permit to ensure the runoff sourced from the well sites would not overflow the local stormwater drainages. The VWRF complies with the County MS4 permit, and the addition of facilities would not affect on-site drainage.

Response LA2-10

Comments LA2-10 through LA2-12 reference permit requirements on FEMA Special Flood Hazard Area Zones. In response to the comment, the following text has been added to Table 2-9 of the Project Description:

Regulatory Agency	Permit	Reason for Permit or Approval
<u>Ventura County Public Works Agency</u>	<u>Floodplain Development Permit</u>	<ul style="list-style-type: none"> <u>Well sites 2 and 3, Calleguas Salinity Management Pipeline Connection 1, and the brine discharge pipeline would be located within a FEMA Special Flood Hazard Area.</u>

Response LA2-11

Please see the response to LA 2-10. In addition, the following text has been added to Table 2-9 of the Project Description.

Regulatory Agency	Permit	Reason for Permit or Approval
<u>Ventura County Public Works Agency</u>	<u>No Rise Certificate</u>	<ul style="list-style-type: none"> <u>Calleguas Salinity Management Pipeline Connection 1 crosses a regulatory floodway.</u>

Response LA2-12

Please see the response to LA 2-10.

Response LA2-13

See response LA2-6. The directional drilling operation under the Santa Clara River may require minor dewatering of groundwater. This would not affect surface water flow. Construction would be short-term and would not affect surface water needed for steelhead migration. As noted on page 3.9-78, dewatering activities would require a dewatering permit from the RWQCB.

County of Ventura Planning Division

Response LA3-1

The comment does not reflect on the content of the EIR.

Response LA3-2

The comment concurs that the Harbor Boulevard AWPf and the Portola Road AWPf sites, if chosen, would require the annexation from the County into the City.

Response LA3-3

The Agricultural/Urban Buffer Policy applies to land “1) in crop or orchard production; or 2) classified by the California Department of Conservation Important Farmland Inventory as Prime, Statewide Importance, Unique or Local Importance farmland.” The Portola AWPf Site would be located on agricultural land that is classified as Prime Farmland. The DEIR identifies the visual impacts of the new AWPf in Section 3.1 and includes Mitigation Measure AES-2, that requires vegetated screening be designed as part of the projects to ensure visual compatibility with surrounding land uses. If the Portola site is selected, the City would coordinate with the County to design the setback and vegetative barriers that comply with the County of Ventura Agricultural/Urban Buffer Policy.

The Harbor Boulevard site is not subject to the buffer policy. The site is designated as “Other Land,” and it is not adjacent to any land that would be subject to the buffer policy. See Figure 3.2-1a on page 3.2-2.

In response to this comment, the following text has been added to Section 3.10-9, page 3.10-12 to recognize the buffer policy.

County of Ventura Agricultural Urban Buffer Policy

The County of Ventura adopted the Agricultural Urban Buffer Policy in July 2006. The policy outlines objectives of protecting the health and safety of the public by lessening exposure of urban areas to agricultural dust, noise, and odors, and to protect agricultural operations and land from vandalism, pilferage, trespassing and complaints against standard legal agricultural practices. The policy provides guidelines to mitigate conflicts between the urban and agricultural interface.

Response LA3-4

Prior to constructing the AWPf on either the Harbor site or the Portola site, the City would annex the property from the County. Once annexed, the property would be subject to the City’s General Plan and Comprehensive Plan designations.

The Harbor site is located in the coastal zone, and therefore would be subject to the City’s Local Coastal Plan (LCP) following annexation. The City’s certified LCP is contained in the 1989 Comprehensive Plan Update to the Year 2010 (Comprehensive Plan). As the DEIR states on page 3.10-28, the Comprehensive Plan designation is “Commercial Planned-Tourist Oriented.” This is not an agricultural or open space designation. Following annexation, the City’s Comprehensive

Plan designation would be the determining land use for Save Open Space and Agricultural Resources (SOAR) purposes, and SOAR would not apply to the site.

The Portola site is not located in the coastal zone. Following annexation, it would be subject to the City's current General Plan designation of "Industry." See Figure 3.10-1a, on page 3.10-5. This is not an agricultural or open space designation. As stated on page 3.10-16, the Industry category:

Encourages intensive manufacturing, processing, warehousing and similar uses, as well as light, clean industries and support offices; also encourages workplace-serving retail functions and work-live residences where such secondary functions would complement and be compatible with industrial uses. Primarily large-scale buildings. Also can be developed as Transit Oriented Development, employment center or working village with a mix of uses.

Mitigation Measure AG-1 requires that any loss of state-designated Prime Farmland or Farmland of Local Importance be compensated in perpetuity with the purchase of property and placement of an irreversible agricultural easement. The DEIR concludes on page 3.2-20 that the irreversible preservation of compensatory agricultural land would ensure impacts of agricultural conversion would be less than significant.

To clarify the applicability of the SOAR program to the land use designations of the proposed AWPf sites, the following revisions are made to the EIR.

On page ES-37, the text under the "Significance Determination" column for Impact LU 3.10-1 is revised to state as follows:

Less than Significant with Mitigation

AES-1 through AES-3, AG-1 (~~Harbor Boulevard and~~ Portola Road AWPf), and CUL-1 through CUL-5

On page 3.1-3, the text under the heading "Advanced Water Purification Facility" is revised to state as follows:

- **Harbor Boulevard Site:** The Harbor Boulevard Advanced Water Purification Facility (AWPF) site would be located within a vacant area of land within Ventura County. If the site is selected, it would be annexed to the City. designated as coastal open space The site is located within the coastal zone and is designated Commercial Planned-Tourist Oriented under the City's Local Coastal Plan. The site is located on the southeast corner of the intersection of Harbor Boulevard and Olivas Park Drive. The Harbor Boulevard site is bounded by agricultural fields to the north, Olivas Links Golf Course to the east, open space to the south, the Ventura Harbor to northwest, and the Ventura Wastewater Reclamation Facility (VWRF) to the west (see Figure 2-5).
- **Transport Street Site:** The Transport Street AWPf site would be located within a vacant area of land designated as Industry Parks and Open Space, with agricultural uses to the

south and commercial and industrial uses to the east, west, and north. Just north of the site is Transport Street (see Figure 2-6).

- Portola Road Site:** The Portola Road AWPf site would be annexed to the City because it is located within Ventura County’s jurisdiction. The City’s General Plan Planning Designation for the site is Industry, and would be located within a land use designation of Agriculture. The Portola Road site is surrounded by open land used for agriculture to the north and south and commercial uses to the west and east (see Figure 2-7).

On page 3.2-21, the text of the second full paragraph is revised to state as follows:

The proposed pump station associated with the product water conveyance system would be constructed within the VWRf and within the proposed AWPf site. ~~As mentioned above, the Harbor Boulevard and Portola Road AWPf sites would be located within the County designated SOAR property. However, implementation of Mitigation Measure AG-1 would ensure that development of the AWPf on the potential proposed Harbor Boulevard or Portola Road site would comply with the SOAR program. Impacts would behave less than significant impacts on agriculture.~~

On page 3.2-24, the text under the heading “Advanced Water Purification Facility” is revised to state as follows:

None of the proposed AWPf sites is located within Williamson Act contracted lands (see Figure 3.2-2a). Consequently, there would be no impact resulting from conflicts with existing Williamson Act contracts. The Harbor Boulevard site is zoned under the County Local Coastal Plan (LCP) as Coastal Open Space-10 acre minimum (COS-10), but would be annexed to the City if selected. The City’s LCP designation is Commercial Planned-Tourist Oriented. The other two sites are not located in the coastal zone. ~~and the zoning designations are Manufacturing Planned Development (MPD) for the Transport Street site, The Portola Road site is located in the County and is currently zoned Agricultural Exclusive-40 acre minimum (AE-40), and Residential-Agriculture-1 acre minimum (R-A-1). for the Portola Road site. Upon annexation to the City, the Portola site would be subject to the City’s General Plan Planning Designation, which is Industry. The Transport Street site is located in the City, and its zoning designation is Manufacturing Planned Development (MPD).~~ There would be no conflict with zoning for agricultural use on any of the Transport Street AWPf sites following annexation.

~~The Harbor Boulevard AWPf would not be consistent with the zoning of COS-10. A categorical use permit and LCP amendment would be required for the construction of the Harbor Boulevard AWPf. The conversion of agricultural land to a non-agricultural for the Portola Road site would conflict with the existing zoning and would require a categorical use permit. In addition, the Harbor Boulevard and Portola Road sites are subject to additional protection under the County’s SOAR initiative. However, the implementation of Mitigation Measure AG-1 would ensure that development of the AWPf on the proposed Portola Road site would comply with the SOAR program. Impacts would be less than significant.~~

On page 3.2-25, the first paragraph is revised to state as follows:

The proposed pump station associated with the product water conveyance system would be constructed within the VWRP and within the proposed AWPf site. As discussed above, none of these sites is under a Williamson Act contract, and none of the sites would be zoned for agriculture after annexation to the City. As mentioned above, the Portola Road AWPf would be located within the County designated SOAR property. However, the implementation of Mitigation Measure AG-1 would ensure that development of the AWPf on the proposed Portola Road site would comply with the SOAR program. Impacts would be less than significant.

On page 3.2-25, the text under the heading “Groundwater Wells” is revised to state as follows:

The proposed projects include construction of up to six wells within the Oxnard Plain Basin (final configuration to be determined by detailed groundwater modeling). The proposed wells would not be located on land under a Williamson Act contract (see Figure 3.2-2c.) Well Sites 2 and 3 would be located in land designated as Prime Farmland and zoned for Agriculture SOAR. Well Site 1 would be located in land designated as Urban and Built-up Land and zoned for Parks. No change in zoning would be required for the construction of the wells, which are allowed in both the Agriculture and Parks zones with a use permit. Impacts would be less than significant. Implementation of Mitigation Measure AG-1 would ensure that development of the wells would

On page 3.2-26, the text under the heading “AWPF Expansion” is revised to state as follows:

To expand the AWPf, the individual advanced treatment processes facilities within the plant would be expanded, but no new treatment processes would be needed or added. The expansion project would occur several years after the original construction of the AWPf, if needed. The proposed AWPf sites are not located within Williamson Act contracted lands; however, the Portola Road AWPf site would be located within ~~the County SOAR designated land~~ land designated as Prime Farmland. If the Portola site is selected for the AWPf, Nevertheless, the impacts associated with the conversion of agricultural lands would have been mitigated as part of the original construction of the AWPf. The expansion project would occur entirely within the footprint of the AWPf and would not further impact land zoned for agricultural beyond what was previously analyzed for the AWPf construction. No impact would occur.

On page 3.10-8, the first bulleted paragraph is revised to state as follows:

The Harbor Boulevard site is zoned under the County Local Coastal Plan (LCP) as Coastal Open Space-10 acre minimum (COS-10). If the Harbor site is selected, it would be annexed to the City and would be subject to the City’s LCP designation (Commercial Planned-Tourist Oriented). The other three sites are not located in the coastal zone, and the zoning designations are Manufacturing Planned Development (MPD) for the Transport Street site and Agricultural Exclusive-40 acre minimum (AE-40) for the Portola Road site under County zoning. If selected, the Portola Road site would be

annexed to the City. The City's General Plan Planning Designation for the site is Industry. In addition, the Harbor Boulevard and Portola Road sites are further subject to additional protection under the County's Save Open Space and Agricultural Resources (SOAR) initiative, discussed below.

On page 3.10-8, the fifth bulleted paragraph is revised to state as follows:

- Zoning designations for the proposed groundwater wells include Agriculture (A), and Parks (P). Well Sites 2 and 3 are subject to the SOAR initiative.

On page 3.10-16, the text under the heading "Chapter 3: Our Well Planned & Designed Community" is revised to state as follows:

Land in the City's planning area is divided into eight Planning Designations. The proposed projects are located within Agriculture, Residential-Low, Residential-Medium, Public and Institutional, Commercial, and Parks and Open Space land uses. If selected for the AWPf, the Portola Road site would be annexed to the City, which has designated the area for Industry. The General Plan Planning Designations which are described below:

On page 3.10-19, under the heading "City of Ventura Municipal Code," the following text is added:

Chapter 24.270 - A Agricultural Zone

Chapter 24.270 establishes the Agricultural ("A") Zone and prescribes use types and other regulations for this zone. The following use type is permitted, subject to a use permit:

- Utility or Equipment Substations

On page 3.10-21, the paragraph under the heading "Save Open Space and Agricultural Resources" is revised to state as follows:

In 1995, the first Save Open Space and Agricultural Resources (SOAR) initiative was approved by voters in the city of Ventura. SOAR is a series of initiatives that require a vote of the public before agricultural land or open space areas can be rezoned for development. Eight city SOAR initiatives require the city councils to obtain the approval of their citizens before urban development can occur beyond a City Urban Restriction Boundary (CURB) or before rezoning agricultural land within the city's sphere of influence (SOAR 2018). The proposed Harbor Boulevard and Portola Road sites are located in SOAR protected areas.

On page 3.10-28, the text that begins with the phrase "Consistency with Plans and Policies Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect" is revised to state as follows:

The construction of the Harbor Boulevard AWPf site would occur within the local coastal zone and is currently subject to Open Space and COS designations under the County's LCP. ~~If selected, however, the site would be annexed to the City. Development at this site would require a coastal development permit and annexation to the City of Ventura.~~ In addition, use of the site may require an LCP amendment since it is ~~zoned~~ Open Space (COS) designated Commercial Planned-Tourist Oriented in the City's LCP. This is not an agricultural or open space land use designation and is not subject to SOAR.

Annexation of the Harbor Boulevard site to the City of Ventura is subject to LAFCo approval, and LAFCo would review the proposed annexation for consistency with LAFCo's Annexation Policies and Procedures. Development of the AWPf on this site would promote efficient municipal services and facilities by locating the AWPf near the existing VWRF, and would not promote sprawl. It is a reasonable and compatible use of the land. Therefore, the construction of the AWPf does not conflict with any policy or zoning provision adopted for the purpose of avoiding or mitigating an environmental effect.

~~This site is also subject to the County SOAR policies and to General Plan Policy 3D-Mitigation Measure AG-1, requiring a conservation easement to mitigate for the loss of open space on the proposed Harbor Boulevard site, would ensure consistency with the SOAR program and General Plan policies intended to avoid or mitigate an environmental effect.~~

On page 3.10-29, the paragraph that begins with the phrase "Consistency with Plans and Policies Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect" is revised to state as follows:

Development of the Portola Road AWPf would convert land designated for agriculture to a non-agricultural use and would conflict with the above goals and policies. Mitigation Measure AG-1, requiring an agricultural conservation easement to mitigate for the loss of Prime Farmland on the proposed Portola Road site, would ensure consistency with the goal of continuing to protect agricultural lands, SOAR program. Further, development at this site would require ~~the~~ annexation to the City of Ventura. Annexation of the Portola Road site to the City of Ventura is subject to LAFCo approval, and LAFCo would review the proposed annexation for consistency with LAFCo's Annexation Policies and Procedures. Development of the AWPf on this site would promote efficient municipal services and facilities by locating the AWPf near the existing VWRF, and would not promote sprawl. It is a reasonable and compatible use of the land. Therefore, the construction of the AWPf does not conflict with any policy or zoning provision adopted for the purpose of avoiding or mitigating an environmental effect.

Response LA3-5

Table 2-9 will be amended to show that the Ventura Local Agency Formation Commission has site annexation authority over both the Harbor Boulevard and Portola Road AWPf sites.

Ventura County Air Pollution Control District

Response LA4-1

The comment describes the proposed projects.

Response LA4-2

The comment notes that Ventura County Air Pollution Control District (APCD) concurs with the air quality impacts and greenhouse gas emission determinations in the DEIR.

Response LA4-3

In response to the comment, the following change has been made to the DEIR:

Existing Criteria Pollutants Levels at Nearby Monitoring Stations

The VCAPCD maintains a network of air quality monitoring stations located throughout Ventura County to measure ambient pollutant concentrations. These stations are located in El Rio, Ojai, Piru, ~~San Nicolas Island~~, Simi Valley, and Thousand Oaks, ~~and~~ Ventura.

Response LA4-4

In response to the comment, the following text has been added to Mitigation Measure AQ-2 on page 3.3-25 of the Air Quality Section:

AQ-2: During construction contractors shall comply with the following measures, as feasible, to reduce NO_x and ROC from heavy equipment as recommended by the VCAPCD in its Ventura County Air Quality Assessment Guidelines:

- All construction equipment shall meet or exceed Environmental Protection Agency Tier 3 certification requirements. The contractor shall be required to document the use of Tier 3 equipment or better.
- HDD drilling motors will comply with Tier 3 standards or greater and have particulate filters installed or the contractor shall provide justification to the City that the equipment is not available.
- The City shall establish a barrier around the HDD drilling site to minimize site lines, air emissions, and noise from the drilling activities.
- For pipeline installation work within 300 feet of sensitive receptors such as schools and health care facilities, the City shall coordinate with the school or health care facility to schedule construction activities during periods that minimize disruption to receptors when feasible.
- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications.
- Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time.

- Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.

Response LA4-5

The recommended buffer of 500 feet is not feasible for the pipelines and the ocean outfall horizontal directional drilling (HDD) site since the proposed locations for the facilities are within 500 feet of sensitive receptors. For the pipeline installation, the duration in front of any individual receptor will be short, resulting in a short duration of exposure to construction equipment exhaust. Mitigation AQ-2 as modified in response to LA4-4 requires all construction equipment to meet or exceed EPA Tier 3 certification requirements when feasible for trucks and HDD motors. This additional emissions controls will minimize exposure to sensitive receptors.

Response LA4-6

Installation of the conveyance pipelines and ocean outfall HDD site would require longer duration than the 2 or 3 months when school is not in session. As a result, work schedule modifications would not eliminate the need to perform construction near school sites when the schools are in session. Furthermore, none of the AWPf sites nor the outfall drilling site are located adjacent to a school. Mitigation AQ-2 as modified in response to LA4-4 requires all construction equipment to meet or exceed EPA Tier 3 certification requirements. The measure also requires that the contractor construct a temporary barrier to minimize emissions and noise. This additional emissions controls will minimize exposure to sensitive receptors.

Response LA4-7

In response to the comment, the following text has been revised on page 3.7-1 of the Greenhouse Gas Emissions section:

Regional Setting

The proposed projects are located in the ~~Central~~ South Central Coast Air Basin, which covers San Luis Obispo, Santa Barbara, and Ventura counties.

In response to the comment, the following text has been revised on page 3.7-8 of the Greenhouse Gas Emissions Section:

Regional

Ventura County Air Pollution Control District

The project site is located in the ~~Central~~ South Central Coast Air Basin, which covers San Luis Obispo, Santa Barbara, and Ventura counties. VCAPCD monitors and regulates the local air quality in Ventura County and manages the AQMP.

Fox Canyon Groundwater Management Agency

Response LA5-1

The comment describes the proposed projects and provides background information.

Response LA5-2

In response to the comment, the following text has been revised in Table 2-9 of the Project Description:

Regulatory Agency	Permit	Reason for Permit or Approval
Fox Canyon Groundwater Management Agency	<u>Groundwater ASR Project Approval</u> <u>Well Permit</u>	• Wells sites for <u>ASR 2 and 3</u>

Response LA5-3

It is anticipated the City would obtain Groundwater aquifer storage and recovery (ASR) Project approval from Fox Canyon Groundwater Management Agency, as noted in Comment LA5-2 and revised Table 2-9, and would request injection credits to account for extraction of injected water. This would be in addition to the City's existing groundwater extraction allocation.

Response LA5-4

In response to the comment, the following text has been revised on page 3.9-48:

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) of 2014, effective January 1, 2015, gives local agencies the authority to manage groundwater in a sustainable manner and allows for limited state intervention when necessary to protect groundwater resources. The SGMA establishes a definition of sustainable groundwater management, establishes a framework for local agencies to develop plans and implement strategies to sustainably manage groundwater resources, prioritizes basins with the greatest problems (ranked as high and medium priority) and sets a 20-year timeline for implementation. The initial basin prioritization under SGMA uses the prioritization conducted by the California Department of Water Resources (DWR) in 2014 under the California Statewide Groundwater Elevation Monitoring program. The ~~Mound~~ Oxnard Subbasin is ranked as high ~~medium~~ priority. The City of Ventura has created a Groundwater Sustainability Agency (GSA) pursuant to SGMA. SGMA requires the creation of a GSA to develop and implement a Groundwater Sustainability Plan (GSP) that would manage and use groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results, defined as follows:...

In addition, Figure 3.9-2 has been revised as shown in Chapter 11, and Figures 3.9-3 and 3.9-4 have been removed from the EIR to avoid confusion regarding the intent of the project to utilize the Oxnard Subbasin rather than the Mound Subbasin.

Response LA5-5

The City recognizes that its allocation of groundwater from the Oxnard Plain may be updated as the Fox Canyon Groundwater Management Agency develops a new allocation system that equitably imposes sustainable management practices. This process underscores the City's need to develop reliable local water supplies in the form of the proposed projects, including Indirect Potable Reuse. The City would obtain approval from Fox Canyon Groundwater Management Agency for use of the ASR wells as designed.

Response LA5-6

The City's allocation from Fox Canyon Groundwater Management Agency is accurately shown in Table 5-3 of the DEIR. The City's current allocation is 3,862 AFY (drought allocation), which reflects Emergency Ordinance E. Emergency Ordinance E was implemented on July 1, 2014, and ramped up to full implementation on January 1, 2016 (<http://fcgma.org/emergency-ordinance-e>). The City is currently still in a water shortage condition and is operating under the allocation of 3,862 AFY.

Table 5-3 is consistent with the 2018 Comprehensive Water Resources Report (CWRR) (Table 4-1 and Table 4-2) and with the 2019 CWRR, which was issued after the DEIR was prepared. The City's normal water supply for Oxnard Plain is 4,100 AFY, but that is based on non-drought conditions and the 2010 allocation from Fox Canyon Groundwater Management Agency. As the 2019 CWRR states, at pages ES-3 through ES-4:

The City's historical allocation was set by the Fox Canyon Groundwater Management Agency (FCGMA) at 5,472 AFY, which was the average extraction from the Golf Course Wells for the base period 1985 to 1989. Beginning in 1992, historical extractions set by the FCGMA were reduced by five percent (5%) to 5,198 AFY, in 1995 it was reduced to 4,925 AFY, in 2000 it was reduced to 4,651 AFY and further reduced in 2010 to the current allocation of 4,100 AFY. Therefore, the City's normal (pre FCGMA Emergency Ordinance E) water supply from the Oxnard Plain Basin is 4,100 AFY.

As the 2019 CWRR further explains, at pages 4-10 through 4-11:

After several special meetings in the first few months of 2014 and several iterations of an emergency ordinance, the Fox Canyon Groundwater Management Agency (FCGMA) Board approved Emergency Ordinance E at a Special Meeting on April 11, 2014. The emergency ordinance limits extractions from groundwater extraction facilities within the FCGMA boundary, suspends use of credits and prohibits the construction of any groundwater extraction facilities and/or the issuance of any groundwater extraction facilities permit.

For all Municipal and Industrial (M&I) Operators the Temporary Extraction Allocation (TEA) is based on an operators average annual reported extractions, for CY 2003 through 2012. Phased reductions were set beginning July 1, 2014, with a 20 percent total reduction of the TEA on January 1, 2016. The City's TEA is 4,827 AFY and with the phased reductions has been 3,862 AFY since January 1, 2016. This equates to a reduction of approximately 29 percent from the previous historical baseline allocation of 5,472 AFY. The City's allocation has been limited to 3,862 AFY.

10.5 Individuals

The following comment letters were received from individuals on the Ventura Water Supply Projects Draft Environmental Impact Report (DEIR). The comment letters are grouped together and are followed by all responses as indicated in Table 10-5.

TABLE 10-5
LIST OF DEIR COMMENT LETTERS: INDIVIDUALS

Letter Code	Commenting Party	Letter Page Number	Response Page Number
I1	Duane Georgeson	10.5-3	10.5-82
I2	Jean Getchell	10.5-4	10.5-82
I3	Duane Georgeson	10.5-6	10.5-82
I4	Katherine Malzacher-Maxwell	10.5-7	10.5-83
I5	Steve Oreilly	10.5-13	10.5-83
I6	Dr. Edo McGowan	10.5-14	10.5-83
I7	Charles Spraggins	10.5-15	10.5-84
I8	Adrianne and Bob Krause	10.5-17	10.5-85
I9	Charles Spraggins	10.5-18	10.5-86
I10	Charles Spraggins	10.5-20	10.5-87
I11	Joe Chrisman	10.5-22	10.5-88
I12	Joseph Richardson	10.5-24	10.5-88
I13	Jim Oliver	10.5-25	10.5-89
I14	Duane Georgeson	10.5-26	10.5-90
I15	Stephen Simms	10.5-28	10.5-90
I16	Burt Handy	10.5-29	10.5-90
I17	Burt Handy	10.5-31	10.5-91
I18	Charles Spraggins	10.5-33	10.5-91
I19	Debra Barringer	10.5-42	10.5-93
I20	Randall Novak	10.5-43	10.5-93
I21	Daniel Cormode	10.5-47	10.5-99
I22	June Juett	10.5-55	10.5-107
I23	Kioren Moss	10.5-56	10.5-108
I24	Mike Juett	10.5-59	10.5-108
I25	Larry Permen	10.5-60	10.5-108
I26	Laura Gulovsen	10.5-61	10.5-109

Letter Code	Commenting Party	Letter Page Number	Response Page Number
I27	Burt Handy	10.5-62	10.5-109
I28	Suzanne McCombs	10.5-63	10.5-110
I29	Duane Georgeson	10.5-64	10.5-112
I30	Burt Handy	10.5-69	10.5-112
I31	Andrew Schneider	10.5-72	10.5-115
<i>Water Commission Meeting Comment Cards and Supporting Materials</i>			
I32	David Johnson	10.5-73	10.5-115
I33	Randall Novak	10.5-73	10.5-115
I34	Mike Anderson	10.5-74	10.5-118
I35	Matthew Doyle	10.5-74	10.5-118
I36	Daniel Cormode	10.5-75	10.5-118

From: Duane Georgeson <duanegeorgeson@msn.com>
Sent: Saturday, March 9, 2019 6:54 PM
To: Dorrington, Gina
Subject: Draft EIR-Ventura Water Supply Projects EIR

Dear Ms Dorrington,

Page 1-22 of your Department's 934 page report contains the following statements: " In 2015 the city initiated a pilot project to test the feasibility of constructing an AWPf" and " The pilot facility operated for nine months and produced favorable results that indicated the highly reliable purification technology could be applied at a larger scale in a cost-efficient and environmentally protective manner." and "As a result the city is proposing to construct a full-scale AWPf as a component of Ventura Water Pure"

I am writing you to-request a copy of any technical and financial reports and information on the 2015 Pilot Project which resulted in the conclusion that a full-scale AWPf project could be built in a cost-efficient and environmentally protective matter.

I would be happy to come to your offices to assist in copying various reports and documents to minimize the cost and inconvenience of assembling this crucial information .

Many thanks for your timely cooperation with this request.

Sincerely

Duane Georgeson

Sent from my iPhone

I1-1

From: Jean Getchell <jeanagetchell@gmail.com>
Sent: Monday, March 11, 2019 6:31 PM
To: Dorrington, Gina
Cc: oscar@venturaharbor.com; bpendleton@venturaharbor.com
Subject: Re: Ventura Water Supply Project

Thank you very much.

I also copied you in a message about SOAR to Richard Francis and Steve Bennett, its original authors. Mr. Francis reminded me that SOAR provides an exception for governmental infrastructure projects, so no vote would be required for the possible facility location on Harbor Boulevard at Olivas Park Drive if it is zoned agricultural.

I2-1

Jean Getchell

Law Office of Jean Getchell
 1743 Santa Ynez Street
 Ventura, CA 93001
 (831) 392-6596

Sent from my iPhone

> On Mar 11, 2019, at 6:23 PM, Dorrington, Gina <gdorrington@cityofventura.ca.gov> wrote:

>

> Dear Ms. Getchell,

>

> Thank you for your inquiry. A copy of the Ventura Water Supply DEIR will be delivered to the Hill Road Branch Library this week.

>

> Respectfully,

>

>

> Gina Dorrington

> Wastewater Utility Manager / Interim Assistant General Manager Ventura

> Water gdorrington@venturawater.net

> Office: 805.677.4131

> Cell: 805.2233053

>

>

> -----Original Message-----

> From: Jean Getchell <jeanagetchell@gmail.com>

> Sent: Saturday, March 09, 2019 9:00 PM

> To: Dorrington, Gina <gdorrington@cityofventura.ca.gov>

> Cc: Brown, Lorrie <lbrown@cityofventura.ca.gov>

> Subject: Ventura Water Supply DEIR - Document Availability at Hill

> Road Branch Library

>

> Ms. Dorrington,

>

I2-2

> Is there a reason the Hill Road Branch Library will not have a copy for review?
>
> Warm regards,
>
> Jean Getchell
>
> Law Office of Jean Getchell
> 1743 Santa Ynez Street
> Ventura, CA 93001
> (831) 392-6596
>
> Sent from my iPhone

Commenter I2
↑
I2-2

From: Duane Georgeson <duanegeorgeson@msn.com>
Sent: Monday, March 25, 2019 2:22 PM
To: Dorrington, Gina
Subject: Ventura Water Supply Projects draft EIR- "Cost Efficiency "

Dear Ms Dorrington

I have carefully reviewed the May 2014 facilities planning study which you referred me to as a source of cost information in determining economic feasibility for Potable Reuse.

On page 9-9 of that report is a capital cost estimate of \$112 million which would include either Direct Potable Reuse at \$80 million or Indirect Potable Reuse at \$94 million.

Page 9-9 also comments that a cost of service study was being prepared by Raftelis Financial. This ".....Rate Design Study Report dated January 2014" is available on the Water Department's web site.

The 2014 Rate Design report (on pages 28 and 54) projects a \$241 million capital program for the six year period 2018 through 2024 (\$113 million for Water and \$128 for Waste-Water).

The 2014 Rate Design report on pages 32 and 58 indicates that customer Waste-Water revenues would have to be increased by about 75% and customer Water Revenues to be increased by about 50% in the next five years just to cover the \$241 million cost of the program visualized in year 2014.

Now that the City Council's approved Water capital budget has doubled to \$480 million we can expect the annual total customer Water utility revenue will have to be raised even higher, likely doubling from the present \$60 million annually to \$120 million annually.

I certainly would agree that you need to "update " the cost information and analysis in your 2014 reports as you pursue your goal of a "COST EFFICIENT " project.

In closing I would caution your Department of the urgent need to modify your extremely optimistic year 2025 completion schedule. You goal of leading the way in pursuing DPR with what amounts to a "Crash" program is not supported by your Rate of progress over the last ten years nor is it supported by the Rate of progress by the city of Oxnard which is still in the permitting stage after more than ten years.

Was it Benjamin Franklin that said

"Haste makes Waste!"?

Sincerely,

Duane Georgeson

I3-1

Sent from my iPhone

From: Barbara Burkhardt <bburkhardt@rinconconsultants.com>
Sent: Thursday, March 28, 2019 12:52 PM
To: Katherine
Cc: Dorrington, Gina
Subject: RE: Upcoming Public Meeting -- Recycled Water?

Hi Katherine,

I saw your plans in plan check recently and was so excited for your family. I can't wait to see the finished house. Congratulations!

As far as the water project, I would direct your concerns to the Water Department. I followed the link in your email and it looks like contacting the Wastewater Utility Manager, Gina Dorrington (copied here) might be the best place to start, as she was listed as the contact for the project EIR.

All best,
 Barbara

From: Katherine [mailto:katherine@venturahydraulics.com]
Sent: Thursday, March 28, 2019 12:38 PM
To: Barbara Burkhardt
Subject: FW: Upcoming Public Meeting -- Recycled Water?

CAUTION: This email originated from outside of Rincon Consultants. Be cautious before clicking on any links, or opening any attachments, until you are confident that the content is safe .

Barbara,

I am reaching out to you to see if you know who in the Planning Department is heading up the charge and push for the use of recycled water? Unfortunately, Woody and I know way more about the quality of recycled water than we should! It is VERY bad! ...you can take this from me! My parents own a ranch that is directly down gradient from the Santa Paula Water Treatment Plant and they currently have a seize and desist order because they have contaminated my parent's property.THIS IS A VERY BAD IDEA FOR VENTURA!!!! If you could let me know who would be good to contact about this, we have a ton of information to provide them that may save their jobs.

I4-1

I hope you are doing well. We are finally about to start our project! Can you believe that ?

Katherine

This is a little something from an expert on Water Quality:
 The City of Ventura is currently in the planning phases for the proposed [VenturaWaterPure](#) project which includes the construction of an Advanced Water Purification Facility (AWPF) for potable reuse. Potable reuse is the proven use of recycled water to supplement drinking water supplies.

I4-2

I did a quick word search or the draft EIR for the word "antibiotic" seeing if the city might have considered water contamination with antibiotic resistant bacterial genes. I found no hits. This is potentially troubling because very special care must be taken to assure that recycled water does not contain these genes. Also, bacteria have virulence genes, again difficult to control. As an example, the bacteria that is known as methicillin resistant Staph aureus (MRSA) sees its virulence factors up-regulated by contact with chlorine. MRSA is a superbug. Glyphosate is often found in wastewater. The pathogen Pseudomonas aeruginosa, typically found in recycled water and a serious opportunistic pathogen, can convert glyphosate (active ingredient in Roundup) into formaldehyde, a known carcinogen. Where is this discussed in the DEIR? The expert panel on recycled water that the state formed, admonished those contemplating the use of recycled water for drinking, to have a well coordinated epidemiological public health system actively tied into and monitoring the system. Where is such a system? Which agencies are thus coordinated, how are they funded and do they have adequate staffing-----or do they even exist? Santa Barbara County was reviewed in a similar way and it failed miserably. The standards for water quality are antiquated and do not consider antibiotic resistant microbes. Thus, water may be deemed as "legal" but that is a far stretch from safe.

Dr Edo McGowan, former water quality planner for the County of Ventura

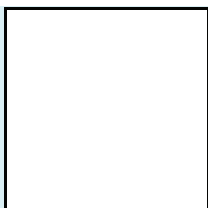
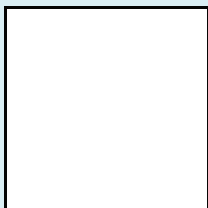
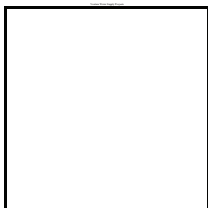
----- Forwarded Message -----

From: Ventura Water <myvtawater@cityofventura.ca.gov>

To: "connell1@pacbell.net" <connell1@pacbell.net>

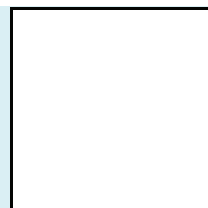
Sent: Monday, March 25, 2019, 2:06:17 PM PDT

Subject: Upcoming Public Meeting



Public Meeting and Draft Environmental Impact Report

Tuesday, March 26, 2019 at 5:30 pm



Dear Valued Customers,

Thank you to all who
joined us for the 7th
Annual Water: Take 1

Ventura City Hall
Community Meeting Room (Room 202)
501 Poli Street Ventura, CA 93001

The City of Ventura recently released a Draft Environmental Impact Report for the proposed Ventura Water Supply Projects. Stakeholders, interested persons, organizations, and agencies are invited to attend a public meeting to receive an overview and submit written comments. Written comments are due no later than April 22, 2019.

The City of Ventura is currently in the planning phases for the proposed [VenturaWaterPure](#) project which includes the construction of an Advanced Water Purification Facility (AWPF) for potable reuse. Potable reuse is the proven use of recycled water to supplement drinking water supplies.

After years of special studies, environmental assessment, demonstration facility testing, and stakeholder meetings, the City determined the best way to enhance environmental protection while improving local water quality and supply reliability is to divert highly treated wastewater discharges for reuse. The construction of a locally owned state-of-the-art AWPF will provide highly purified drinking water and a long-term drought resilient water supply solution.

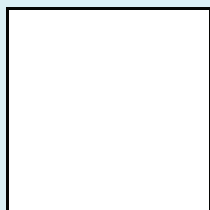
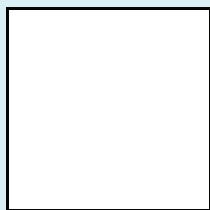
The Ventura Water Supply Project's Draft EIR is available [here](#).

Film Festival. The night truly encompassed Ventura's spirit of community and collaboration. This year's honorees exemplify the critical efforts of community members that inspire change through forward thinking water conscious actions and initiatives.

This event would not be possible without our passionate and committed sponsors Nossaman LLP, Carollo Engineers, Kennedy/Jenks Consultants, and Hopkins Groundwater Consultants. We were privileged to have distinguished guests, Michelle Sevilla, representative for Assemblymember Monique Limón and members of the Water Commission, join us to recognize and honor our local "difference makers".

Lastly, thank you to our community organizations, professionals, and members of the public who stand with us to protect and improve our local water supplies for future generations.

We look forward to growing our circle of partners, sponsors and participants who are passionate about the value of water. If you are interested in getting



Water: Take 1 Film Festival Recognizes Local "Difference Makers"

In celebration of World Water Day, the City honored local water heroes at the 7th Annual Water: Take 1 Film Festival. Honorees were recognized for doing their part to protect natural resources and bring awareness to water.

The event, which was held at the Buenaventura Banquet Center, commenced with live music, food, and drinks followed by an award presentation and screening of water-themed short documentaries. Ventura Water Interim General Manager, Susan Rungren welcomed guests before kicking off the film screenings.

Event sponsors Hopkins Groundwater Consultants, and **Kennedy Jenks Consultants** recognized **Surfrider Foundation's Ocean Friendly Garden** program for partnering with students at Ventura High School to replace over 1,000 square feet of lawn with a water wise garden. The new landscape was designed to save water, prevent stormwater pollution, and act as a demonstration garden for the public.

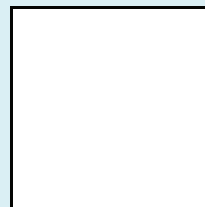
Representatives from **Nossoman LLP** presented the Community Organization Award to Ron and Barbara Barrett for their leadership in protecting local watersheds and inspiring youth to care for the environment. For more than 30 years, the couple has volunteered as site leaders for the annual **Coastal Cleanup Day**.

CLEAN International, whose mission is the eradication of waterborne illness and an end to the daily walk for water worldwide, was presented the National Foundation Award by **Carollo Engineers**. CLEAN, a Ventura-based non-profit organization, advocates for clean, sustainable, and convenient water and sanitation around the world.

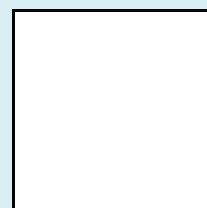
View the films of this year's winners at www.watertake1.com.

involved with Water: Take 1 please visit www.watertake1.com. In an ever changing world one thing remains the same: water is precious and vital to life.

Sincerely,



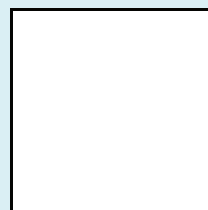
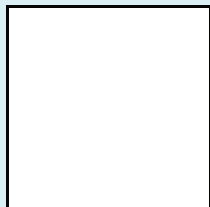
Susan Rungren
*Ventura Water
Interim General Manager*



IPM & Beneficial Insects

Saturday, April 6, 2019
10:00-11:30 am
Avenue Adult Center
550 N Ventura Ave.
RSVP [here](#).

It's a bug-eat-bug world.
Learn how to control
pests with beneficial
insects in your landscape.



To view current employment opportunities with the City of Ventura visit [here](#).

- **Ventura Water General Manager**
- **Assistant General Manager- Water Operations**
- **Environmental Compliance Inspector**

Visit Ventura Water's Outreach Team

Ventura Water's Outreach Team is composed of a diverse set of staff members dedicated to public education and community engagement. Come visit us to learn about employment opportunities, improvement projects, upcoming public meetings, and conservation programs!

Ventura College Career Fair

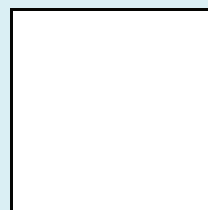
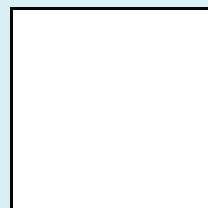
Tuesday, April 16
10:00 am- 2:00 pm
Ventura College

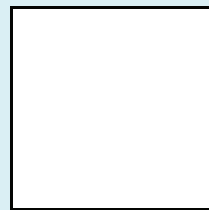
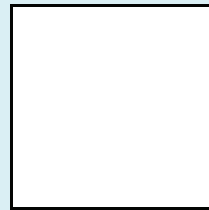
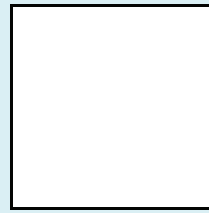
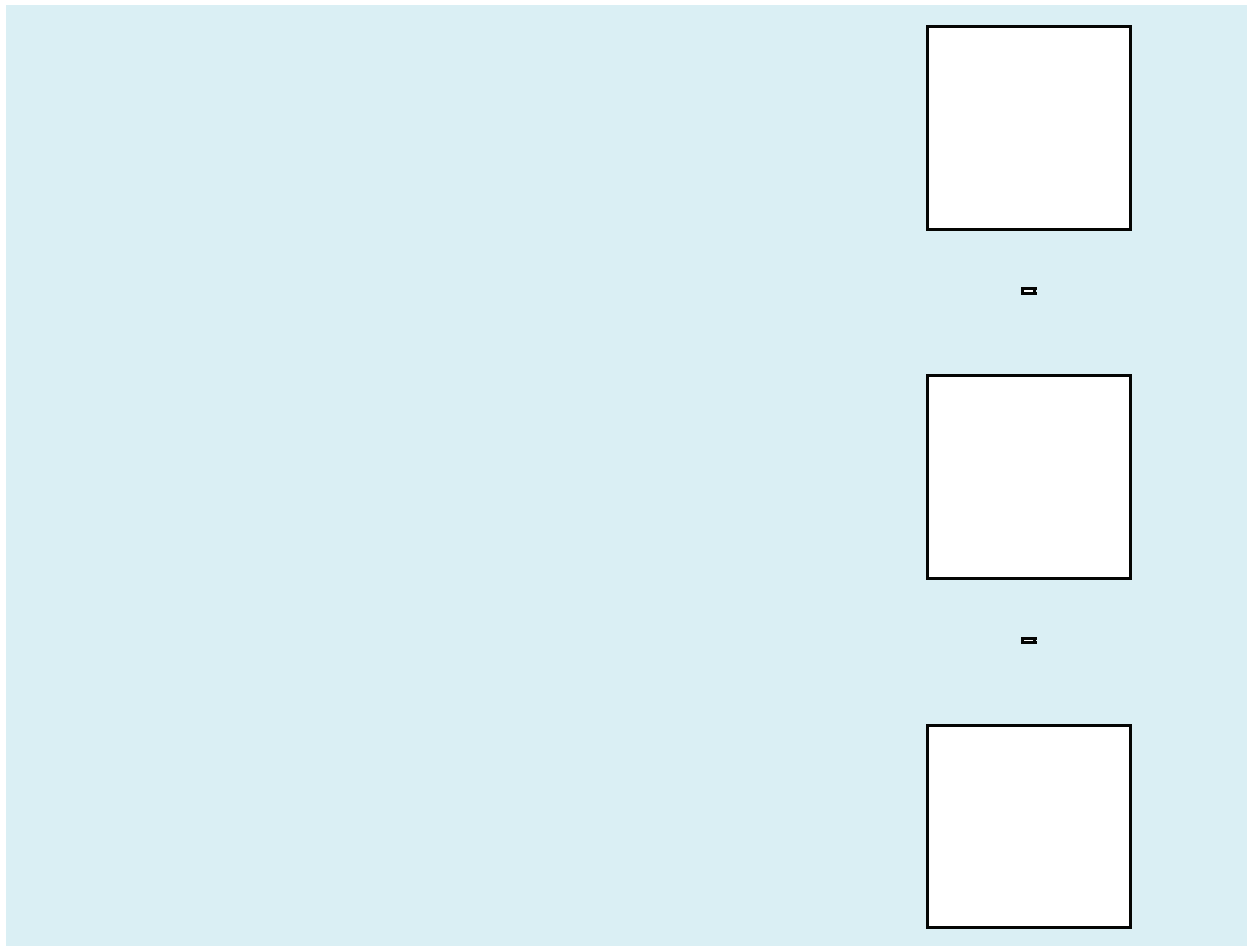
Earth Day Ecofest

Saturday, April 27
10:00 am- 4:00 pm
Plaza Park, Ventura, CA

Chamber of Commerce Business Expo.

Thursday, May 16
4:30 pm- 7:30 pm
Four Points Sheraton
Ventura, CA





myvtawater@cityofventura.ca.gov
www.venturawater.net
805-667-6500

Connect with us

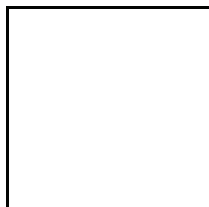


Ventura Water | 336 Sanjon Road, Ventura, CA 93002

[Unsubscribe connell1@pacbell.net](mailto:Unsubscribe.connell1@pacbell.net)

[Update Profile](#) | [About our service provider](#)

Sent by myvtawater@cityofventura.ca.gov in collaboration with



Try it free today

From: noreply@cityofventura.ca.gov
Sent: Thursday, March 28, 2019 11:21 PM
To: Dorrington, Gina
Subject: Online Form Submittal: Ventura Water Supply Projects Draft EIR

Ventura Water Supply Projects Draft EIR

First Name	Steve
Last Name	OReilly
Email Address	Steve_Oreilly@hotmail.com
Share your comments on the Ventura Water Supply Projects Draft EIR	Map has no roads to orient the viewer. No Harbor view on map, covered by graphic. Copies in black and white are ineffective as same symbols used with only different colors used to identify differences. Hopefully getting a color copy of the document online thru this sign-in process. Thank you Steve

I5-1

Email not displaying correctly? [View it in your browser.](#)

From: Edo McGowan <edo_mcgowan@hotmail.com>
Sent: Thursday, March 28, 2019 3:17 PM
To: Dorrington, Gina; Sheryl Hamlin; microcapmaven@aol.com; katherine@venturahydraulics.com
Subject: Comments on DEIR

Comments on the City of Ventura's proposal for converting recycled wastewater into drinking water

In addition to the carriage of pathogens within the bulk of Title 22 recycled water, the water carries a variety of xenobiotics. These and their metabolites (break-down products) will need to be removed. The problem facing us is the lack of standards for these xenobiotics. Because we have a variety of potential standardless contaminants, the finished water may contain these, although that water can be considered as "legal". Although "legal"-----it may be hardly safe. This is the risk of attempting to spin straw into gold as the base stock is highly variable and potentially unstable.

The DEIR will need to address this aspect. As an example, recycled water may carry *Pseudomonas aeruginosa* which can break down glyphosate into formaldehyde, a known carcinogen. Where are the standard water quality tests for this event, and if they don't exist, then what? How is that eventuality addressed? By definition, a carcinogen has no lower impact limit. Thus, the entire treatment train warrants critical evaluation within the DEIR, including analysis of mitigators. Where is this? This is just an example of issues with this DEIR. You need to go back to the drawing-board.

Dr Edo McGowan, Former Water Quality Planner for County of Ventura

I6-1

From: SaveOurWaterVentura <4R.Grandkids@saveourwaterventura.org>
Sent: Thursday, March 28, 2019 8:09 PM
To: Water Commission
Subject: Economic justice and Ventura's Wastewater Recycling Project
Attachments: themedata.thmx; colorschememapping.xml

Economic justice and Ventura's Wastewater Recycling Project
 ¿Dónde está la justicia económica y social?

May 28, 2019

To: Ventura Residents

Ventura is on a track to spend hundreds of millions of dollars to convert sewage water into drinking water. Estimated project costs keep escalating. Proponents have not provided adequate information and disclosure. There are many examples of big projects that did not work out as expected. Consider the high speed rail project -- or Oxnard's GREAT (water recycling) project. When big projects go badly, millions of dollars are lost. The consequences ultimately fall on the poor. We citizens must pay more attention to large multi-million dollar project proposals.

At first, we were told that treated sewage water is processed to be 97% pure - (prior to its release into the ocean). Recycling advocates insisted that the cost to remove the remaining 3% would be minimal. However, as it turns out, the project will be very expensive -- many hundreds of millions of dollars. Also, Ventura will incur significant expenditures for annual operating costs.

Ventura has prepared a draft environmental impact report (EIR). If you would like to comment on the EIR, you must do so prior to April 22, 2019. For details and instructions, please direct your browser to the following web address:

<https://www.cityofventura.ca.gov/1470/Ventura-Water-Pure>

I7-1

17-2

Opponents of the Ventura Water-Pure Project include Venturans for Responsible & Efficient Government aka VREG. ***A major concern is that there is no long term track record for Direct Potable Reuse (DPR)***. DPR is a process to sanitize sewage water and then pipe it directly back to households for drinking purposes. ***Are Ventura residents being used as guinea pigs to enhance the resumes of Ventura's elected officials and staff?*** You may review VREG's critique at the following web-address:

<http://www.vregventura.org/are-you-really-content-to-drink-sewage-when-you-dont-have-to/>

17-3

Should Ventura allow the project to proceed past the point of no-return OR wait until DPR has a proven track record? There are various possibilities for phasing in DPR and/or reducing wastewater going to the estuary. In all scenarios -- involving either wastewater use or disposal -- a pipeline into the ocean will be required. Thus, shouldn't Ventura build this (outfall/brine) pipeline first?

17-4

It seems likely many residents will not drink the recycled water. Those that have the money will drink only bottled water - or they will install expensive equipment to filter the water before it enters their homes. Some may decide to boil the water before drinking it.

17-5

In addition to the health risk, "toilet to tap" will create a massive and lethal security risk. A terrorist will be able to use any toilet in the city to flush a toxic agent that could end up in our drinking water.

At this time, it is hard to see "economic and social" justice in Ventura's Water-Pure Project. ¿Dónde está la justicia económica y social?

Kindest regards y Saludos cordiales,

Charles Spraggins

sow.ventura@SaveOurWaterVentura.org

4R.Grandkids@saveOurWaterVentura.org

unsubscribe by email to: sow.ventura@gmail.com

From: Mary Adrienne Krause <thekrausefamily@yahoo.com>
Sent: Friday, March 29, 2019 10:32 AM
To: Dorrington, Gina; Nasarenko, Erik
Subject: EIR for potential water resources

Dear Ms. Dorrington:

We are concerned with the proposals for alternative water resources for the city of Ventura outlined in the Environmental Impact Report, dated March 2019. As we understand the report it contains evaluations for using either desalinization or treatment of sewage water for drinking purposes. First, we would like to comment on the timing of this document. Many residents in Ventura are working on re-building following the devastation of the Thomas Fire, and are unable to give their energy and effort to weighing in on this EIR. Second, the lack of water available to fight the Thomas Fire and the subsequent failure of the City of Ventura to explain that problem to the tax-paying residents, does not give us confidence in the further management of water resources by the City of Ventura.

I8-1

Aside from the above concerns we do not support building a desalinization plant for Ventura, due to the very high costs of running these plants and due to the air pollution that is emitted in the process. We also do not support building a plant to treat sewage water for use as drinking water. We do not believe that Ventura has the funds to hire sufficient numbers of knowledgeable personnel to monitor such a facility and ensure the safety of the water. Errors in this process or it's monitoring could be life-threatening for residents.

I8-2

Finally, we would like to state that the City Councils of Ventura have created the water problems that we now have, by overbuilding and not ensuring sufficient water supplies for the new developments. Now, the long-time residents will bear the costs for this building.

I8-3

Sincerely,
 Adrienne and Bob Krause
 1023 Via Ondulando Ventura, CA

From: Rangel, Kathy
Sent: Monday, April 1, 2019 7:44 AM
To: Dorrington, Gina
Subject: FW: Oxnard-Ventura-Fox Canyon Wastewater Deal Suggestion
Attachments: themedata.thmx; colorschememapping.xml

Best Regards,

Kathy Rangel
 Executive Assistant
 City Manager/City Council Office
 City Of Ventura
 501 Poli St.
 Ventura, CA 93001
 (805) 654-7703



From: SaveOurWaterVentura <4R.Grandkids@saveourwaterventura.org>
Sent: Saturday, March 30, 2019 6:12 PM
To: City Manager Internet Email <citymanager@cityofventura.ca.gov>
Subject: re: Oxnard Ventura Fox Canyon Wastewater Deal Suggestion

March 30, 2019

re: Oxnard-Ventura-Fox Canyon Wastewater Deal Suggestion

Oxnard and Ventura often compete for sales-tax dollars. However, has anyone explored a beneficial water deal for both cities? Ventura has prepared a draft EIR concerning a proposed wastewater re-cycling project (costing 400MM?). Would Oxnard be interested in a deal to receive Ventura's Wastewater and process the water within Oxnard's GREAT system? Apparently, the GREAT system is now operational, has considerable capacity, and new pipelines will be functional soon. It seems Oxnard has infrastructure and budget problems while Ventura has money but not infrastructure. See Ventura's DEIR at the following address:

<https://www.cityofventura.ca.gov/1470/Ventura-Water-Pure>

I9-1

The DEIR has a discussion of "Project Alternatives". See Alternative 5 titled "Conveyance of tertiary Effluent to Oxnard Wastewater Treatment Plant". The DEIR implies that "Under this alternative Ventura would not augment its water supply". The DEIR implies that if Oxnard processed the wastewater, that Ventura could not get potable water in return. Is that an assumption OR has a REAL deal been explored ? Couldn't Oxnard and Fox Canyon agree to give Ventura some FC water as part of an exchange? Ventura gets water and Oxnard gets some money. Win-Win-Win. Everybody happy: Oxnard, Ventura, Fox Canyon farmers, and environmentalists.

I9-2

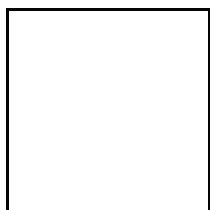
Lots of extra water and money for everyone. Am I dreaming, or is it a possibility?

Respectfully yours,

Charles Spraggins

Save Our Water Ventura

sow.ventura@saveourwaterventura.org



From: SaveOurWaterVentura <4R.Grandkids@saveourwaterventura.org>
Sent: Sunday, March 31, 2019 7:56 PM
To: Dorrington, Gina
Subject: Draft Environmental Impact Report Comments
Attachments: 2019 0331 DEIR Comments.pdf; ATT00001.htm

SaveOurWaterVentura.org

4666 Vanderbilt Court
Ventura, CA 93003

March 31, 2019

Gina Dorrington
City of Ventura
501 Poli Street
Ventura, CA 93002-0099

Email: gdorrington@cityofventura.ca.gov

Comments re:
VENTURA WATER SUPPLY PROJECTS
Draft Environmental Impact Report
SCH No. 2017111004

<p>The Draft EIR fails to fully address the social and economic effects of constructing, operating and maintaining the proposed project as required by CEQA. In projecting costs you should consider terrorism. The Bioterrorism Act of 2002 requires that drinking water utilities serving more than 3,300 people conduct vulnerability assessments and develop emergency response plans. DPR is likely to result in elevated costs for water-system security. A terrorist will be able to use any toilet in the city to flush a toxic or radioactive agent that could end up in the drinking water.</p>	<div style="border-left: 1px solid black; height: 100px; margin: 0 5px;"></div>	<p>I10-1</p>
<p>When addressing these matters please also include a comparison with all project alternatives.</p>	<div style="border-left: 1px solid black; height: 20px; margin: 0 5px;"></div>	<p>I10-2</p>
<p>In phasing, explain why the outfall pipeline is not the number one priority.</p>	<div style="border-left: 1px solid black; height: 20px; margin: 0 5px;"></div>	<p>I10-3</p>
<p>It seems likely many residents will not drink the recycled water. Those that have the money will drink only bottled water - or they will install expensive equipment to filter the water before it enters their homes. Some may decide to boil the water before drinking it. People's "decisions not to drink city water" could have a major socio-economic and environmental impact.</p>	<div style="border-left: 1px solid black; height: 100px; margin: 0 5px;"></div>	<p>I10-4</p>

The City's legal exposure/liability may increase, but may increase to an even higher level -- if Ventura has a marketing campaign to convince the public that recycled water is safe to drink. I doubt the City will be able to buy insurance that would cover its exposure. Assessment of new risks would be appropriate for inclusion.

I10-5

The DEIR has a discussion of "Project Alternatives". See Alternative 5 titled "Conveyance of tertiary Effluent to Oxnard Wastewater Treatment Plant". The DEIR states that "Under this alternative Ventura would not augment its water supply". The DEIR implies that if Oxnard processed the wastewater, that Ventura could not get potable water in return. Is that an assumption OR has a REAL deal been explored? Couldn't Oxnard and Fox Canyon (FC) agree to give Ventura some additional FC water as part of an exchange? Ventura gets water and Oxnard gets some money. Why and how have you concluded that this alternative would not provide additional water? Has anyone explored a beneficial water deal for both cities? Would Oxnard be interested in a deal to receive Ventura's Wastewater and process the water within Oxnard's GREAT system? Apparently, the GREAT system is now operational, has considerable capacity, and new pipelines will be functional soon. It seems Oxnard has infrastructure and budget problems while Ventura has money but not infrastructure.

I10-6

If Ventura has not fully explored the major alternatives, then the DEIR is in violation of CEQA Guidelines.

I10-7

Yours truly,

Charles Spraggins
sow.ventura@SaveOurWaterVentura.org

From: Rungren, Susan
Sent: Monday, April 1, 2019 11:15 AM
To: Joseph Chrisman
Cc: Rungren, Susan
Subject: RE: Water Commission Meeting and Presentation

Hi Joe,

The Draft EIR for the project has information on the proposed outfall location. Please see the DEIR in the attached link to the City website and Ventura Water homepage. Check Pages 2-13, 2-35, 2-48 and Figures 2-2, 2-9 and 2-19.

Please let me know if you need any additional information.

<https://www.cityofventura.ca.gov/1470/Ventura-Water-Pure>

Best Regards,

Susan Rungren
 Ventura Water Interim General Manager
 805-652-4523

-----Original Message-----

From: Joseph Chrisman <jchrisman@hathawaylawfirm.com>
 Sent: Saturday, March 30, 2019 11:44 AM
 To: Rungren, Susan <srungren@cityofventura.ca.gov>
 Subject: FW: Water Commission Meeting and Presentation

Good Morning Susan,

Congratulations on a job well done at the Water Commission meeting last Tuesday. I listened to a portion of the meeting--until the public comment period began-- and took the attached photo of the chart of the City Water Supply Projects Component Parts. You have had your hands full for quite some time to put the parts of the puzzle together. I wasn't sure if there was a report that talked about the outfall part of the project in greater detail? I know it has been discussed and also the idea of the pipeline to the existing outfall in Port Hueneme, but I can't tell from looking at the photo exactly where the outfall would be installed in relation, for example, to Seaward? If there is a report that talks about the outfall part of the projects in greater detail I would appreciate it if you could forward it to me. Have a good weekend. Thanks again.

I11-1

Joe Chrisman

Joseph C. Chrisman
 Hathaway, Perrett, Webster, Powers, Chrisman & Gutierrez A Professional Corporation
 jchrisman@hathawaylawfirm.com Visit our Web Site

https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fat%20www.hathawaylawfirm.com&c=E,1,582Qmu3g5wDxoAkTbV84EYgvpvsv_NchLdJdUKBi49dNOdduKgiXMTBQ2u_jcRPA7tUD83594-iZG1cfLvpzzhOe3CcELppikdop95loYw,,&typo=1

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-----Original Message-----

From: Joseph Chrisman

Sent: Saturday, March 30, 2019 11:30 AM

To: Joseph Chrisman <jchrisman@hathawaylawfirm.com>

Subject: Water Commission Meeting and Presentation

Joseph Richardson 8778 Tacoma St. Ventura Ca. 93004 1 (805) 659 2387, Production supervisor City of Ventura water 1985-1992

I am writing this meme and sharing it as widely as I can. My hope is to inform as many people about the false claims and faulty planning by the City of Ventura Water Dept staff.

I12-1

The first claim: there is a water shortage

There is NOT a water shortage. The city has multiple sources that are and can meet the city demand. The fact is the City Water Dept staff have and are acting in manners that reduces the water availability to our users in a manner that allows them to falsely claim a shortage.

Currently there is a surface flow in the Ventura River, going by within 15 feet of the abandoned surface diversion facility, that is nearly 20 times the amount of water the city is using daily. This river water is the cheapest and highest quality water available to our users. If it was being produced into the system the use of the much lower quality deep well water that is in distress as a supply could be reduced and EVERYONE would be better off.

I12-2

The second claim: city is caught up in and forced by legal restraints and settlements

The city allowing and conceding to a legal settlement on the estuary was a TOTAL THEFT of city water resources. The fact is there would NOT BE AN estuary if the city didn't put it's tertiary treated effluent in there to begin with. Based on the latest costs estimates the City could have easily permitted and built an ocean outfall instead of WASTING what will be hundreds of millions of dollars on their WaterPure experiment that has NO chance of ever being permitted for potable use.

I12-3

The amount of water ALREADY spent on this boon-doggle could have built multiple reverse osmosis facilities to make currently available groundwater available and of higher quality of ANY source the city currently is using.

Some final thoughts:

The City continues to put out numbers to back up their 'silly' math on how we are in a shortage by claiming that the Ventura River production facilities, in a normal year, are capable of producing significant water. Well as far as river flows go, the river IS CURRENTLY flowing NORMAL YEAR flow but the facilities are NOT BEING USED, REPAIRED, OR MAINTAINED deliberately to keep the amount of water produced LESS than what it is possible of producing ... yet again .. only possible IF the city did in fact repair, maintain, and use the facilities at Foster Park. Facilities that have INALIENABLE rights to the water despite false claims by litigants. INALIENABLE rights that the City decades ago established were probably PUEBLO rights. The full story on that issue is being completely hidden from the current population of the city even though those in authority at the City Council and Water Commission are in full knowledge of such legal standing.

I12-4

From: Jim Oliver <jaolivertwist@gmail.com>
Sent: Monday, April 1, 2019 12:23 PM
To: Dorrington, Gina
Subject: Environmental Impact of Ventura Water

Gina,

I am citing my concerns over the plan of Ventura Water to reuse our sewer water to drink and bathe in. As a novice in this field I must say the presentation I attended on March 26th was at best unintelligible with all the professional language or at worst purposely misleading. There was much back and forth with the Direct Potable Reuse, DPR and Indirect Potable Reuse, IPR, so it is unclear to me if IPR is the only option being considered or if DPR is also in the mix. If DPR is in the mix in any way, I must strongly object to this project. We were told at the meeting that this is currently being used in parts of California and Texas and this is the case with IPR but NOT DPR! In fact my research has uncovered that this type of water reuse has yet to be approved for human consumption. And this brings me to my biggest complaint and that is there has been much concern shown for the local wildlife and plant life but I see NONE for us humans. This seems to be the path our tax funded government is going. I think before any of this goes forward there needs to be a study done on what are the health affects on us humans with this project. I also believe that if the average Ventura citizen knew of this plan of toilet to tap, there would be a big push back.

I13-1

I13-2

I13-3

Jim Oliver
 8915 Santa Margarita Rd
 805-985-5488

From: Duane Georgeson <duanegeorgeson@msn.com>
Sent: Monday, April 1, 2019 5:05 PM
To: rmccord2@gmail.com; Scott McCarty; Steve Doll; Dorrington, Gina
Subject: Fwd: Ventura Water Supply Projects draft EIR- "Cost Efficiency " -re-sending

Attached is my recent comment letter to respond to the draft EIR for Ventura water supply project. The response letter explains that to finance the Ventura Water PURE project will require increasing water and wastewater revenues approximately 100% from present \$60 million per year to \$120 million per year by 2025. Please call me if you have questions.
 Thanks Duane

I14-1

Sent from my iPhone

Begin forwarded message:

From: Duane Georgeson <duanegeorgeson@msn.com>
Date: March 27, 2019 at 6:11:01 PM PDT
To: "Dorrington, Gina" <gdorrington@cityofventura.ca.gov>
Subject: FW: Ventura Water Supply Projects draft EIR- "Cost Efficiency " -re-sending

Sent from [Mail](#) for Windows 10

Sent from my iPhone

Begin forwarded message:

From: Duane Georgeson <duanegeorgeson@msn.com>
Date: March 25, 2019 at 2:22:12 PM PDT
To: Gina Dorrington <gdorrington@cityofventura.ca.gov>
Subject: Ventura Water Supply Projects draft EIR- "Cost Efficiency "

Dear Ms Dorrington

I have carefully reviewed the May 2014 facilities planning study which you referred me to as a source of cost information in determining economic feasibility for Potable Reuse. On page 9-9 of that report is a capital cost estimate of \$112 million which would include either Direct Potable Reuse at \$80 million or Indirect Potable Reuse at \$94 million. Page 9-9 also comments that a cost of service study was being prepared by Raftelis Financial. This ".....Rate Design Study Report dated January 2014" is available on the Water Department's web site.

The 2014 Rate Design report (on pages 28 and 54) projects a \$241 million capital program for the six year period 2018 through 2024 (\$113 million for Water and \$128 for Waste-Water).

The 2014 Rate Design report on pages 32 and 58 indicates that customer Waste-Water revenues would have to be increased by about 75% and customer Water Revenues to

I14-2

be increased by about 50% in the next five years just to cover the \$241 million cost of the program visualized in year 2014.

Now that the City Council's approved Water capital budget has doubled to \$480 million we can expect the annual total customer Water utility revenue will have to be raised even higher, likely doubling from the present \$60 million annually to \$120 million annually.

I certainly would agree that you need to "update " the cost information and analysis in your 2014 reports as you pursue your goal of a "COST EFFICIENT " project.

In closing I would caution your Department of the urgent need to modify your extremely optimistic year 2025 completion schedule. You goal of leading the way in pursuing DPR with what amounts to a "Crash" program is not supported by your Rate of progress over the last ten years nor is it supported by the Rate of progress by the city of Oxnard which is still in the permitting stage after more than ten years.

Was it Benjamin Franklin that said

"Haste makes Waste!"?

Sincerely,

Duane Georgeson

I14-2

Sent from my iPhone

From: Steve Simms <sgs@hhaweb.com>
Sent: Tuesday, April 2, 2019 3:09 PM
To: Dorrington, Gina
Subject: Opposed to toilet to tap

I have been a resident of Ventura since 1972. I do not want to bathe in or drink recycled sewage.

The technology is unproven, it will surely cost more that estimated, and it may be a total failure. If it proves successful, my wife and I may move out of Ventura.

I
I15-1

Repudiate the Wishtoyo agreement if necessary and spend our money on lawyers and the state water connection.

I
I15-2

Stephen Simms

From: burt handy <burthandy@gmail.com>
Sent: Thursday, April 4, 2019 5:31 PM
To: Council; Water Commission
Subject: Ventura County Water Fix

Ventura County Water Fix

This proposed 30 to 45 mile pipeline would go a long way in reducing the aquifer overdraft situation, provide a higher quality water supply, , allow for the ability to use supplemental water available in “Wet Years” to recharge aquifer storage, providing a back-up supply for the current state water pipeline coming through Metropolitan Water in Los Angeles, and provide for more water for most of the cities in the west end of Ventura County.

I16-1

The state of California has passed legislation creating the Sustainable Groundwater Sustainability Act (SGMA) to regulate the groundwater in California.

Ventura County has limited access to the State Water, through Metropolitan Water (Los Angeles).

The State water project sends the water through Pyramid and Castaic Lake to Los Angeles.

If a direct raw water line was built through the Santa Clara River Valley to the Freeman Diversion in the Oxnard area, this line could provide a back-up route to furnish water to Thousand Oaks, Simi Valley, Camarillo, and Oxnard. Additionally, the line would provide water to Ventura, Fillmore, Santa Paula, Piru, and the unincorporated areas of Ventura County.

This line could also be used to transport supplemental water (extra water in “wet years” which is just dumped into the ocean) to recharge the aquifers in the Santa Clara River basin, and the Oxnard Plains, which are in a critical overdraft situation.

This raw water pipeline could come from Lake Piru or Lake Castaic, which is between 30 and 45 miles from the Oxnard basin (Fox Canyon Groundwater Sustainability Agency)

This water could also be used to provide extra water, which is of high quality to all the basins, which would save energy, and make the water for your constituents a much higher quality, and a more dependable water supply.

This project would be also able to provide table A water (from the state water project) at a lower cost to Ventura County, and a more direct route along with the proposed California Water Fix project.

This 30 to 45-mile pipeline would go a long way to assisting in reducing the overdraft situation, increased water supply, along with a higher quality water supply.

Burt Handy

From: burt handy <burthandy@gmail.com>
Sent: Thursday, April 4, 2019 10:55 PM
To: Council; Water Commission
Subject: Fwd: State Water Interconnect Project EIR submission
Attachments: Saticoy to Piru and Lake Castaic.jpg; Piru to Freeman Diversion by United Staff with estimated costs.jpg

----- Forwarded message -----

From: **burt handy** <burthandy@gmail.com>
Date: Thu, Apr 4, 2019 at 8:18 PM
Subject: State Water Interconnect Project EIR submission
To: Cooper, Betsy <bcooper@cityofventura.ca.gov>

In the Interconnect project Environmental Impact Report (EIR) only one option is listed. I believe there is another option which was not mentioned and needs to be evaluated in the EIR.

The Project objectives could also provide for all the stated objectives in **section 1.7**, which state::
Provide a near term water supply source for the City to enhance supply reliability
Improve City water quality
Provide a backup supply for the Cities othe potential, lonig-term water supply options
Allow Casitas and dUnited to receive their State Water Project (SWP) entitlements and
Enable the city to deliver water to Calleguas during n imported water supply outage.
Under section 1.10 The only alternative is listed as a route change from the same origin point and finish point.

This alternative should be evaluated in the EIR

A pipeline from Lake Piru or Lake Castaic to the Ventura city Saticoy treatment plant.
This alternative would be between 26 miles and 40 miles in length, would provide access to the SWP at either location, at a reduced cost. The cost of water in the state water resources bulletin 132-18 table b-24 shows the cost of water to Ventura is \$1428.98 per Acre Foot AF and to Castaic Lake is \$374.97, a savings of \$1054.05 per AF.

This alternative would also allow for a higher flow of water to Ventura, and a back-up supply for the other SWP pipeline which runs 140 miles from Lake Castaic to Ventura.

This pipeline could also provide raw (untreated water) to Ventura where it could be treated to the city of Ventura and to Calleguas through an existing SWP pipeline running through Oxnard.

This pipeline could also provide direct untreated water to United's spreading grounds, the city of Oxnard, the city of Port Hueneme, the cities of Santa Paula, Fillmore, Piru, and a source for Casitas to receive State Water. The cost indicated for this interconnect for the pipeline is approximately 17 Million for Calleguas, and 22 Million for Ventura for a total cost of 39 Million.

The sizing for this pipeline, at 36" could provide approximately 50 Cubic Feet Per Second (CFS) and with a 48" pipe could provide approximately 75 CFS.(source evaluation by Uniited water presented on March 26, 2019)

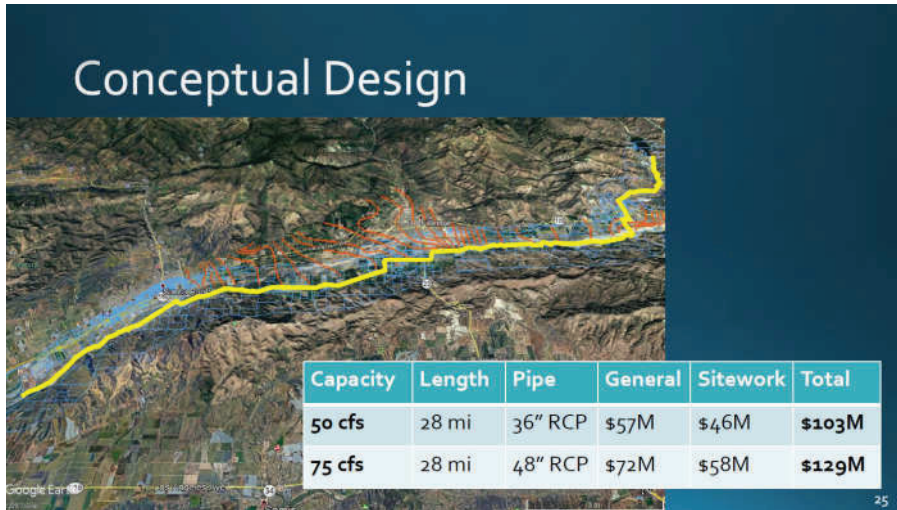
This pipeline would also be a gravity pipeline from Piru or Castaic to Ventura.

I17-1

This pipeline could also provide a backup for Calleguas, Thousand Oaks, and Simi Valley in the event the pipeline coming from Metropolitan Water District (MTD) failed or was out of service.

The information shows a conceptual design for pipelines presented by United Water, showing the potential alternate route and potential costs.

I believe this alternative should be evaluated in the EIR. ...



Source: Groundwater Meeting Presentation by United staff Page 25 on March 26, 2019, Dan Detmer, John Lindquist, and Bob Siemak

A potential route using Ventura the Ventura County Transit Authority for the routing..



Source...by Burt Handy

If you have any questions please contact

Burt Handy
P O Box 3842
Ventura, Ca. 93006-3842
burthandy@gmail.com
05-653-0537

From: SaveOurWaterVentura <4R.Grandkids@saveourwaterventura.org>
Sent: Sunday, April 7, 2019 9:12 AM
To: Water Commission
Subject: RE: LETS SAVE WATER -- AND SAVE MILLIONS OF DOLLARS
Attachments: themedata.thmx; colorschememapping.xml

RE: LETS SAVE WATER -- AND SAVE MILLIONS OF DOLLARS

To: Ventura City Council, Water Commission

After reading Ms. Underhill's comments of 4/5 (below), consider:
 Should Ventura cancel the pipeline project for State Water AND use the money to build the
 "wastewater pipeline to Oxnard" (suggested in our letter of March 30 below)?

I18-1

Charles Spraggins

=====

March 30, 2019

re: Oxnard-Ventura-Fox Canyon Wastewater Deal Suggestion

Oxnard and Ventura often compete for sales-tax dollars. However, has anyone explored a beneficial water deal for both cities? Ventura has prepared a draft EIR concerning a proposed wastewater re-cycling project (costing 400MM?). Would Oxnard be interested in a deal to receive Ventura's Wastewater and process the water within Oxnard's GREAT system? Apparently, the GREAT system is now operational, has considerable capacity, and new pipelines will be functional soon. It seems Oxnard has infrastructure and budget problems while Ventura has money but not infrastructure. See Ventura's DEIR at the following address:

I18-2

<https://www.cityofventura.ca.gov/1470/Ventura-Water-Pure>

The DEIR has a discussion of "Project Alternatives". See Alternative 5 titled "Conveyance of tertiary Effluent to Oxnard Wastewater Treatment Plant". The DEIR implies that "Under this

I18-2



alternative Ventura would not augment its water supply". The DEIR implies that if Oxnard processed the wastewater, that Ventura could not get potable water in return. Is that an assumption OR has a REAL deal been explored? Couldn't Oxnard and Fox Canyon agree to give Ventura some FC water as part of an exchange? Ventura gets water and Oxnard gets some money. Win-Win-Win. Everybody happy: Oxnard, Ventura, Fox Canyon farmers, and environmentalists.

Lots of extra water and money for everyone. Am I dreaming, or is it a possibility?

Respectfully yours,

Charles Spraggins
Save Our Water Ventura
sow.ventura@saveourwaterventura.org

Diane Underhill Comments Below Regarding Water Projects and Draft Environmental Impact Report

I18-3



To: City of Ventura, Ventura Water
Betsy Cooper
501 Poli Street
Ventura, CA 93002-0099
bcooper@cityofventura.ca.gov

Subject: State Water Interconnection Project (SCH No. 2018031010) Draft Environmental Impact Report Review Comments

Pg 1-9 EIR states why the SWP interconnection project is needed:

"The City, Calleguas, United, and Casitas have the following needs:

- The City needs to provide a continued reliable water service to City water customers. This involves making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup connection for Ventura Water's potential potable reuse project.

- Calleguas needs to improve its water supply reliability in the event of an outage of imported supplies.
- United needs to protect local supplies to ensure a long-term supply for its service area. This involves making up for losses in annual yield from existing supply sources (Santa Clara River diversions and groundwater), enhancing groundwater recharge options while reducing groundwater overdraft, improving basin groundwater quality, and providing an emergency connection for United's O-H Pipeline.
- Casitas needs to extend the ability of Lake Casitas to provide water during a long-term drought and to replace water that otherwise would have been diverted for storage at Lake Casitas but is now released downstream as required by the BO for the Robles Diversion Facility."

Then the EIR states what the SWP interconnection project objectives are:

Project Objectives:

1. Provide near-term water supply for the City to enhance water supply reliability;
2. Improve City water quality;
3. Provide a back-up supply for the City's other potential, long-term water supply options;
4. Allow Casitas and United to receive their SWP entitlements; and
5. Enable the City to deliver to Calleguas during an imported water supply outage.

As a Ventura citizen and a Ventura Water ratepayer here are some observations and questions about the project objectives:

1. How does this project provide near-term water supply for the City to enhance our water supply when on page 1-6 of this report it says: **"The proposed State Water Interconnection Project is not anticipated to provide any increased water supply volume for the city,** and thus is not being considered in that [Ventura Water Supply Projects] EIR."

This begs the question, if "the State Water Interconnection project is not anticipated to provide any increased water supply volume for the city" then why is the city justified in paying toward this very expensive project? Is it the best use of our water infrastructure funds?

2. The second project objective is to improve City water quality. The City water supply quality will be improved on the east-end of the city because if the City gets SWP water in-lieu of the Casitas water, then the Casitas water "service area" restrictions will not apply. This means that Ventura Water can blend the high total-dissolved-solids (TDS) Mound aquifer water with the SWP water. This will improve east-end water quality, but what will be the impacts to the Casitas service area customers' water quality? If the City is taking SWP water in wetter times in-lieu of Casitas water, does that mean that the Casitas water customers will be receiving SWP water blended with the highly mineralized Mound basin water from the east-end? Will it be improved or degraded when compared with Casitas water quality? Does the EIR address this impact – the potential for water users in the Casitas water service area to have a degraded water quality?

Page 1-15 EIR : “Unless appropriate measures are taken, mixing of waters from different sources with different water qualities can result in water quality issues. To minimize the risk of lead and iron release from the introduction of SWP water into the 430 zone, a blending station is proposed. At the blending station, the different water sources can be mixed and water treatment additives used to condition and stabilize the water before introduction to the City’s water system.”

In the SWP interconnection project plan is the City signing over its Casitas water supply allocation completely? Or is it just not taking its Casitas supply until the city has repaid the "rented" water that was used out of the Casitas service area? Historically, Casitas has served the Westside, Downtown, some beach areas, and Midtown (to Mills Rd.). It should be noted that the Casitas water supply can “expand” to cover the **actual AF usage** in the service area. This means if in the future there is more demand in the Casitas service area that our Casitas allocation is increased to match the actual usage. If we are signing over our Casitas supply to use the “in-lieu” state water, then be aware we are potentially signing over a much larger future supply than we are currently using in the service area. Also note that SWP water may be much more costly than Casitas water, so for ratepayers this would be an important question: **Is the City is paying the Casitas AF water charge or the SWP water charge?**

Additionally, these Casitas service area ratepayers in the City have paid into and become vested in the the Casitas system over the years. Is it fair that these area water consumers must now change their water supply to a potentially more expensive and more degraded in quality supply with potentially less reliability? (In drought periods, state water is extremely unreliable with water deliveries sometimes as low as 5% of the actual allocation.)

3. How can this project “provide a back-up supply for the City's other potential, long-term water supply options” when state water is historically unreliable when it there is a statewide drought sometimes only delivering a very small % of the needed water allocation? And also, as stated in the first project objective bullet: “ The proposed State Water Interconnection Project is not anticipated to provide any increased water supply volume for the city.” Additionally, what happens if Calleguas does not have the capacity in their system to wheel extra SWP water to the City of Ventura either now or in the future?

Page 1-25 EIR: “Based on a hydraulic analysis performed, a 36-inch diameter pipeline could deliver as much as 18,800 AFY, if this volume of water was available. **However, the availability of water is limited.**”

Page 1-26 EIR: “To evaluate SWP supply availability under existing conditions, the 2017 DCR considers the impacts on SWP delivery capability due to climate change, sea level rise, and multiple Delta-specific concerns: the variability of Delta inflows seasonally and annually, the vulnerability of the Delta’s conveyance system and structure due to floods and earthquakes, and water quality objectives that address Delta ecosystem health.”

”Consideration is also given to the major Delta policy planning efforts currently underway: The Delta Plan and the California WaterFix. With these factors, the 2017 DCR projects that under existing conditions (2017), the average annual delivery of Table A water is estimated at 62%.

"In a very dry year or in the event of infrastructure failure, it is possible there would be no SWP delivery.

"Deliveries could also be impacted by capacity limitations in the MWD and Calleguas water transmission and treatment facilities because wheeling agreements would be for excess capacity not being used by MWD and Calleguas customers. More capacity would typically be available in the winter than in the summer"

There are a lot of moving parts in this SWP interconnection proposal, and none of them seem to work to protect Ventura's water-user and ratepayer, but rather works to allow Casitas and United to receive their SWP entitlements. This project has obvious benefits for Casitas and United, and obvious benefits for Calleguas to be supplied City water in the event of an emergency, however the benefit to the city and its ratepayers is much more tenuous.

4. The project "allows Casitas and United to receive their SWP entitlements" which is great in that we should help our neighbors, however if these neighboring areas have had a tremendous amount of recent building, then, is it fair that Ventura takes on the burden of agencies which have **not** understood water availability is limiting factor to unrestricted development? Is it now fair for neighbors who have built without a vision for long-term sustainability to get to water from a neighbor who has taken great pains to conserve and extend their existing water supply?

Additionally, the report accurately states that prior to emergency Ordinance E the City was relying on 25,000 AF of conservation credits we stored in the Oxnard Plain Basin to be used in water shortage years, however in 2014 because groundwater was being over-drafted from the basin our carefully saved and stored credits were eliminated. To stop seawater intrusion and to achieve compliance with the 2014 Sustainable Groundwater Management Act (SGMA), **basin pumping may be reduced as much as 39% more**. This certainly makes one question if the city should not be looking into **improving water storage infrastructure** to save our own water in wet times for use in dry times. How much would city owned, run, and, most importantly, controlled water-storage facilities cost compared to Ventura's share of this extremely expensive pipeline project? Ventura needs to look at alternative water storage and purple-pipe projects that could conserve and extend our water supply in manners that we control.

5. And finally, the project enables the City to deliver to Calleguas during an imported water supply outage (an earthquake or pipe break, etc). This means now, for the first time, water can be drawn from Ventura's supply to replenish Calleguas supply, the problem is that the City does not have sufficient storage, so the water is coming from Casitas and/or it will be depleting the amount of water available to Ventura water users. Is there a limit on how long Ventura supplies Calleguas with water in the event of an emergency? It may take months for repairs to be made after an emergency. The EIR notes that Calleguas is not selling SWP water to Ventura, Casitas and United water agencies, but is merely wheeling existing SWP entitlements through their system, as required by state law, to these agencies with existing SWP water entitlements. Calleguas is fairly compensated for doing this. How much does this wheeling fee increase the SWP water cost? This is a very expensive project that has very limited benefits for Ventura ratepayers, in fact, because if the City enters into this SWP interconnection deal the straw can go into Ventura's water supply and suck it out to be used by Calleguas -- this could actually have a detrimental effect on Ventura's long-term water supply reliability.

Some other thoughts and questions about this SWP Interconnection EIR:

The San Buenaventura City Council Resolution No. 2014-057 dated **9/22/2014** established that “there is a direct nexus between the availability of water supply and the immediate preservation of the public health and safety”; and, resolved that “the ordinary demands and requirements of the water consumers served by the City of San Buenaventura cannot be met by the water supplies **now** available to the City without depleting the water supply or diminishing its quality to the extent that there would be insufficient water for human consumption”.

I18-3

Have the City's water supply circumstances change since this 9/22/2014 resolution? That is, have the water conservation incentives of the water shortage contingency plan significantly reduced the water demand of the City's water consumers? Have these demand-side conservation efforts, a wetter 2019, and loss of over 500 homes in the Dec. 4, 2017 Thomas Fire (some of which may not be rebuilt) changed the current water supply equation?

Page 1-5 EIR: “In 2017, the City's total water demand was 13,973 AFY, with a five-year average since 2013 of 15,429 AFY. Overall, per capita water demand has declined significantly since the middle of the last century due to effective water use efficiency practices, including plumbing code changes, improved water loss control, and an ongoing and active water use efficiency program. As a result, per capita water use decreased from an average of 277 gallons between 1940-1970 to 166 gallons in 2010. Additional conservation efforts during the most recent drought resulted in even further **declines to 117 gallons per capita per day (GPCD) in 2015**. Nevertheless, water use is projected to increase to between 19,000 to 21,500 AFY by 2030 and potentially up to 22,700 AFY by 2040.”

The last sentence above is projecting water use increases, **the basis for these projections are not given**. With future water-saving technological advances and increased conservation and an increased use of recycled water the question becomes: **Is this project needed for the City of Ventura's long-term water supply?** Ventura water users have patriotically found ways to conserve water, if we can make better use of our city controlled recycled water (particularly in the near-term using more non-potable recycled water for landscape irrigation) then we may not need such an expensive SWP interconnection pipeline. Remember, except for a few wet years our area has basically been in drought since 2000. Remember, too, that Lake Casitas can refill completely with one very wet year. And, remember when there is a statewide drought the SWP water deliveries can be reduced to almost nothing.

The state water allocation of 10,000 AFY (that the City's water department has paid for the "rights" but has not taken delivery of , or paid for, actual wet water) is a current contract set to end in 2035 with an extension possible through 2085. Does the EIR consider that the extension of water contract may be significantly more expensive (especially with potential state water tunnel projects) than the current contract? Is it fiscally responsible for the City to obligate Ventura ratepayers to pay for such an expensive SWP interconnection project, without knowing what the SWP 2035 extension contract will cost ?

If the City is pursuing a recycled water plant, is an expensive SWP interconnection pipeline truly necessary? As an alternative to this project, has the cost of implementing a citywide purple-pipe water system for **non-potable** treated water been considered? **As direct potable reuse of recycled water is not yet approved by the state, making the best use of our non-potable recycled water is imperative**. If, as studies show, a large percentage of our water supply is used for landscaping -- then doesn't it make sense to compare the cost of this new SWP pipeline project with the cost to the city to build a purple-pipe water system to bring non-potable recycled water to all areas of the city? The addition of non-potable water tanks on our hillsides could aid our emergency preparedness

by providing hillside homeowners with landscape water and greatly extending our hillside fire-fighting capabilities. The City should consider as an alternative to this expensive SWP project, the cost of implementing a citywide non-potable purple-pipe system including many more hillside water tanks and examine other water storage projects that the city would have more control over than the availability of state water in statewide drought periods.

Importantly, if Ventura is planning to take SWP water when it is available, it will need a reliable storage plan to keep the water safe and available until it is needed. The fact that thousands of AF of our "banked" water in the Oxnard Plain Aquifer was eliminated with the stroke of a pen when it was found the aquifer was being massively overdrawn, should be a cautionary tale. Where is this reliable storage for "taking state water when it is available" to help Ventura drought-proof our water supply? With this SWP plan, is Lake Casitas acting as the City's storage? Lake Casitas has a finite storage limit. Lake Casitas can still be severely compromised in a multi-year drought. Ventura's Casitas service area AFY usage is comparatively pretty small. If the City takes SWP water in-lieu of Casitas water this will not prevent the Lake from drying up in a multi-year drought. This means that this SWP project will not drought-proof Ventura's water supply anymore then our existing reliance on our Casitas allocation does.

The one thing this project will do is legally allow us to use Casitas/SWP replacement water to blend with the high TDS water of the Mound aquifer to raise the water quality for east-end users, but this "gain" is tempered by the fact that Casitas service area customers will likely suffer degraded water quality and the SWP project is very expensive for very limited gains for Ventura ratepayers. With better use of our non-potable recycled water and better storage infrastructure we should be able to do far more to drought proof our local water supply, for far less money.

Does this EIR sufficiently address the *economic and physical impacts* of storing our water and then transporting this water to the city for usage?

What is the current AF cost of Casitas water and what is the **future projected** AF cost of state water? What is the potential increase if the new state water contract is significantly higher than our current contract? Are these economic impacts being considered?

It is the opinion of many that the subject EIR fails to comply with Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15120 -15131 by not addressing the social and economic impact of adopting or not adopting the estimated \$150M proposed project.

It is imperative that the expected economic impacts of the project options on water rates and property taxes are considered. It is also imperative that the impacts to economically disadvantaged persons, and/or elderly or disabled persons on fixed incomes are considered. In Ventura we have long wanted to allow our older citizens to "age in place." It is fiscally irresponsible if the City signs on to this expensive SWP project, that will have only very limited benefits for Ventura water ratepayers, without even knowing what the 2035 SWP extension contract might cost. We must know full social and



economic impacts of this proposed SWP Interconnection project. This project could be growth-inducing and it could feed a physical gentrification of the City causing irrevocable losses to the culturally and economically diverse city that Ventura has historically celebrated.

From EIR Page 3-1 Growth Inducing Impacts:

“CEQA Guidelines Section 15126.2(d) requires that an EIR evaluate the growth-inducing impacts of a proposed action.

Section 15126.2(d) calls for an EIR to: Discuss the way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a reclaimed water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. In general terms, a project could foster spatial, economic, or population growth in a geographic area, if it meets any one of the following criteria:

- Removes an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fosters economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fosters population growth (e.g., construction of additional housing or employment generating land uses), either directly or indirectly;
- Establishes a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or
- Develops or encroaches on an isolated or adjacent area of open space (distinct from an in-fill project).

Should a project meet any one of the above-listed criteria, it could be considered growth inducing. The project’s potential growth-inducing impacts are evaluated below relative to these criteria. “

If we saddle Ventura water ratepayers with the enormous costs, known and unknown, related to this SWP Interconnection pipeline, it will be growth-inducing because we will need truck loads of new construction fund money to help alleviate the higher capital improvement and water rate costs. The interconnection pipeline is growth-inducing because by it allows the City the easy access, that it never before had, to SWP water deliveries.

Where it is clearly stated on page 1-6 and throughout this EIR document that: **“The proposed State Water Interconnection Project is not anticipated to provide any increased water supply volume for the city,** and thus is not being considered in that [Ventura Water Supply Projects] EIR.”

And yet under the heading, **“Why the project is needed”** it states the City’s reasons:

“The City needs to provide a continued reliable water service to City water customers. This involves making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup connection for Ventura Water’s potential potable reuse project.”

The reality is that although this project in the short -erm will not supply any increased water volume for the City it does check the box for “providing an emergency/back-up connection for Ventura Water’s **potential** potable reuse project.” and because of this and because the interconnection pipeline allows the City easy access to **SWP water the pipeline project, by its very existence, will be growth inducing** and will have social and economic impacts to the City and its citizens far beyond those examined in this EIR document.

Putting aside all of the growth-inducing impacts and all of the potential impacts to city services, traffic and air quality, this is without doubt a lot of money to be spent on an emergency back-up for a **potential** potable reuse project. The state has not approved **direct potable reuse** projects because at this point in our water cleaning technology certain pharmaceuticals and viruses may still be present. **Indirect potable reuse projects are approved**. An indirect potable reuse project means sewage wastewater is cleaned to tertiary standards then injected into and aquifer and pumped back out for treatment and potable use. Ventura’s problem is the Mound Aquifer which we control, is highly mineralized with high TDS levels so pumping cleaned wastewater into the aquifer means it will come out with higher TDS levels. HOWEVER, we can do this indirect potable reuse **process now** possibly without needing an emergency back-up connection to the SWP. So if the state does not approve direct potable re-use, we may not need this costly SWP interconnection emergency/back-up with all of its potential drawbacks. For the City of Ventura, signing on to this project may be **premature**.

The purpose of this EIR is to serve as an informational document that to inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. Without being able to know the costs associated with the 2035 SWP contract extension **or** whether the City’s potential direct potable reuse project will get state approval **or** how this project will impact our lower economic families and fixed income seniors through higher property taxes, rents and utility payments or the growth-inducing city-gentrifying effects of the City physically establishing a SWP interconnection pipeline City leaders should not move forward, The City as Lead Agency under CEQA should understand that this EIR leaves vital social and economic impacts unexamined. This SWP project EIR must address, *as required by law*, all of the the social and economic impacts, including the growth-inducing impacts, of adopting or not adopting the proposed project.

Respectfully submitted for the public record,
Diane Underhill
1585 E. Thompson Blvd.
Ventura, CA 93001
805.643.1065

I18-3

From: Debra Barringer <dbarringer98@hotmail.com>
Sent: Wednesday, April 10, 2019 10:11 AM
To: Dorrington, Gina
Subject: WaterPure

Dear Ms. Dorrington:

I commend Ventura Water for seeking smarter use of precious fresh water sources and proposing to implement the potable reuse system. People that object seem to think reusing fresh water is an “experimental” or somehow unsafe practice. There is no “new” water on earth – all of it has been recycled countless times. Communities all over the world not fortunate to live near river headwaters are using water that has been discharged as wastewater by many other communities located upstream. We have been lucky to have had the use of Ventura River water for so long but supplies from that source are not endless and demands seem to be. I attended a public meeting that solicited comments on the potential environmental effects of discharge water to the Santa Clara River estuary and was satisfied that all resources were given the requisite consideration and that native plant and animal species will not be adversely affected; in some cases species may benefit from less water discharged into the that backs up in the estuary to non-natural levels. I heartily support and encourage the use of wetlands as part of the water treatment system – Nature has been handling this process forever.

I19-1

The WaterPure system is estimated to cost about half of what a new desalination plant would with a lot less energy required to produce potable water. So again, we are fortunate to have this as an option at this time. I hope this new project causes people to realize how precious fresh water is and that they must do everything they can to utilize it in a careful manner. Join me in using rainbarrels, removing impermeable concrete and replacing with pavers and planting beds, sheet-mulching over thirsty grass and planting California native plants and other drought-tolerant species in your yards!

Regards,
 Debra Barringer
 Ventura, CA

Sent from [Outlook](#)

Ventura Marina Mobile Home Park
1215 Anchor's Way Drive
Ventura, CA 93001

April 10, 2019

Gina Dorrington
City of Ventura
501 Poli Street
Ventura, CA 93002-0099

RE: Ventura Water Supply Project EIR Response

Dear Gina Dorrington;

The Home Owners Association of the Marina Ventura Mobile Home Park (VMMHP) is pleased to submit the following comments and concerns on the Ventura Water Supply Projects DEIS. These comments specifically relate to the proposed location of the Advanced Water Processing Facility (AWPF) on the SE corner of Harbor Blvd and Olivas Dr. and the proposed Marina Park Ocean Outfall and Pipeline.

I20-1

The California Environmental Quality Act requires notification and posting of EIR availability and all meetings associated with this type of project. We feel this was not done effectively as our only apparent notice was an announcement at the Harbor Commission bi-weekly open meeting. Please make every effort to assure that the residents of the VMMHP receive proper notifications in the future.

Please understand that our residents are "battle scarred" from the construction that is in progress presently in our neighborhood. In addition, if you look at the EIR the city created for the Portside Ventura housing project, you will see that it is difficult to trust an EIR sponsored by a Ventura City organization. That EIR was created many years ago and since no home owners in our park recall every being presented with the opportunity to review this EIR, it is possible they were not informed of its existence. It is now that we are enduring the negative effects of items misrepresented at that time and we have learned to be more cautious.

I20-2

In general, the criteria and process for choosing the AWPf location need to be better-identified and further analysis of the social impacts to neighboring businesses and residents needs to be conducted.

I20-3

The Harbor Blvd site bounds the Olivas Park Golf Course and is currently open space. It is directly across from the entrance to the Village and Marina, one of Ventura's biggest visitor attractions and kitty corner from the Holiday Inn Express and Sheraton motels. The proposed Harbor Blvd site will also border the nationally recognized Pacific Coast Bicycle Route that receives considerable recreational use and hosts a number of organized rides that provide much needed revenue to local business.

This location is within ½ mile of the Ventura Marina Mobile Home Park, a senior community of over 300 single-family residences and the new upscale development at Portside that, when complete, will provide 270 multiple family residences, a marina, restaurants, and shopping.

I20-4

A lot of time, money, and effort have recently been put into the area near the proposed Harbor Blvd site to make it appealing to visitors and residents. Building an industrial complex and electrical substation in this area seems incongruous with its current Coastal Zone designation and intended use.

We have the following concerns about the Proposed Harbor Blvd site:

I20-5

1. **Odor.** Will either the processing of the tertiary water at this site or the chemicals used in the process emit any odors that are either unpleasant or caustic to the nearby residents, particularly seniors.

2. **Security.** This site is adjacent to a Santa Clara River, where many of Ventura's homeless choose to camp. A 24-hour security presence will be required to prevent vandalism and squatting.

I20-6

3. **Chemicals.** Exactly what chemicals will be used, how will they be stored, what emissions will the AWPf produce, and what are the potential effects of hazardous or unplanned spills? What are the dangers associated with Ozone and the planned contact chambers and what are the impacts on air quality? A by product of ozone is bromate, which can cause human health issues. What is the plan to prevent this occurrence?

I20-7

4. **Marina Park Ocean Outfall and Pipeline.** What is the makeup of the water that will be pumped to this location? What is proposed pathway of that pipeline? How will the construction and slant drilling of the Outfall affect the activity on this park. How will this Outfall affect the already marginal bacterial content of the ocean beaches at Marina Park? I20-8

5. **Agricultural effects.** If there are intentions to have liquids stored in the open, how will this water that intended to make its way to the ocean be protected from helicopter spraying of the adjacent strawberry fields. The spraying is known to contain Veribon, a very dangerous chemical that is know to affect sea mammals and other sea life and whose printed cautions include the warning to prevent contact with water that feeds to the ocean. I20-9

6. **Noise.** Will the pumps and other processes at the AWPf create noise? If so, what are the frequency, timing, and duration of that noise?|What is the plan to mitigate the noise output? I20-10

7. **Construction management.** The traffic, noise, dust, and damage to existing infrastructure that will occur during construction need to be managed and mitigated. The city needs to closely monitor construction and ensure that the permits identify the when, where, and what of Best Management Practices. The roads in this area are in horrendous shape and any new construction will only exasperate the problem. Has any thought been given to the existence of Valley Fever Spores in the soil that are released during excavation? I20-11

8. **Tsunami Zone.** This chosen location is in the identified tsunami zone. What precautions are being applied to the design to prevent serious impacts from a tsunami event? I20-12

9. **Liquifaction Zone.** This site is in an identified liquefaction zone that will impact construction and cost of the build out. I20-13

10. **Visual impact.** The proposed Harbor Blvd site is located in the California Coastal Zone that requires the protection of important scenic and visual qualities. If the Harbor Blvd site is selected what mitigation will be implemented to ensure that the site is tastefully screened from view for those using the bike lane or the travelling to the Village, Marina, or Golf Course. I20-14

11. **Costs.** The construction costs were addressed at the presentation I attended, however the issue of Operational Costs was not addressed. Ozone is a high energy consumer. What is projected operational cost that will likely be passed on the consumer? Has renewable energy been considered?

I20-15

Respectfully Submitted,

Randall Novak
VMMHP HOA President

12 Apr 2019

From: Daniel Cormode
186 Gorrion Ave
Ventura, CA 93004

To: Gina Dorrington
City of Ventura
501 Poli Street
Ventura, CA 93002-0099
Email: gdorrington@cityofventura.ca.gov

Subj: VENTURA WATER SUPPLY PROJECT Draft Environmental Impact Report, SCH 2017111004, dated March 2019 Review Comments

- | | | |
|--|---|--------|
| 1. The City of San Buenaventura distributed the VENTURA WATER SUPPLY PROJECT Draft Environmental Impact Report, SCH 2017111004, dated March 2019 for public review and comment. | I | I21-1 |
| 2. The following is a summary of the comments which were a result of review of the subject EIR: | | |
| a. The subject EIR fails to comply with Section 15131 of the Guidelines for Implementation of the California Environmental Quality Act Article 9 Contents of Environmental Impact Reports by not addressing the social and economic impact of either adopting or not adopting the estimated \$512M proposed project. | I | |
| b. AWPf design requirements used for preparation of the subject EIR are outdated and understated. | I | I21-2 |
| c. The Summary of Ventura Water Supplies presents an optimistic unrealistic picture of reality. Normal year supplies do not reflect reductions in water supplies as a result of current legal challenges, climatic changes or planned capital water projects. | I | I21-3 |
| d. Estimated 2030 supplies are based on the unrealistic assumption that water supplies will return to normal conditions by 2025 and 2030 ¹ . | I | I21-4 |
| e. Additional water from the future Advanced Water Purification Facility is not identified. | I | I21-5 |
| f. Curtailment of delivery of water from Casitas Municipal Water District with in-lieu delivery of water from the State Water interconnection is not identified. | I | I21-6 |
| g. The projected loss of water supply due to Lake Casitas becoming dry by 10/02/2024 based on the current depletion rate is not considered. | I | I21-7 |
| h. The additional 2,500 acre-feet of water from the Ventura River/Foster Park is based on increasing the surface diversion capability of the Ventura River which was destroyed in 2005. | I | I21-8 |
| i. Delivery of State Water is not identified. | I | I21-9 |
| j. What is the assurance that the design and construction of the project as proposed will be able to meet the yet to be defined final performance criteria? | I | I21-10 |
| 3. The subject EIR fails to comply with Section 15131 of the Guidelines for Implementation of the California Environmental Quality Act Article 9 Contents of Environmental Impact Reports by not | ↓ | I21-11 |

¹ Draft 2019 Comprehensive Water Resources Report dated 03/21/2019, p 4-13.

addressing the social and economic impact of either adopting or not adopting the estimated \$512M proposed project.

4. The California Environmental Quality Act (CEQA) specifies California Environmental Impact Reports (EIR) shall include social and economic information.
 - a. Environmental Impact Reports shall contain the information outlined in this article.²
 - b. Draft EIRs shall contain the information required by Sections 15122 through 15131. Final EIRs shall contain the same information and the subjects described in Section 15132.³
 - c. Economic or social effects of a project may be used to determine the significance of physical changes caused by the project.⁴
 - d. Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid significant effects on the environment.⁵
 - e. Despite implication of these sections, CEQA does not focus exclusively on physical changes, and is not exclusively physical in concern. For example, in Section 21083(c), CEQA requires an agency to determine if a project may have a significant effect on the environment if it will cause substantial adverse effects on human beings, either directly or indirectly.⁶
5. The EIR precludes determination of any social or economic impact since no capital, operating or maintenance cost data is provided to support the no impact conclusion..
6. Implementation of the proposed project will have a social and economic impact by resulting in an increased water supply needed for public health, safety, quality of life and economic development. Adverse social and economic impacts from Implementation of the proposed project will result in significantly higher water and wastewater rates needed cover increases in capital, operating and maintenance expenses. Increased water and wastewater rates have a social and economic impact on elderly persons on fixed or little incomes to become homeless, thereby, exacerbating the number of homeless persons, crime and vagrancy Implementation of the proposed project may increase health and safety risks due contamination of the water supply.
7. Implementation of the no project option will result in the continued water supply shortage
8. The City is proposing to implement the Ventura Water Supply Projects (proposed projects) to: protect the ecology of the Santa Clara River Estuary (SCRE); develop additional water supply sources to meet water demands for planned future growth; and enhance supply reliability even in drought years. The whole State Water Interconnect project and associated pipelines are required to: serve as an emergency backup in case of a failure in the Advanced Water Pure Facility; and enable delivery of water from East Ventura to West Ventura to allow in-lieu delivery of State Water to Casitas. Ventura Water would then not take water from Lake Casitas. "In-lieu

↑
I21-11
I21-12
I21-13
I21-14
I21-15
↓

² Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15120(a).

³ Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15120(c).

⁴ Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15131(b).

⁵ Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15131(c).

⁶ Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15131.

delivery means that the SWP would be delivered to a Ventura Water customer in the Casitas service area, rather than directly delivered to Casitas, and this would offset the Ventura Water demand on the Casitas system.”⁷ .

9. The proposed projects would be implemented in two phases. The first phase (Phase 1) would divert tertiary-treated water, which currently flows into the SCRE, to the VenturaWaterPure Project for additional treatment, protecting the ecology of the SCRE and to providing a new potable water supply. The second phase (Phase 2) would provide additional needed water supply if Phase 1 is insufficient to meet the needs of planned growth. Phase 1 is evaluated at a “project level” since its implementation would occur as the priority water supply project. Phase 2 would only be implemented if the amount of recycled water available is less than future potable demands. If Phase 2 is needed to meet future water demands, then additional project-level CEQA review would be required to evaluate its implementation.

↑
I21-15

⁷Notice of Availability, State Water Interconnection (SCH No. 2018031010) Draft Environmental Impact Report dated February 19, 2019

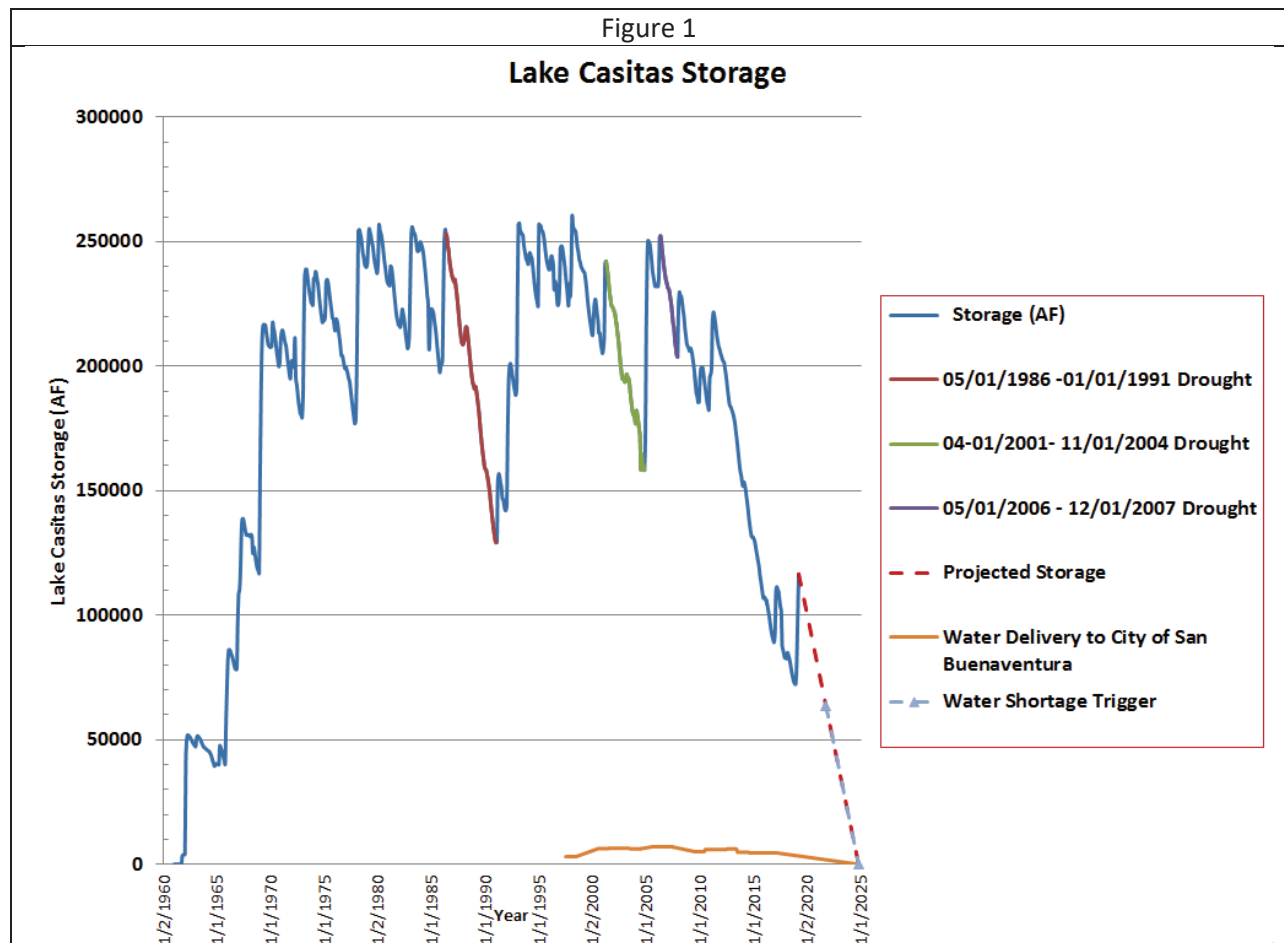
10. A List of the fifteen Capital Improvement Projects associated with the implementation of Ventura Water Supply Projects is presented for information and included as Table 1. The cost of the projects is estimated to exceed \$512M.

I21-16

Table 1 List of Capital Improvement Projects Associated with Implementation of Ventura Water Supply Projects		
Project	Title	Cost Listed on 2018-2024 CIP Project Description
73092	Waterline Replacement – Main St./Telephone Rd.	\$8,900,000
97949	Waterline – State Water Interconnection	\$22,900,000
97955	Waterline – Midtown to Westside	\$13,340,000
97956	Waterline – Eastside to Midtown	\$5,700,000
73102	Treatment – State Water Blending Station	\$3,990,000
73111	Pump Station 210/260 Boundary Adjustment	\$1,500,000
73061	Water Treatment – Saticoy Facility Upgrade	\$14,000,000
	State Water Connection and Distribution System	\$70,330,000
96935	Advanced Treatment Plant Land Acquisition	\$5,150,000
97934	Mound Basin Aquifer Storage	\$24,000,000
96940	Recycled Water Line - Purewater Pipelines	\$16,500,000
96938	Brine Line Ocean Outfall	\$37,000,000
96945	Advanced Treatment Potable Reuse	\$77,700,000
73078	Bailey Plant Modifications	\$5,960,000
96939	Wetlands Improvements	\$10,640,000
	Total Advanced Treatment Potable Reuse	\$242,840,000
73083	Advanced Treatment Plant - Desalination	\$120,000,000
	Total Advanced Treatment Plant - Desalination	\$120,000,000
	Total Project Cost	\$362,840,000
	Estimated Financing Cost of \$195,987,500 for 30 years at 4.5% Interest	\$149,502,255
	Total Cost	\$512,342,255

11. The amount of water currently stored in Lake Casitas is estimated to be 116,550 acre-feet based on a surface elevation of 504.09 feet above sea level. The current depletion rate is estimated to be 20,857 acre-feet per year. Lake Casitas is forecast to be at 25% capacity by 10/02/2021 and empty by 10/02/2024 based on the current depletion rate. Implementation of the State Water Interconnection Pipeline which allows in-lieu annual delivery of an estimated 2,366 acre-feet of water is calculated to extend the life of Lake Casitas by 8.6 months. A history of Lake Casitas Storage is shown in Figure 1.

I21-17



12. AWPf design requirements used for preparation of the subject EIR are outdated and understated. Phase 3 VWRf Discharge Scenarios are based on a current discharge of 4.7 MGD diverted which appears to be 60% of the Maximum Annual Average Flow of 7.76 MGD Historical Monthly Transfer Station Flow Values. It is rumored that the SWRCB may require 90% of the flow from the VWRf to be diverted, thereby, making the design requirements used for development of the current EIR outdated. Phase 3 VWRf Discharge Scenarios contained in the subject EIR is contained in Table 2.

I21-18

Table 2					
TABLE 1-2 PHASE 3 VWRP DISCHARGE SCENARIOS					
Discharge Scenario	Percent of current discharge (4.7 MGD) diverted	VWRP discharge to SCRE		VWRP flow diverted to other uses	
		MGD	AFY	MGD	AFY
1	0%	4.7	5,263	0	0
2	10%	4.2	4,705	0.5	558
3	20%	3.7	4,143	0.9	1,007
4	30%	3.3	3,697	1.4	1,569
5	40%	2.8	3,135	1.9	1,128
6	50%	2.3	2,577	2.3	2,577
7	60%	1.9	1,128	2.8	3,135
8	70%	1.4	1,569	3.3	3,697
9	80%	0.9	1,007	3.7	4,143
10	90%	0.5	558	4.2	4,705
11	100%	0	0	4.7	5,263
SOURCE: Stillwater Sciences 2018					

I21-18

13. The Summary of Ventura Water Supplies presents an optimistic unrealistic picture of reality. Normal year supplies do not reflect reductions in water supplies as a result of current legal challenges, climatic changes or planned capital water projects. Estimated 2030 supplies are based on the unrealistic assumption that water supplies will return to normal conditions by 2025 and 2030⁸. Additional water from the future Advanced Water Purification Facility is not identified. Curtailment of delivery of water from Casitas Municipal Water District with in-lieu delivery of water from the State Water interconnection is not identified. The projected loss of water supply due to Lake Casitas becoming dry by 10/02/2024 based on the current depletion rate is not considered. The additional 2,500 acre-feet of water from the Ventura River/Foster Park is based on increasing the surface diversion capability of the Ventura River which was destroyed in 2005 due to shifting for the course of the Ventura River. Future delivery of State Water is not identified. A Summary of Ventura Water Supplies contained in the subject EIR

**TABLE 1-3
SUMMARY OF VENTURA WATER SUPPLIES**

Water Supply Source	Normal Year (AFY) ⁽⁸⁾	Dry Year (AFY) ⁽⁹⁾	Estimated 2030 Supplies ⁽⁹⁾
Casitas Municipal Water District	5,340 ⁽¹⁾	3,204 ⁽⁴⁾	5,841
Ventura River/Foster Park	4,200	2,384 ⁽⁵⁾	3,647–6,700
Mound Groundwater Basin	4,000	2,130 ⁽⁶⁾	4,000
Oxnard Plain Groundwater Basin	4,100	3,862	3,862
Santa Paula Groundwater Basin	3,000 ⁽²⁾	3,000	1,141–3,000 ⁽⁷⁾
City-Acquired Water Rights in 2016 (Santa Paula Basin)	40.9 ⁽³⁾	40.9	40.9
Recycled Water	700	700	865
TOTAL	21,381	15,321	21,778–28,207

(1) The estimated 5-year average normal water supply from Casitas is 5,062 AFY. Adding in development under construction (estimated to be 278 AFY) brings the total normal year supply to 5,340 AFY.

(2) Includes 3,000 AF of original City allocation

(3) 5.8 AF of water rights acquired for the past development of Tract 4632. 12.0 AF of water rights acquired for the development of Phase 1 of Tract 5632 in 2016 and 23.1 AF of water rights acquired for the development of Tract 5774 in 2016.

(4) 40 percent drought impact based on 2017 agreement with Casitas.

(5) 5-year production average from 2013-2017.

(6) Three-year average production (2015-2017).

(7) The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually. Assumes the worst-case scenario that the basin is determined to be in a Stage 2 overdraft per the Court's Stipulated Judgment and the City is reduced to an allocation of 1,141 AFY during drought conditions.

(8) Table 4-1 of the 2018 Comprehensive Water Resources Report, City of Ventura

(9) Table 4-3 of the 2018 Comprehensive Water Resources Report, City of Ventura

SOURCES: 2018 Comprehensive Water Resources Report, City of Ventura; UWMP 2016

⁸ Draft 2019 Comprehensive Water Resources Report dated 03/21/2019, p 4-13.

14. What is the assurance that the design and construction of the project as proposed will be able to meet the yet to be defined final performance criteria:
 - a. "Unlike groundwater replenishment projects and a long history in California, the development of surface water augmentation projects is in its infancy."⁹
 - b. The State Water Board found that: Knowledge gaps and key research recommendations must be addressed before uniform water recycling criteria for DPR can be adopted; Developing DPR criteria will require a deliberate and phased approach to ensure public health protection and continued consumer confidence in the public water supply; and, Significant work is needed to address recommendations regarding the non-treatment barriers that are part of ensuring the safety of DPR, including source control, wastewater treatment plant optimization, operator certification, and technical, managerial and financial capacity.¹⁰
 - c. In the report to the Legislature, the State Water Board determined that the research recommended by the SB 918 Expert Panel should be conducted concurrently with the development of the DPR criteria. The research projects are expected to be completed in the 2020-2021 time frame. The five research projects are summarized as follows¹¹:
 1. Implement a probabilistic method to confirm the necessary removal values for pathogens, and apply this method to evaluate the performance and reliability of DPR treatment trains;
 2. Monitor pathogens in raw wastewater to develop better empirical data on concentrations and variability;
 3. Investigate the feasibility of collecting raw wastewater pathogen concentration data associated with community outbreaks of disease;
 4. Identify suitable options for final treatment processes that can provide some averaging with respect to potential chemical peaks, particularly for chemicals that have the potential to persist through advanced water treatment; and
 5. Develop more comprehensive analytical methods to identify unknown contaminants, particularly low molecular weight compounds potentially in wastewater that may not be removed by advanced treatment and is not presently detectable by current regulatory monitoring approaches.
15. The Council has established that "there is a direct nexus between the availability of water supply and the immediate preservation of the public health and safety"; and, resolved that "the ordinary demands and requirements of the water consumers served by the City of San Buenaventura cannot be met by the water supplies now available to the City without depleting the water supply or diminishing its quality to the extent that there would be insufficient water for human consumption".¹²
16. For additional information, please contact Daniel Cormode by telephone at (805)647-4063 or by email at dcormode@sbcglobal.net.

I21-20

I21-21

⁹ A PROPOSED FRAMEWORK FOR REGULATING DIRECT POTABLE REUSE IN CALIFORNIA, State Water Resources Control Board, April 2018.

¹⁰ Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse, State Water Board, December 2016.

¹¹ A PROPOSED FRAMEWORK FOR REGULATING DIRECT POTABLE REUSE IN CALIFORNIA, State Water Resources Control Board, April 2018.

¹² San Buenaventura City Council Resolution No. 2014-057 dated 09/22/2014

From: June Juett <junejuett@gmail.com>
Sent: Sunday, April 14, 2019 4:15 PM
To: Dorrington, Gina
Subject: Ventura Water Supply Projects EIR

I thank the City of Ventura for its proactive approach to the maintenance of our water supply.

The Harbor Boulevard site would impact my home at the Ventura Marina Community during the construction phase; noise, dust and traffic delays during an extended period of construction are likely, in spite of the mitigation efforts outlined in the EIR.

I have experienced a local construction project where original mitigations were not enforced; blocked traffic lanes, poor dust management, deteriorated road conditions, prolonged noise and project length have been the experience. I am wary of perpetuating such conditions close to my residence.

However, I find logic in the siting of the facility at the Harbor Boulevard site. I write only in a personal capacity, but limited support for the project might be found in the Marina Community if the City:

- fully acknowledges the reservations of residents and interested parties and designates and introduces a contact person with authority to enforce mitigations.
- ensures that approval of the final project is conditional on the completion of all work, screening, esthetics, and road repairs.

June Juett

I22-1

From: Cooper, Betsy
Sent: Monday, April 15, 2019 2:32 PM
To: Rungren, Susan; Dorrington, Gina; Jones, Craig; Hogan, Miles
Subject: FW: Ventura Waters Solution EIR and United Water Conservation District
Attachments: Ventura Water Solution and UWCD 1.pdf

Not sure why I was the chosen one to receive this email, but it doesn't look like anyone else from Ventura Water received it.

Betsy

From: Kioren Moss [mailto:kdmven@earthlink.net]
Sent: Monday, April 15, 2019 2:27 PM
To: City Clerk Internet Email; Jim Friedman; 'Christy Weir'; Heitmann, Cheryl; LaVere, Matt; Brown, Lorrie; Nasarenko, Erik; Rubalcava, Sofia
Cc: KIOREN MOSS; Cooper, Betsy
Subject: Ventura Waters Solution EIR and United Water Conservation District

To: Ventura City Council
From: Kioren Moss
re: Ventura Water Solutions EIR and United Water Conservation District

Ventura should be seriously negotiating with United Water Conservation District to joint venture the proposed direct potable reuse sewer treatment plant. UWCD is chartered to fight seawater intrusion, as you know. That agency would seek to place water into its settling ponds around Los Angeles Ave. ("Wells Rd.") and Vineyard Ave.

Other potential partners are the cities of Santa Paula and Fillmore and the Piru district, among others. Ventura County Regional Sanitation District should be included in the discussion, as should Oxnard. Could Oxnard sell its plant for a profit to a new agency or a group of agencies?

The current plan to hook up to State Water seems reasonable enough. We understand that UWCD is a likely participant.

Please see my attached letter.

Thank you.

Regards,

Kioren Moss

I23-1

Kioren Moss, MAI

Moss & Associates, Real Estate Appraisers & Advisors

3319 Telegraph Rd., Suite 201

Ventura, Calif. 93003-3319

(805) 339-0613 facsimile: (805) 339-0678

kdmven@earthlink.net

California Bureau of Real Estate Appraisers License AG002198

California Bureau of Real Estate License 0608156

Moss & Associates

Real Estate Appraisers & Advisors

3319 Telegraph Road, Suite 201, Ventura, California 93003-3319

(805) 339-0613 FAX (805) 339-0678

Kioren Moss, MAI

Member, Appraisal Institute

Certified General Real Estate Appraiser

kdmven@earthlink.net

Individual Memberships in:

Appraisal Institute

International Right of Way Association

April 15, 2019

Ventura City Council
501 Poli St.
Ventura, Calif. 93001

re: Water Treatment from Ventura Sewer Plant EIR; United Water Conservation District

Ladies and Gentlemen:

Given that the United Water Conservation District is interested in a joint venture of a water treatment plant to recharge the groundwater tables with treated water from a future City of Ventura Reverse Osmosis sewer plan, why isn't this on the agenda?

Ventura County Regional Sanitation District is suited to participate if not to spearhead the joint use of such a plant. Santa Paula, Fillmore and Piru and other treatment facilities are subject to pressure from regulatory agencies in the same manner as Ventura, so they will likely participate. The costs of over \$100 million for such a plant should motivate all concerned.

Whether the Oxnard RO plant could be expanded to include all of the above-agencies' participation needs to be explored. Could VCRSD buy that plant? Or should another jointly owned one be created?

Meanwhile, some UWCD board members are waiting for the pending litigation between them and Ventura to end, before holding serious talks. We cannot afford to wait.

Sincerely,



Kioren Moss

I23-2

From: Mike Juett <mikejuett@earthlink.net>
Sent: Monday, April 15, 2019 3:24 PM
To: Dorrington, Gina
Subject: Ventura Water Supply Project EIR

Thank you, City of Ventura, for your proactive approach to our water supply.

I think the logic in locating the facility at the Harbor Boulevard site is sound. However, the Harbor Boulevard site will impact me during the construction phase (noise, dust, and traffic delays) even with the mitigation efforts outlined in the EIR.

I have experienced a local construction project where original mitigations were not enforced; construction debris on the bike lane and sidewalk, no dust management, deteriorated road conditions, prolonged noise, and extended project length. I don't want a repeat of this.

If you can guarantee that the above problems will not occur with the Water Project, then I can support the project and the use of the Harbor Boulevard site.

I24-1

From: Larry Permen <lpermen@pacbell.net>
Sent: Tuesday, April 16, 2019 1:59 PM
To: Dorrington, Gina
Subject: Our drinking water

Hello Gina,
I have been informed of the city's consideration to use treated sewer water as drinking water.
I am writing to let you know i very much disapprove of this as there are serious health and safety considerations
and risks to this idea. As a long time resident of Ventura, having this as my drinking water would definitely encourage me
to sell
my home and leave Ventura.

Thanks for your help,

Larry Permen

I25-1

From: Laura Gulovsen <eandl157@twc.com>
Sent: Tuesday, April 16, 2019 3:11 PM
To: Dorrington, Gina
Subject: Ventura water policy

I am opposed to turning sewer water into drinking water for our city. Finding out information about the program and related costs and is difficult to locate. Why can't it made more readily available? Need to have more info.

Sincerely,

M Laura Gulovsen
157 Madera Ave.
Ventura, CA 93003

I26-1

From: burt handy <burthandy@gmail.com>
Sent: Thursday, April 18, 2019 8:18 AM
To: Council; Water Commission
Subject: Re Cost of Pure Water

Honorable Mayor, Deputy Mayor, City Council and Water Commission...

I have concerns about the true cost of the pure water which is being proposed by Ventura Water, as the only way to get water....I believe the State Water should be evaluated in comparison, and also look at Ocean Water Desalination. With the requirements for the endangered species in both the Ventura River and the Santa Clara River, the city (We) need to evaluate all the options.

I27-1

The item missing in the evaluations is the amount of available water to treat for the pure water project.

From what I can deduce, it is a very low amount and I have not seen any evaluations by Ventura Water to show these figures....Also there is no accounting for the losses...According to the Phase 3 Study, with 20 acres in the Polishing Ponds the loss was 2 CFS (cubic feet a second @ 7.48 gallons) which would be $7.48 \times 2 \times 60 \text{ (seconds)} \times 60 \text{ (minutes)} \times 24 \text{ (hours in a day)}$ for a total of **1,292,544** Gallons lost per day...Broken down by 20 acres it is 64,647 GPD per acre. Applying this to the projected 35 acre wetlands, this would be **2,261,952** GPD lost.

I27-2

With 7.19 MGD available from the ventura treatment plant, just the losses in the two ponds alone would bring the available water down to **3,635,504 GPD**.. Take 1.9 MGD out and is down to **1,735,504 GPD**. Take recycled water out at approximately 625,000 and this number is down to 1,115,504 GPD.

These figures do not take into account the water loss from treating the influent into tertiary water at the treatment plant, which is estimated to be 10%. If this figure was taken out (7.19 MGD for 719,000 GPD) now the available water to treat for pure water is down to **396,504 GPD**.....

How is this reasonable for a cost of over 600 million for the infrastructure and treatment alone for pure water????

I27-3

Burt Handy

1. I believe that the administrative report needs to be explicit that there are competing needs between the endangered/protected species. I28-1
2. It's important that the administrative report clearly state that the proposed project will comply with the Consent Decree and the timeline related to it. Any alternative considered must comply with the Consent Decree and timeline. The suggestion that we ignore those provisions will subject the City to enormous monetary penalties and could call the entire settlement under the Consent Decree into question and open the City up to additional litigation and related expense. I think it would be helpful to specify what those penalties would be for failure to comply to keep the decision in context. If necessary, have the City Attorney provide a more detailed assessment of the legal risks for failure to comply in a closed session report to City Council. I28-2
3. The administrative report should clearly cover the fact that we could divert all effluent to Oxnard (at a cost of \$xx million for new pipeline and \$XX for annual operating costs) as an alternative to comply with the consent decree, BUT that alternative would intentionally forego the potential of XX AF of water supply for Ventura residents. For context, I think you need a comparison of the cost of developing an alternative water supply source. I28-3
4. I think that the long-term CIP program needs to consider building water storage capacity that would be available for periods when there was either additional state water available and/or treated effluent available that might exceed the immediate system needs. I28-4
5. The administrative report needs to be clear that the proposed treatment of effluent will be suitable for either direct or indirect potable reuse. It will be easy for the discussion regarding the EIR to be hijacked over whether or not the State Board has "approved" direct potable reuse. When it's time to discuss direct versus indirect, staff can present a summary of the differences between the two approaches in terms of O&M costs, yield, timing etc. I28-5
6. I think the administrative report needs to discuss the fact that the cost of ocean desalination is likely to be more expensive to operate, with very high energy costs, which are not environmentally friendly AND the fact that a separate EIR will be required to consider ocean desalination if it is determined that additional supplies are necessary. I28-6
7. Has staff evaluated the possibility of Oxnard being willing to "purchase" our effluent? If so, please discuss. If not, have there been discussions regarding the cost to send our effluent to Oxnard as an alternative to the proposed project? Have staff considered an alternative scenario where we send effluent to Oxnard for treatment and then "purchase" treated water from Oxnard in equivalent quantities, realizing that we'd have to build two pipelines in that scenario? If these alternatives have not been discussed/considered, why not? I28-7
8. Given the extreme controversy that is likely to surround construction of an ocean outfall that would be required to treat the generated brine (and difficulties in obtaining a permit for construction of a new ocean outfall), why are there no discussion of the possibility of connecting to Calleguas' existing ocean outfall in Port Hueneme? At a minimum, there should be a comparison of the cost and timing for construction of a new ocean outfall with the alternative of connecting to existing infrastructure owned by another "sister" agency and the costs associated with the connection to such infrastructure and any costs related to "acceptance" of the brine by that agency. I28-8

From: Duane Georgeson <duanegeorgeson@msn.com>
Sent: Sunday, April 21, 2019 11:35 AM
To: Dorrington, Gina
Subject: Re: Draft EIR-Ventura Water Supply Projects - cost impact to the City

Dear Mrs. Dorrington,

I was pleased to learn that your department recognizes the need to update the 2014 "phase 2 facilities planning study" since that study is based on a capital program of only \$241 million compared to the present Council approved capital budget of \$480 million.

As I explained in my March 25 response to you, it is the January 2014 cost of service rate design study report which provides very relevant cost information on which the financial feasibility of Direct or Indirect Potable Reuse to your water and wastewater customers can be assessed.

To remind you, the January 2014 Rate design study determined that water revenues would need to be increased by approximately 50% and wastewater revenues by approximately 75%. (a total annual revenue increase of \$49 million). In producing the final EIR it is essential that the 5 year old Rate design study be "updated" (to reflect the doubling of capital budget to \$480 million) so that the Water commission and the City Council have realistic cost information to consider before they proceed with a project which will likely have a dramatic impact on other City financial priorities! As I commented, the total annual revenue requirement could be more than \$60 million representing a Doubling of the total Water and Wastewater revenues. (For comparison the total Police and Fire operating budget is about \$ 60 million per year.

Sincerely

Duane Georgeson

I29-1

I29-2

Sent from my iPhone

On Mar 24, 2019, at 8:13 PM, Dorrington, Gina <gddorrington@cityofventura.ca.gov> wrote:

Dear Mr. Georgeson:

The Estuary Special Studies Phase 2: Facilities Planning Study for Expanding Recycled Water Delivery Report has been the basis for determining economic feasibility for Potable Reuse. The information does need updating, which we are currently in process of establishing. I am resending you the link below:

<https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cityofventura.ca.gov%2FDocumentCenter%2FView%2F682%2F-2014-Phase-2-Amended-Final-Report-Estuary-Special-Studies-&data=02%7C01%7C%7Ceb73235115c64b348b9a08d6aedc9d3d%7C84df9e7fe9f640afb435aaaaaaa%7C1%7C0%7C636888659886490031&sdata=laWzp%2B85kSEdtDcm8a07FUXgSsaDpWe0KHU9OEqYvZU%3D&reserved=0>

If you feel that any statements in the EIR need to be edited or need further clarification, we welcome those written comments during this 45-day period. Tuesday night's public meeting during the Water Commission will be a time to introduce the project and give an overview of how the EIR and project

alternatives were developed. You will have opportunity to fill out a direct comment card to the EIR at that time.

Respectfully,

Gina Dorrington
Via remote access
Wastewater Utility Manager / Interim Assistant General Manager
Ventura Water
1400 Spinnaker Drive
Ventura, CA 93002
(805) 677-4131
gdorrington@venturawater.net

From: Duane Georgeson [<mailto:duanegeorgeson@msn.com>]
Sent: Saturday, March 23, 2019 12:55 PM
To: Dorrington, Gina
Subject: Re: Draft EIR-Ventura Water Supply Projects EIR -Jan. 2018 Demonstration Project Report - COST INFORMATION

Dear Ms. Dorrington,
Thank you for the opportunity to
Purchase a copy of the January 2018 Summary Report on the 2015 DPWR (direct potable water reuse demonstration project).
I have carefully reviewed the 191 page summary report and I commend the water department on the "technical studies" and the quality of "technical information" in the Summary Report.
However I was disappointed to find that there was no relevant capital or operation & maintenance cost information in the 191 pages.
In my March 9, 2019 email to you I explained that I was requesting both technical and "COST" information which form the basis of your conclusion that an AWP (advanced water purification facility) could be constructed and operated in a "..... COST EFFICIENT" manner here in Ventura."
I am hereby repeating my request of March 9 for any relevant cost reports, studies, and information which support the "COST EFFICIENT" conclusion.
Time is very short for me to review the relevant cost information, prior to March 26, 2019 (the only public hearing on the 934 page document) so I am repeating my offer to come to your offices on Monday, March 25th to review and copy the relevant cost documents.
Thank you for your timely cooperation.
Sincerely,
Duane Georgeson

I29-3

I29-4

Sent from my iPhone

On Mar 22, 2019, at 9:59 AM, Duane Georgeson <duanegeorgeson@msn.com> wrote:

Ms Dorrington,
Thank you for your prompt response.

I wish to purchase a copy of the third item on your list, prepared by Carollo dated January 2018 {191 pages @ \$015/ page = \$28.65).
Do I understand that I have to pick up the report copy by 11 AM this morning?
For your information I am unable to find a copy of this report on your Web site.
Sincerely,
Duane Georgeson

I29-5

Sent from [Mail](#) for Windows 10

From: [Dorrington, Gina](#)
Sent: Friday, March 22, 2019 8:39 AM
To: [Duane Georgeson](#)
Subject: RE: Draft EIR-Ventura Water Supply Projects EIR

Mr. Georgeson,

Copies of the VenturaWaterPure Direct Potable Reuse Demonstration Project Final Report and the Estuary Special Studies Phase 2: Facilities Planning Study for Expanding Recycled Water Delivery can be made available to you at the City Clerk's Office in City Hall at 501 Poli Street by noon today. The total page count for these documents is 533 pages at a cost of \$0.15/page for a total of \$79.95. For your information, I am unable to find this report listed on your Web site.

Both of these document are available on our website:

<https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cityofventura.ca.gov%2F1081%2F6635%2FLibrary-of-Reports%3FactiveLiveTab%3Dwidgets&data=02%7C01%7C%7Ceb73235115c64b348b9a08d6aedc9d3d%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C636888659886490031&sdata=ltSwultuxNh1h7okznPIAKzO4uU52wpKmFegy6R6niU%3D&reserved=0>

<https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cityofventura.ca.gov%2FDocumentCenter%2FView%2F682%2F-2014-Phase-2-Amended-Final-Report-Estuary-Special-Studies-&data=02%7C01%7C%7Ceb73235115c64b348b9a08d6aedc9d3d%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C636888659886490031&sdata=laWzp%2B85kSEdtDcm8a07FUXgSsaDpWe0KHU9OEqYvZU%3D&reserved=0>

<https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cityofventura.ca.gov%2FDocumentCenter%2FView%2F16353%2F2018-VenturaWaterPure-Direct-Potable-Reuse-Demonstration-Project-Summary-Report&data=02%7C01%7C%7Ceb73235115c64b348b9a08d6aedc9d3d%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C636888659886490031&sdata=helJKIw%2BA%2BbEiM8GBHuKwvNcE4pMsc3QxmzjWc5rU38%3D&reserved=0>

Please respond if you will be picking up copies by 11 am this morning.

Respectfully,

Gina Dorrington
Wastewater Utility Manager / Interim Assistant General Manager
Ventura Water
gdorrington@venturawater.net
Office: 805.677.4131
Cell: 805.2233053

-----Original Message-----

From: Duane Georgeson <duanegeorgeson@msn.com>
Sent: Thursday, March 21, 2019 4:38 PM
To: Dorrington, Gina <gdorrington@cityofventura.ca.gov>
Subject: Re: Draft EIR-Ventura Water Supply Projects EIR

Dear

Ms Dorrington,

This is to remind you that your staff was to respond to my request for technical and financial information by today.

To repeat my offer I would be happy to come to your office and copy the relevant information regarding the 2015 pilot studies for direct Potable Reuse.

I would very much like to receive the information by next Monday since you have scheduled only the hearing on March 26 to receive input on the Water Supplies draft EIR.

Sincerely

Duane Georgeson

I29-5
cont.

Sent from my iPhone

> On Mar 11, 2019, at 6:19 PM, Dorrington, Gina <gdorrington@cityofventura.ca.gov>
> wrote:

>

> Dear Mr. Georgeson:

>

> Thank you for you inquiry. Staff will be reviewing your request and respond within the next 10 calendar days.

>

> Respectfully,

>

>

> Gina Dorrington

> Wastewater Utility Manager / Interim Assistant General Manager Ventura

> Water gdorrington@venturawater.net

> Office: 805.677.4131

> Cell: 805.2233053

>

>

> -----Original Message-----

> From: Duane Georgeson <duanegeorgeson@msn.com>

> Sent: Saturday, March 09, 2019 6:54 PM

> To: Dorrington, Gina <gdorrington@cityofventura.ca.gov>

> Subject: Draft EIR-Ventura Water Supply Projects EIR

>

> Dear Ms Dorrington,

> Page 1-22 of your Department's 934 page report contains the following statements: " In 2015 the city initiated a pilot project to test the feasibility of constructing an AWPf " and " The pilot facility operated for nine months and produced favorable results that indicated the highly reliable purification technology could be applied at a larger scale in a cost-efficient and environmentally protective manner." and "As a result the city is proposing to construct a full-scale AWPf as a component of Ventura Water Pure"

> I am writing you to-request a copy of any technical and financial reports and information on the 2015 Pilot Project which resulted in the conclusion that a full-scale AWPf project could be built in a cost-efficient and environmentally protective matter.

> I would be happy to come to your offices to assist in copying various reports and documents to minimize the cost and inconvenience of assembling this crucial information .

> Many thanks for your timely cooperation with this request.

> Sincerely

> Duane Georgeson

> Sent from my iPhone

I29-5
cont.

From: burt handy <burthandy@gmail.com>
Sent: Sunday, April 21, 2019 12:52 PM
To: Dorrington, Gina; Council; Water Commission
Subject: Questions regarding Ventura Projects
Attachments: Cost Breakdown.xls

To Whom it may concern
 These are the questions I have a

Questions for Ventura Projects EIR

1. The EIR does not show an itemized list of losses in one chart from the influent to the amount of tertiary water is available to discharge or use for recycling purposes...(showing influent, treatment to make tertiary level water, loss by irrigation, loss in the polishing ponds, and projected loss in the treatment wetlands. I30-1
2. What is the projected Maintenance and Operation costs to produce Pure Water per acre foot (AF) at this time? I30-2
3. When treated effluent is injected by the aquifer storage and recovery (ASR), then removed, then retested, then sent to a blending station then placed into the water supply, what will be the estimated cost of this process, and what will be the timeline for injection and then pumping out of the aquifer before it contaminates other water in the aquifer. I30-3
4. The amount of planned potable use is at a top, 3989 acre feet per year (AFY), and this must be supplemented by Desalination for 1500 AFY how is this figure computed? I30-4
5. Currently Ventura has an allocation of 10,000 AFY from state Water with an allocation of 60%, which would be 6,000 AFY, 600 AFY higher than the best water source from direct potable reuse (DPR), indirect potable reuse (IPR), and Desalination. Additionally, if the water is used in lieu of Casitas water, this adds another 3000 AFY per year. Can the pipeline through Metropolitan Water handle this flow which would be approximately 13 cubic feet per second (CFS) for 9,000 AFY and 21 CFS for 15,000 AFY. I30-5
6. According to the EIR sometimes water may not be available through the water interconnect, so it is another reason to construct a pipeline to Piru or Castaic for reliable high quality state water. This would also avail Ventura to wheel water through the pipeline supplying the residents of Oxnard, Port Hueneme, Camarillo, the fertile croplands of the Oxnard plains, along with the ability to assist with recharge of the aquifers. This would also avail Ventura to take advantage of any water which becomes available through the Water Fix. I30-6
7. The cost of the Pure Water system just for infrastructure over 30 years at 4% interest, is approximately \$685 Million, with a per AF cost of approximately \$6521.00 and an HCF cost of approximately \$14.97 (see attached Excel Spread sheet) I30-7
8. The cost of a pipeline to Piru/Castaic would be approximately \$130 Million with a per AF cost over 30 years of \$722.00 per AF with gravity flow and a HCF cost of approximately \$1.65 I30-8
9. The current state water project bonds are paid off in 2035, so the cost of transporting water will be reduced. I30-9
10. How do the costs of the tertiary water processed by Pure Water to the cost of using State Water. I30-10
11. With pipe runs to the City Yard and the community park, approximately 6 miles of pipeline, which could use recycled water in the amount of approximately 1000 AFY and a cost of about 12 million, this would be a great return on investment and could take care of the consent decree requirement for recycled water use. This would also show the city residents that Ventura Water and the city council are looking at the bottom line for the cost of water in Ventura. In the Pure Water treatment yard, it see a planned 4.5 MG storage tank, this could be used for recycled water to be sent to the rest of the city. I30-11

- | | | |
|--|---|--------|
| 12. In 7.2 of the EIR it says that Ventura is dependent on local water only. By constructing a pipeline to Piru or Castaic, this would tie Ventura into another reliable source of water. | I | I30-12 |
| 13. In tables 1-4 and 1-5 it states that groundwater is a source of water within 100 AFY regardless of a drought or a wet water year. This in my opinion is incorrect, in that the city encounters losses of available water in drought conditions from the aquifers in Ventura's area. 11106 AF in dry years and 11,009 AFY in drought years . Please show how these figures were calculated. | I | I30-13 |
| 14. In table 2-1 it lists the minimum available water is 2.8 MGD....How is this computed? The losses in the polishing ponds are 2 CFS. What are the projected losses from the wetlands and how are they computed computed in this figure???? | I | I30-14 |
| 15. Table 2-2 states the Potable Water Annual Average Objectives...How are these figures computed? Are they on the available water from the treatment plant or the available water after treatment at the Pure Water facility (Orange County says it takes 130 MGD of untreated water to produce 100 MGD of treated water or a 23% loss of available water)? | I | I30-15 |

If you have any questions Contact:

Burt Handy

P O Box 3842

Ventura, Ca. 93006-3842

(805)653-0537

bout the proposed Ventura Projects....

Project	Est Cost	Year	\$357 per AF	30 yr cost + O & M	Per AF	Per HCF
Saticoy Well	\$5,100,000.00	1	\$850,017.00	\$14,676,484.00	\$6,164.00	\$14.15
Saticoy Conditioning upgrades	\$14,000,000.00	2	\$884,017.68	\$14,711,477.51	\$6,178.70	\$14.18
Treatment Bailey	\$5,960,000.00	3	\$919,378.39	\$14,746,838.22	\$6,193.55	\$14.22
Treatment Mound Basin aquifer storage	\$24,000,000.00	4	\$956,153.52	\$14,783,613.35	\$6,208.99	\$14.25
State Water project	\$22,000,000.00	5	\$994,399.66	\$14,821,859.49	\$6,225.06	\$14.29
Land Acquisition	\$5,150,000.00	6	\$1,153,359.90	\$16,659,163.24	\$6,239.39	\$14.32
Brine Line	\$37,000,000.00	7	\$1,199,494.30	\$16,705,297.63	\$6,256.67	\$14.36
Wetlands Improvemnts	\$10,640,000.00	8	\$1,247,474.07	\$16,753,277.40	\$6,274.64	\$14.40
Recycled Pipelines	\$16,500,000.00	9	\$1,297,373.03	\$16,803,176.37	\$6,293.32	\$14.45
Purification facility	\$77,000,000.00	10	\$1,349,267.95	\$16,855,071.29	\$6,312.76	\$14.49
Aeriation Blowers	\$8,490,000.00	11	\$2,153,238.67	\$24,773,127.81	\$5,505.14	\$12.64
Digester Improvement	\$9,070,000.00	12	\$2,239,368.22	\$33,597,168.22	\$6,221.70	\$14.28
desal	\$120,000,000.00	13	\$2,328,942.95	\$33,686,742.95	\$6,238.29	\$14.32
tll	\$354,910,000.00	14	\$2,422,100.66	\$33,779,900.66	\$6,255.54	\$14.36
Est Y @ 4% for 30 years	\$255,072,042.45	15	\$2,518,984.69	\$33,876,784.69	\$6,273.48	\$14.40
	\$609,982,042.45	16	\$2,619,744.08	\$33,977,544.08	\$6,292.14	\$14.44
cost over 30 years per AF	\$5,807.42	17	\$2,724,533.84	\$34,082,333.84	\$6,311.54	\$14.49
cost per HCF	\$13.33	18	\$2,833,515.19	\$34,191,315.19	\$6,331.73	\$14.53
		19	\$2,946,855.80	\$34,304,655.80	\$6,352.71	\$14.58
Estimated Cost over 30 years plus total O& M	\$684,952,288.25	20	\$3,064,730.03	\$34,422,530.03	\$6,374.54	\$14.63
AVG Cost over 30 years plus total O& M per A	\$6,521.18	21	\$3,187,319.24	\$34,545,119.24	\$6,397.24	\$14.69
AVG Cost per HCF	\$14.97	22	\$3,314,812.00	\$34,672,612.00	\$6,420.85	\$14.74
above does not have other costs included		23	\$3,447,404.48	\$34,805,204.48	\$6,445.41	\$14.80
		24	\$3,585,300.66	\$34,943,100.66	\$6,470.94	\$14.85
Estimated Cost for Line to Piru	\$105,000,000.00	25	\$3,728,712.69	\$35,086,512.69	\$6,497.50	\$14.92
Estimated Cost for Line to Piru w/ interest at 4%	\$179,550,000.00	26	\$3,877,861.20	\$35,235,661.20	\$6,525.12	\$14.98
Cost per AF over 30 years	\$997.50	27	\$4,032,975.65	\$35,390,775.65	\$6,553.85	\$15.04
Cost per HCF over 30 years	\$2.29	28	\$4,194,294.67	\$35,552,094.67	\$6,583.72	\$15.11
Estimated cost for pipeline to Castaic	\$161,538,461.00	29	\$4,362,066.46	\$35,719,866.46	\$6,614.79	\$15.18
Estimated Cost fpr line to Castaic w/ interest at 4%	\$276,230,768.31	30	\$4,536,549.12	\$35,894,349.12	\$6,647.10	\$15.26
Cost per AF over 30 years	\$1,534.62			\$74,970,245.80		
Cost per HCF over 30 years	\$3.52					

From: Andrew Schneider <2andrewschneider@gmail.com>
Sent: Monday, April 22, 2019 4:26 PM
To: Dorrington, Gina
Subject: Ventura Water Supply Projects Draft EIR

Gina Dorrington:

Such a short time to respond to such a costly project.

I am concerned about us rate payers have to pay almost a billion dollars to build and maintain a project for us to drink toilet water contaminated with agricultural and industrial pollutants.

Andrew & Marian Schneider, 805.489.8664
1215 Anchors Way Drive, SPC 181, Ventura, CA 93001

I31-1

COMMENT FORM

Name (Print) David Johnson Meeting Date 4-26-19

Address 429 S. Dos Caminos Ave.

E-Mail Address david219@yahoo.com Telephone No. 450-8880

Organization/Group/Person You Represent: Self

What is the impact of rising seas on the treatment ponds since the ponds & infrastructure are near the ocean? Storm & weather system impact?

The "Comment Form" is for members of the public attending the meeting who do not wish to speak, but wish to have their position noted.

Hardening of the system?

I32-1

COMMENT FORM

Name (Print) RANDALL NOVAK Meeting Date 3-25-2019

Address 1215 ANCHORS WAY DR. #45

E-Mail Address RANDALLNOVAK@GMAIL.COM Telephone No. 626-823-7714

Organization/Group/Person You Represent: VENTURA MARINA COMMUNITY HOA PRES

1. WHY IS COASTAL COMMISSION NOT INVOLVED -
2. 24 DRILLING @ MARINA PARK IS NOT TOLERABLE (NOISE & VIBRATION)
3. EFFECT ON OCEAN BACTERIAL LEVELS NOT IN AIR, ALREADY HIGH
4. EFFECT OF PIPELINE CONSTRUCTION NOT EFFECTS OF SOIL DISTURBANCE - NOISE, INCONVENIENCE

The "Comment Form" is for members of the public attending the meeting who do not wish to speak, but wish to have their position noted.

5. EFFECTIVE VIEWS OF INDUSTRIAL EQUIPMENT AFFECTS RESIDENTIAL VALUES
6. AROMAS NOW NOT TOLERABLE - WILL BE WORSE

7. OPERATIONAL COST INCREASES?

I33-1

I33-2

I33-3

I33-4

I33-5

I33-6

I33-7

DRAFT
EIR

Commenter I34

COMMENT FORM

Name (Print)

Mike Anderson

Meeting Date

3/26/19

Address

10048 Lake Vista St.

Ventura, 93004

E-Mail Address

Telephone No.

Organization/Group/Person You Represent:

A

Cost, operation expenses have not been shared, what are they projected to be? How will it impact rates?

B

Is it possible to ask for a 5 year extension on this project? Cost and state regulations make this prohibitive. When will we ask for extension?
AS an alternative or otherwise.

The "Comment Form" is for members of the public attending the meeting

who do not wish to speak, but wish to have their position noted.

C

Does cost become a factor? How is that addressed?

I34-1

I34-2

I34-3

Commenter I35

COMMENT FORM

Name (Print)

MATTHEW J. DOYLE

Meeting Date

3/26/19

Address

10197 NORWALK ST.

E-Mail Address

cindy and matt@roadrunner.com

Telephone No.

805 647 8220

Organization/Group/Person You Represent:

I FULLY SUPPORT POTABLE
REUSE AND GROUNDWATER INJECTION.

The "Comment Form" is for members of the public attending the meeting

who do not wish to speak, but wish to have their position noted.

I35-1

COMMENT FORM

Name (Print) DANIEL CORMUDE Meeting Date 26 MAR 19

Address 186 GORRION AVE VENTURA, CA 93004

E-Mail Address dcormude@slighl.net Telephone No. 805 647 4063

Organization/Group/Person You Represent: EVCC

The "Comment Form" is for members of the public attending the meeting
who do not wish to speak, but wish to have their position noted.

*with
Attachment
See next pages*

Daniel Cormode

From: Daniel Cormode <dcormode@sbcglobal.net>
Sent: 25 March, 2019 10:13 AM
To: watercommission@cityofventura.ca.gov
Cc: 'DANIEL CORMODE'
Subject: Comments to the VENTURA WATER SUPPLY PROJECT Draft Environmental Impact Report, SCH 2017111004

Water Commission,

Comments pertaining to discussion of the subject item to be discussed at the March 26, 2019 Water Commission Meeting are forwarded as public comments.

R/

Daniel Cormode
805-647-4063

1. The City of San Buenaventura distributed the VENTURA WATER SUPPLY PROJECT Draft Environmental Impact Report, SCH 2017111004, dated March 2019 for public review and comment.
2. The following is a summary of the comments which were a result of review of the subject EIR:
 - a. The subject EIR fails to comply with Section 15131 of the Guidelines for Implementation of the California Environmental Quality Act Article 9 Contents of Environmental Impact Reports by not addressing the social and economic impact of either adopting or not adopting the estimated \$512M proposed project
 - b. AWPf design requirements used for preparation of the subject EIR are outdated and understated.
 - c. The Summary of Ventura Water Supplies presents an optimistic unrealistic picture of reality. Normal year supplies do not reflect reductions in water supplies as a result of current legal challenges, climatic changes or planned capital water projects.
 - d. Estimated 2030 supplies are based on the unrealistic assumption that water supplies will return to normal conditions by 2025 and 2030^[1]
 - e. Additional water from the future Advanced Water Purification Facility is not identified.
 - f. Curtailment of delivery of water from Casitas Municipal Water District with in-lieu delivery of water from the State Water interconnection is not identified.
 - g. The projected loss of water supply due to Lake Casitas becoming dry by 10/02/2024 based on the current depletion rate is not considered.
 - h. The additional 2,500 acre-feet of water from the Ventura River/Foster Park is based on increasing the surface diversion capability of the Ventura River which was destroyed in 2005.
 - i. Delivery of State Water is not identified.
 - j. What is the assurance that the design and construction of the project as proposed will be able to meet the yet to be defined final performance criteria?
3. The subject EIR fails to comply with Section 15131 of the Guidelines for Implementation of the California Environmental Quality Act Article 9 Contents of Environmental Impact Reports by not addressing the social and economic impact of either adopting or not adopting the estimated \$512M proposed project.
4. Social and Economic concerns may include, but are not limited to, the following issues:
 - a. What is the expected impact to social behavior, quality of life, public health, safety, water quality and water availability on residents residing in the project areas or served by water supplied from the project, both with or without the proposed project?

treatment barriers that are part of ensuring the safety of DPR, including source control, wastewater treatment plant optimization, operator certification, and technical, managerial and financial capacity.^[11]

- c. In the report to the Legislature, the State Water Board determined that the research recommended by the SB 918 Expert Panel should be conducted concurrently with the development of the DPR criteria. The research projects are expected to be completed in the 2020-2021 time frame. The five research projects are summarized as follows^[12]:

1. Implement a probabilistic method to confirm the necessary removal values for pathogens, and apply this method to evaluate the performance and reliability of DPR treatment trains;
 2. Monitor pathogens in raw wastewater to develop better empirical data on concentrations and variability;
 3. Investigate the feasibility of collecting raw wastewater pathogen concentration data associated with community outbreaks of disease;
 4. Identify suitable options for final treatment processes that can provide some averaging with respect to potential chemical peaks, particularly for chemicals that have the potential to persist through advanced water treatment; and
 5. Develop more comprehensive analytical methods to identify unknown contaminants, particularly low molecular weight compounds potentially in wastewater that may not be removed by advanced treatment and is not presently detectable by current regulatory monitoring approaches.
13. The Council has established that “there is a direct nexus between the availability of water supply and the immediate preservation of the public health and safety”; and, resolved that “the ordinary demands and requirements of the water consumers served by the City of San Buenaventura cannot be met by the water supplies now available to the City without depleting the water supply or diminishing its quality to the extent that there would be insufficient water for human consumption”.^[13]
14. For additional information, please contact Daniel Cormode by telephone at (805)647-4063 or by email at dcormode@sbcglobal.net.

^[1] Draft 2019 Comprehensive Water Resources Report dated 03/21/2019, p 4-13.

^[2] Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15120(a).

^[3] Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15120(c).

^[4] Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15124.

^[5] Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15124(c).

^[6] Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15131(b).

^[7] Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 9 Contents of Environmental Impact Reports. Section 15131(c).

^[8] Notice of Availability, State Water Interconnection (SCH No. 2018031010) Draft Environmental Impact Report dated February 19, 2019

^[9] Draft 2019 Comprehensive Water Resources Report dated 03/21/2019, p 4-13.

^[10] A PROPOSED FRAMEWORK FOR REGULATING DIRECT POTABLE REUSE IN CALIFORNIA, State Water Resources Control Board, April 2018.

^[11] Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse, State Water Board, December 2016.

^[12] A PROPOSED FRAMEWORK FOR REGULATING DIRECT POTABLE REUSE IN CALIFORNIA, State Water Resources Control Board, April 2018.

^[13] San Buenaventura City Council Resolution No. 2014-057 dated 09/22/2014

11. The Summary of Ventura Water Supplies presents an optimistic unrealistic picture of reality. Normal year supplies do not reflect reductions in water supplies as a result of current legal challenges, climatic changes or planned capital water projects. Estimated 2030 supplies are based on the unrealistic assumption that water supplies will return to normal conditions by 2025 and 2030⁽⁹⁾. Additional water from the future Advanced Water Purification Facility is not identified. Curtailment of delivery of water from Casitas Municipal Water District with in-lieu delivery of water from the State Water interconnection is not identified. The projected loss of water supply due to Lake Casitas becoming dry by 10/02/2024 based on the current depletion rate is not considered. The additional 2,500 acre-feet of water from the Ventura River/Foster Park is based on increasing the surface diversion capability of the Ventura River which was destroyed in 2005 due to shifting for the course of the Ventura River. Future delivery of State Water is not identified. A Summary of Ventura Water Supplies contained in the subject EIR

**TABLE 1-3
SUMMARY OF VENTURA WATER SUPPLIES**

Water Supply Source	Normal Year (AFY) ⁽⁸⁾	Dry Year (AFY) ⁽²⁾	Estimated 2030 Supplies ⁽⁹⁾
Casitas Municipal Water District	5,340 ⁽¹⁾	3,204 ⁽⁴⁾	5,841
Ventura River/Foster Park	4,200	2,384 ⁽⁵⁾	3,647–6,700
Mound Groundwater Basin	4,000	2,130 ⁽⁶⁾	4,000
Oxnard Plain Groundwater Basin	4,100	3,862	3,862
Santa Paula Groundwater Basin	3,000 ⁽³⁾	3,000	1,141–3,000 ⁽⁷⁾
City-Acquired Water Rights in 2016 (Santa Paula Basin)	40.9 ⁽³⁾	40.9	40.9
Recycled Water	700	700	865
TOTAL	21,381	15,321	21,778–28,207

(1) The estimated 5-year average normal water supply from Casitas is 5,082 AFY. Adding in development under construction (estimated to be 278 AFY) brings the total normal year supply to 5,340 AFY.

(2) Includes 3,000 AF of original City allocation

(3) 5.8 AF of water rights acquired for the past development of Tract 4832. 12.0 AF of water rights acquired for the development of Phase 1 of Tract 5632 in 2016 and 23.1 AF of water rights acquired for the development of Tract 5774 in 2016.

(4) 40 percent drought impact based on 2017 agreement with Casitas.

(5) 5-year production average from 2013-2017.

(6) Three-year average production (2015-2017).

(7) The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually. Assumes the worst-case scenario that the basin is determined to be in a Stage 2 overdraft per the Court's Stipulated Judgment and the City is reduced to an allocation of 1,141 AFY during drought conditions.

(8) Table 4-1 of the 2018 Comprehensive Water Resources Report, City of Ventura

(9) Table 4-3 of the 2018 Comprehensive Water Resources Report, City of Ventura

SOURCES: 2018 Comprehensive Water Resources Report, City of Ventura; UWMP 2016

12. What is the assurance that the design and construction of the project as proposed will be able to meet the yet to be defined final performance criteria:
- "Unlike groundwater replenishment projects and a long history in California, the development of surface water augmentation projects is in its infancy."⁽¹⁰⁾
 - The State Water Board found that: Knowledge gaps and key research recommendations must be addressed before uniform water recycling criteria for DPR can be adopted; Developing DPR criteria will require a deliberate and phased approach to ensure public health protection and continued consumer confidence in the public water supply; and, Significant work is needed to address recommendations regarding the non-

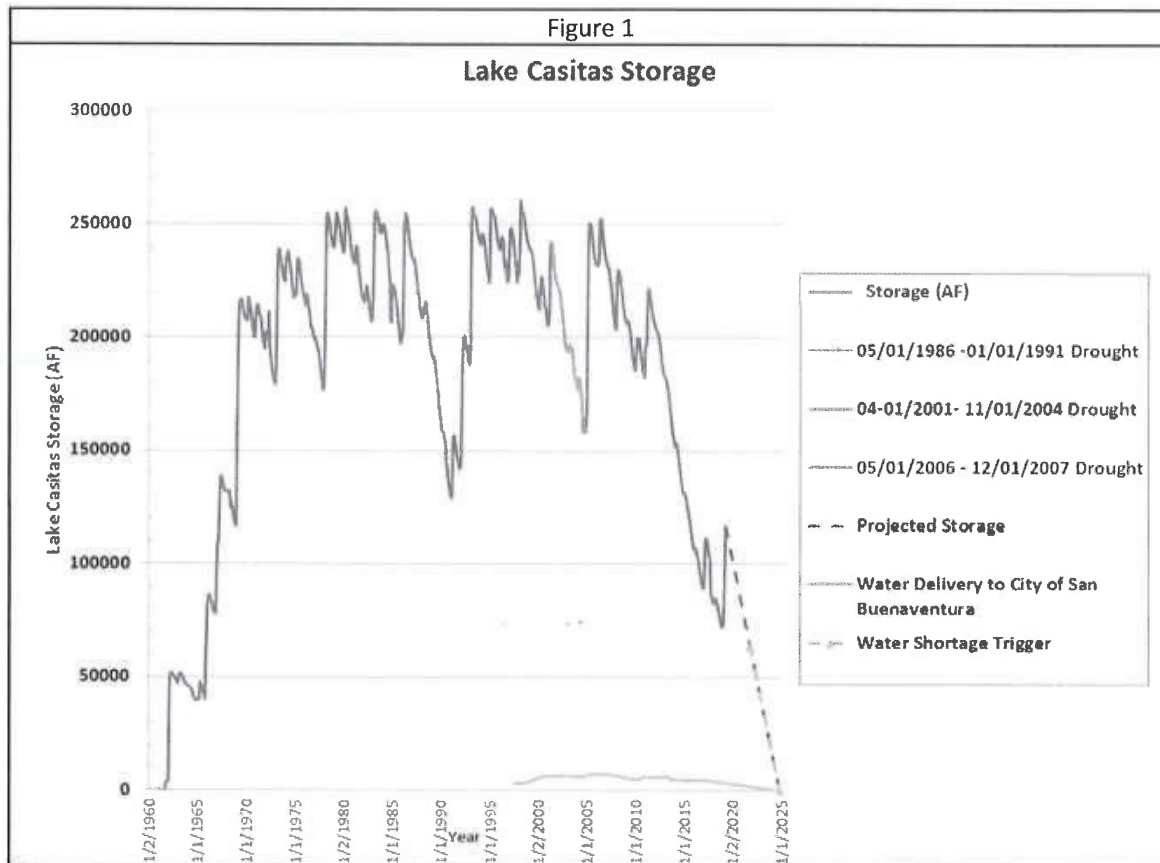
Table 2

TABLE 1-2
PHASE 3 VWRP DISCHARGE SCENARIOS

Discharge Scenario	Percent of current discharge (4.7 MGD) diverted	VWRP discharge to SCRE		VWRP flow diverted to other uses	
		MGD	AFY	MGD	AFY
1	0%	4.7	5,263	0	0
2	10%	4.2	4,705	0.5	558
3	20%	3.7	4,143	0.9	1,007
4	30%	3.3	3,697	1.4	1,569
5	40%	2.8	3,135	1.9	1,128
6	50%	2.3	2,577	2.3	2,577
7	60%	1.9	1,128	2.8	3,135
8	70%	1.4	1,569	3.3	3,697
9	80%	0.9	1,007	3.7	4,143
10	90%	0.5	558	4.2	4,705
11	100%	0	0	4.7	5,263

SOURCE: Stillwater Sciences 2018

9. The amount of water currently stored in Lake Casitas is estimated to be 116,550 acre-feet based on a surface elevation of 504.09 feet above sea level. The current depletion rate is estimated to be 20,857 acre-feet per year. Lake Casitas is forecast to be at 25% capacity by 10/02/2021 and empty by 10/02/2024 based on the current depletion rate. Implementation of the State Water Interconnection Pipeline which allows in-lieu annual delivery of an estimated 2,366 acre-feet of water is calculated to extend the life of Lake Casitas by 8.6 months. A history of Lake Casitas Storage is shown in Figure 1.



10. AWP design requirements used for preparation of the subject EIR are outdated and understated. Phase 3 VVRF Discharge Scenarios are based on a current discharge of 4.7 MGD diverted which appears to be 60% of the Maximum Annual Average Flow of 7.76 MGD Historical Monthly Transfer Station Flow Values. It is rumored that the SWRCB may require 90% of the flow from the VVRF to be diverted, thereby, making the design requirements used for development of the current EIR outdated. Phase 3 VVRF Discharge Scenarios contained in the subject EIR is contained in Table 2.

8. A List of the fifteen Capital Improvement Projects associated with the implementation of Ventura Water Supply Projects is presented for information and included as Table 1. The cost of the projects is estimated to exceed \$512M.

Table 1 List of Capital Improvement Projects Associated with Implementation of Ventura Water Supply Projects		
Project	Title	Cost Listed on 2018-2024 CIP Project Description
73092	Waterline Replacement – Main St./Telephone Rd.	\$8,900,000
97949	Waterline – State Water Interconnection	\$22,900,000
97955	Waterline – Midtown to Westside	\$13,340,000
97956	Waterline – Eastside to Midtown	\$5,700,000
73102	Treatment – State Water Blending Station	\$3,990,000
73111	Pump Station 210/260 Boundary Adjustment	\$1,500,000
73061	Water Treatment – Saticoy Facility Upgrade	\$14,000,000
	State Water Connection and Distribution System	\$70,330,000
96935	Advanced Treatment Plant Land Acquisition	\$5,150,000
97934	Mound Basin Aquifer Storage	\$24,000,000
96940	Recycled Water Line - Purewater Pipelines	\$16,500,000
96938	Brine Line Ocean Outfall	\$37,000,000
96945	Advanced Treatment Potable Reuse	\$77,700,000
73078	Bailey Plant Modifications	\$5,960,000
96939	Wetlands Improvements	\$10,640,000
	Total Advanced Treatment Potable Reuse	\$242,840,000
73083	Advanced Treatment Plant - Desalination	\$120,000,000
	Total Advanced Treatment Plant - Desalination	\$120,000,000
	Total Project Cost	\$362,840,000
	Estimated Financing Cost of \$195,987,500 for 30 years at 4.5% Interest	\$149,502,255
	Total Cost	\$512,342,255

Duane Georgeson I1

Response I1-1

As noted on page 1-22 of the DEIR, the City installed a pilot project to evaluate the proposed treatment processes that would be constructed for a potable reuse project. The results of the pilot project were published in a report by Carollo Engineers in 2018. See the Master Response on Water Quality and Public Health for additional information. The 2018 VenturaWaterPure Direct Potable Water Reuse Demonstration Project Summary Report can be found on the Ventura Water's web site, <https://ca-ventura.civicplus.com/1081/6635/Library-of-Reports?activeLiveTab=widgets>.

Jean Getchell I2

Response I2-1

The Harbor Boulevard site, if selected, would be annexed to the City prior to development. The site is located in the coastal zone, and therefore would be subject to the City's Local Coastal Plan (LCP) following annexation. The City's certified LCP is contained in the 1989 Comprehensive Plan Update to the Year 2010 (Comprehensive Plan). As the DEIR states on page 3.10-28, the Comprehensive Plan designation is "Commercial Planned-Tourist Oriented." This is not an agricultural or open space designation. Following annexation, the City's Comprehensive Plan designation would be the determining land use for SOAR purposes, and SOAR would not apply to the site. Please see Response LA3-4 for additional information on SOAR and for clarifications in the text of the EIR.

Response I2-2

Public noticing requirements for a DEIR are described in Section 15087 of the State CEQA Guidelines. Given the geographic scope of the projects, the City of Ventura made copies of the DEIR available at three local branch libraries, at the City of Ventura Planning Division, and online at <https://ca-ventura.civicplus.com/DocumentCenter/View/16149/2019-Ventura-Water-Supply-Projects-Draft-EIR>. An additional copy of the DEIR was delivered to the Hill Road Branch Library on March 11, 2019, as a response to this comment.

Duane Georgeson I3

Response I3-1

As explained in the Master Response on Project Cost, the annual total customer water utility revenue would not have to double from the current figure due to the proposed use of grant funds, low cost loans, and fees already imposed. The cost information and analysis has been updated, as described in the Master Response. Regarding the project schedule, the implementation of the project by 2025 was set under the Consent Decree and will be included in the NPDES permit to be issued in 2019.

Katherine Malzacher-Maxwell I4

Response I4-1

The comment requests contact information for the projects in order to express opposition to the projects, stating that the Santa Paula Water Treatment Plant contaminated downgradient property. The EIR evaluates potential impacts of the project to groundwater quality on page 3.9-56. See also the Master Response on Water Quality and Public Health for a description of the measures that will be taken to ensure water quality and avoid contamination of water supplies.

Response I4-2

A comment letter from Dr. Edo McGowan is attached to the comment. Dr. Edo McGowan's comment letter is addresses below, in Response I6.

Steve Oreilly I5

Response I5-1

The comment notes that black and white maps and graphics are difficult to understand. The City of Ventura made color copies of the DEIR available at four local branch libraries, at the City of Ventura Planning Division, and online at <https://ca-ventura.civicplus.com/DocumentCenter/View/16149/2019-Ventura-Water-Supply-Projects-Draft-EIR>.

Dr. Edo McGowan I6

Response I6-1

Groundwater recharge regulations focus on protecting public health from risks associated with chemicals and pathogens, including *pseudomonas aeruginosa*, cited in the comment. The pathogen reduction requirements are based on drinking water treatment industry-accepted end goals for pathogen concentrations. These goals are based on achieving a goal of a lower than 1 in 10,000 annual risk of infection with each examined pathogen group (Regli et al. 1991). Removal of chemical constituents, including xenobiotic compounds such as *pseudomonas aeruginosa* mentioned in the comment, is governed by the 1,4 dioxane log reduction requirement. The removal of 1,4-dioxone (>0.5 -log reduction) is used by California regulators as a conservative measure for the design and operation of the UV AOP. Regulators use 1,4-dioxane for this purpose because it is a conservative surrogate for the destruction of other low molecular weight trace chemicals that may pass through RO. As a result, a properly designed and operated UV AOP (i.e., meeting appropriate online CCP monitoring) will ensure the destruction of 1,4-dioxane and other trace chemicals.

This standard was also applied to the control of *Cryptosporidium* oocysts as part of the 2016 Long Term 2 Enhanced Surface Water Treatment Rule (LT2), which addressed the health effects associated with *Cryptosporidium* in surface water used as a drinking water supply (USEPA 2006b). The log reduction requirements cited above are based on estimated 95th percentile values in secondary effluent and the required removal to meet the pathogen concentration goals. The pathogen reduction requirements imposed through the DDW permit require the implementation

of processes and the monitoring of those processes that would ensure that *Pseudomonas aeruginosa* would be removed to prevent formation of formaldehyde. Please see the Master Response: Water Quality and Public Health.

Charles Spraggins, Save Our Water Ventura I7

Response I7-1

The Master Response on Project Cost explains CEQA requirements for the consideration of project costs and discusses project costs.

Response I7-2

The EIR discusses DPR treatment processes (DEIR, pp. 2-7 – 2-9, p. 2-20). As the Master Response on Water Quality and Public Health explains, regulations are currently not in place that could effectively allow for efficient permitting of a DPR project for Ventura. Because DPR is not currently permitted, an IPR project would be implemented in Phase 1.

Response I7-3

As noted in Response I7-2, DPR could not be implemented until regulations have been adopted to provide for DPR permit approvals. The ability to implement DPR will remain a consideration in the event that regulations are adopted and it would prove to be operationally and economically beneficial.

The DEIR discusses the construction of an ocean outfall to discharge the brine created in the treatment process. As noted on page 3.9-63, discharge of the brine would be subject to NPDES permitting requirements issued by the Los Angeles Regional Water Quality Control Board (RWQCB). The outfall would be installed prior to operation of the new AWPf.

Response I7-4

The implementation of the project would create a reliable water supply for the City, meeting the stringent regulations required by DDW. As noted on page 3.9-57, the proposed projects would improve drinking water quality compared to existing conditions throughout the City's potable water system. Please see the Master Response on Water Quality and Public Health for additional information on water treatment and standards.

Response I7-5

Phase 1 would implement IPR in the local Oxnard Plain Basin. Purified water would be conveyed to wells and injected into the groundwater basins pursuant to Title 22 regulations. As described in Master Response on Water Quality and Public Health, these California regulations have been developed to account for any potential risk to public health, including the possibility of hazardous substances entering the facility through the sewer system. The Fully Advanced Treatment process has been developed by panels of public health experts to detect and protect against any such incident. The efficacy of treatment has been tested for decades in other parts of Southern California as discussed in the Master Response.

The California State Water Resources Control Board (SWRCB) DDW maintains a website with information on the development of these regulations, testing, and permitting requirements included in Title 22 regulations.

(https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.html).

The website contains an extensive library of regulations, policy documents, and scientific advisory panel reviews covering potential public health risks associated with water quality.

Information supporting the Title 22 regulations is provided in the following website:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.html

The State's Safe Drinking Water Plan is provided at the following website:

https://www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan/index.html

The SWRCB's 2018 Science Advisory Panel on contaminants of emerging concern is included here:

https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/recycledwater_c ec.html

The reverse osmosis process removes contaminants down to the molecular level. Further soil aquifer treatment provides for a worse case treatment environmental buffer that reduces potential for pathogen survival. The finished water quality would exceed the quality of existing groundwater and would improve the taste and mineral content of potable water. As a result, the project would benefit the entire community equitably. Furthermore, Section 3.14 of the EIR includes an assessment of environmental justice that evaluates whether the proposed project would unevenly affect disadvantaged or low income communities. The EIR concludes on page 3.14-10 that the project would not disproportionately affect minority or low income populations. See Master Response: Project Cost for additional information on the proposed projects' effects on water rates.

Adrianna Krause I8

Response I8-1

The comment states that residents rebuilding after the Thomas Fire might find it difficult to comment on the DEIR.

The City appreciates the efforts of residents to participate in the review of the DEIR, in light of the many stressors that the Thomas Fire imposed on the community. One objective of the proposed projects is to improve water supply reliability in an economically and environmentally responsible manner. The proposed projects would increase water reliability through the development a local drought-resistant water supply for the City.

Response I8-2

The comment expresses opposition to desalination based on cost and air quality concerns. Air quality impacts from desalination are discussed at 3.3-16 through 3.3-17 and 3.3-25 through 3.3-26 (construction emissions), 3.3-29 through 3.3-30 (operational emissions), 3.3-31

(cumulative impacts), 3.3-31-32 (toxic air contaminants), 3.3-32-33 (odors), 3.7-14 through 3.7-15 (construction carbon dioxide emissions), and 3.6-17 through 3.6-18 (operational carbon dioxide emissions). The cost of desalination is not expected to cause any significant environmental impacts. Funding and costs are addressed in the Master Response on Project Cost.

Response I8-3

Section 1.7, at pages 1-17 through 1-22 of the DEIR, discusses the water supply planning that underscores the project objectives. As shown in Table 1-5, additional water supplies are needed to meet 2035 dry-year demands. Ventura Water is responsible for ensuring that sufficient water supplies are available to meet estimated water demands based on population projections consistent with the City's General Plan. Chapter 5 of the EIR discusses growth inducement, explaining in detail why the proposed projects would not induce growth within the city beyond the growth provided for by the General Plan and evaluated in the General Plan Final EIR.

Charles Spraggins, Save Our Water Ventura I9

Response I9-1

EIR Chapter 6, Alternatives, includes Alternative 5, Conveyance of Tertiary Effluent to Oxnard Wastewater Treatment Plant and Construction of Ocean Desalination Facility. The Alternative evaluates the impacts of conveying Ventura's water to the Oxnard treatment plant. The treated water would be available to the City of Oxnard to reuse for non-local supply offset or to supplement the City of Oxnard's supply. This alternative would not augment water supplies for the City. As a result, the City would need to construct an ocean desalination facility to meet the water demands of the City or repurchase the treated water back from the City of Oxnard.

Conveying tertiary-treated water to Oxnard and then purchasing it back would require:

(1) Oxnard's agreement to treat and sell the water over a lengthy period, dependent on whether Oxnard has the legal authority to do so; (2) an assumption that Oxnard's advanced treatment plant would have the ability to treat the water to drinking water standards; (3) the additional cost of constructing the separate pipeline and pump station that would be needed in order to return water to Ventura; and (4) potentially large fees that Oxnard could impose on Ventura for the repurchase of Ventura's water. The fees would be under the control of Oxnard, and Ventura would lose control over the cost of its own drinking water source. The fees would most likely be greater than the proposed projects' operational costs. Additionally, the City would still need to do some form of treatment upon receiving the water back, such as aquifer storage and recovery, so those costs would not be removed.

This additional annual expense would equal or exceed the total costs of the projects, while diminishing the City's control over the water supply compared to the proposed projects. The City would be subject to an agreement with outside entities that may impose limitations on the supply, reducing confidence that this alternative would provide a reliable water supply in drought conditions. In addition, the Oxnard facility would need to be expanded, since Oxnard has plans to use its existing treatment capacity. These expansion costs would be similar to construction costs associated with the proposed AWPf. Finally, such an arrangement would require LAFCo approval, which adds to the uncertainty of the concept. For all these reasons, lack of control over

the resource, little savings on construction costs, and long-term service costs, this alternative was rejected from further consideration. See also the Master Response on Project Cost.

Response I9-2

For the City to obtain water from the City of Oxnard, it would need to purchase the water and convey it back to the City. This possible option would require the construction of two pipelines and pump stations and would likely present large purchasing fees that would be greater than the proposed project's operational costs. This additional annual expense would equal or exceed the total costs of the projects, while diminishing the City's control over the water supply compared to the projects. Furthermore, the alternative would not provide any groundwater treatment benefit. See response to comment I9-1 and Master Response on Project Cost.

Charles Spraggins, Save Our Water Ventura I10

Response I10-1

The comment states that recycled water creates public health and terrorism concerns. See response I7-5 and the Master Response on Water Quality and Public Health. The infrastructure required in the proposed projects would be operated and monitored just as all City infrastructure is to best protect and reduce risk. The operations and maintenance of the proposed projects facilities would adhere to required emergency response procedures.

Response I10-2

Chapter 6, Alternatives, evaluates the impacts of the project compared to six potentially feasible alternatives. Table 6-2, Summary of Impacts of Alternatives Compared to the Proposed Project, compares impacts of the alternatives to impacts of the proposed project for all impacts, including hydrology and water quality and population, housing and environmental justice. Relative cost information is included in the Master Response on Project Cost.

Response I10-3

An ocean discharge facility is an important component of the proposed projects. The City would construct a new ocean outfall that would discharge concentrate (and occasional tertiary-treated water) to the ocean north of the Ventura Harbor or the City would construct a new pipeline from the proposed AWPf (via the VWRF) to the existing Calleguas Municipal Water District (Calleguas) SMP ocean outfall. One of these options would be constructed as part of Phase 1 of the projects.

Response I10-4

The comment states the opinion that residents will not want to drink City water. See Master Response: Water Quality and Public Health and Response I7-4.

Response I10-5

The comment states the opinion that the proposed projects would increase City insurance costs and legal exposure liability. As discussed further in the Master Response on Water Quality and Public Health, the implementation of the proposed projects would create a reliable water supply

for the City, meeting the stringent regulations required by SWRCB DDW. Of the alternatives evaluated in the DEIR, the No Project Alternative has the greatest potential to increase the City's legal exposure liability by creating a risk of noncompliance with the Consent Decree and potential revisions to the NPDES permit to meet the 1974 Policy for the Enclosed Bays and Estuaries of California. See DEIR pages 1-7, 1-9, 2-3 – 2-4, and 3.9-40 - 41.

Response I10-6

Please see Responses I9-1 and I9-2.

Response I10-7

The City evaluated numerous alternative approaches that would feasibly meet the project objectives of protecting the ecology of the SCRE, meeting the City's projected water demands, complying with RWQCB NPDES permit requirements, and complying with the Consent Decree. Chapter 6, Alternatives, evaluates six project alternatives and describes other alternatives that were evaluated and rejected from further consideration because they would not feasibly meet most of the project objectives.

Joe Chrisman I11

Response I11-1

As noted in the email response to the comment, the DEIR includes information on the proposed outfall location at pages 2-13, 2-35, and 2-48 and Figures 2-2, 2-9, and 2-19.

Joseph Richardson I12

Response I12-1

Section 1.7 of the EIR describes the City's existing water supplies and demands. The information is based on the 2018 Comprehensive Water Resource Report (CWRR), which provides an annual analysis of the City's water demand trends, current water demands, demand projections, and the current and future supply picture. The purpose of the CWRR is to track proposed development projects, consistently calculate the anticipated increase in water demand associated with each proposed development project, and then evaluate the impact on the current water supply. The CWRR specifically focuses on water demand of approved (entitled) projects and on near-term demand changes.

Response I12-2

As described in Section 1.7 of the DEIR, on pages 1-18 through 1-21, the City's water supplies include Ventura River entitlements. See Table 1-3, on page 1-20. No additional water is available for appropriation from the Ventura River, and during drought years less water is available from the Ventura River.

Response I12-3

As discussed in Section 1.6 of the DEIR, the 1974 Water Quality Control Policy for the Enclosed Bays and Estuaries of California prohibits discharges of municipal wastewater to enclosed bays

and estuaries except “when the relevant Water Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge.” DEIR, p. 1-7.

To address issues regarding the definition of enhancement, the benefits that the discharge provides to the SCRE and adjacent sub-watershed, and whether discharge practices should be modified over time to better protect habitat and water quality of the portion of the SCRE directly affected by the VWRf discharge, the Regional Board required the City to complete a series of “special studies” as a condition of the City’s 2008 NPDES discharge permit. *Id.* For the City’s subsequent NPDES permit renewal (which is currently in effect), Regional Board Order R4-2013-0174 for VWRf discharges required the City to conduct additional special studies, including the “Phase 3 estuary studies,” to “provide sufficient information to allow the Regional Water Board to determine whether or not the continued discharge of effluent enhances the Estuary.” DEIR, p. 1-8. The Phase 3 Study, the subsequent Technical Review Team (TRT) reports, and the Scientific Review Panel (SRP) Final Report all concluded that the ecology of the estuary would be improved by reducing discharge to the SCRE. Please see DEIR pages 1-7 through 1-18. None of these studies supports the conclusion that the estuary would not exist without discharge from the VWRf.

The proposed projects include using the AWPf to treat groundwater using reverse osmosis (RO), improving water quality from existing supplies.

Response I12-4

Section 1.7 of the EIR discusses the water supply planning that informs the project objectives. As shown in Table 1-5, additional water supplies are needed to meet 2035 dry year demands. Ventura Water is responsible for ensuring that sufficient water supplies are available to meet estimated water demands based on population projects consistent with the City’s General Plan.

With respect to Foster Park, please see Response I21-8.

Jim Oliver I13

Response I13-1

Please see response I7-2. Phase 1 of the proposed projects would implement an IPR project in the local Oxnard Plain Basin. Purified water would be conveyed to wells and injected into the groundwater basins pursuant to Title 22 regulations. The injected water would remain underground for a sufficient period of time to meet regulatory requirements before being available for extraction via either the same wells or downstream wells.

Response I13-2

Regulations have not been finalized to achieve DPR permit approvals in California. However, the SWRCB is in the process of developing regulations that may be in place concurrently with the development of the projects. Because DPR regulations are not currently in place, Phase 1 of the proposed project would implement an IPR project in the local Oxnard Plain Basin.

Response I13-3

The EIR evaluates the proposed IPR project's potential to impact water quality on page 3.9-56. The EIR concludes that compliance with Title 22 regulations in coordination with DDW would ensure protection of public health. Please see the Master Response on Water Quality and Public Health.

Duane Georgeson I14**Response I14-1**

The Master Response on Project Cost discusses project costs and revenues.

Response I14-2

Please see response I3-1 and the Master Response on Project Cost.

Stephen Simms I15**Response I15-1**

The comment expresses opposition to the proposed projects. Please see the Master Response on Water Quality and Public Health, which describes some of the projects within Southern California that have successfully employed recycled water.

Response I15-2

Please see Response I12-3, explaining the state law requirements that govern the proposed projects, with or without the Consent Decree. As Sections 1.7.1, 5.4, and 6.2.1 of the DEIR explain, the State Water Interconnection Project is being pursued in parallel with the proposed projects to provide backup water supplies when available, but the interconnection is not considered a reliable, consistent water supply. Please see the Master Response on the State Water Interconnection Project.

Burt Handy I16**Response I16-1**

In an EIR the Lead Agency is obligated to analyze alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant environmental effects of the projects. A connection to the SWP at Lake Piru or Castaic Lake may achieve water delivery objectives to the Oxnard Plain; however, it would not avoid or substantially lessen the significant effects of the projects. A Castaic/Piru pipeline would not satisfy key project objectives—providing a drought- and disaster-resilient water supply, protecting, maintaining, and improving ecological resources and related beneficial uses of the SCRE and its watershed, improving municipal supply groundwater quality within the service area, and maintaining compliance with the City of Ventura's VWRF NPDES permit – and therefore does not qualify as a project alternative.

Burt Handy I17

Response I17-1

The comment attached a comment on the State Water Interconnection Project EIR. Please see Response I16-1 and the Master Response on the State Water Interconnection Project.

Charles Spraggins, Save Our Water Ventura I18

Response I18-1

Alternative 5, discussed in section 6.3.5, would convey tertiary-treated effluent to Oxnard. The EIR concludes that the Alternative would not meet most of the project objectives. As discussed further in Responses I9-1 and I9-2, water would need to be purchased from Oxnard and returned to Ventura for use, which is expected to be more expensive than the proposed projects. The recycled water supplied by the VWRf is owned by the City of Ventura and provides an independent local water supply sufficient to meet future dry year demands.

Response I18-2

Please see Responses I9-1 and I9-2.

Response I18-3

The comment attaches an email that was submitted during the review process of the DEIR for the State Water Interconnection Project.

Sections 1.7.1, 5.4, and 6.2.1 of the Ventura Water Projects DEIR discuss the State Water Project (SWP Interconnection), which is also addressed as a cumulative project in Chapter 4. The comment discusses the cost of the SWP Interconnection and asks whether the SWP Interconnection is necessary. As noted in the DEIR, the SWP Interconnection is being pursued in parallel with the proposed projects to provide backup water supplies when available, but the interconnection is not considered a reliable, consistent water supply. The proposed projects are intended to address the fact that water supplies from the SWP are not available during drought periods, as the comment notes. Please see also the Master Response on the SWP Interconnection Project.

The comment states that storage of water from the SWP would be necessary. As the DEIR states, on page 6-4:

SWP water supplied through the Calleguas system would be subject to the SWP water allocation, updated each year depending on the hydrology in the State. Some years the full entitlement may be available, while other years less water would be available. DWR indicates that over a long term average approximately 60 percent of water entitlements may be available to the State Water Contractors. In addition, water may be available during certain parts of the year but not others, making it an unreliable source. The City of Ventura does not have storage opportunities to store water in above ground or underground reservoirs when it is available.

The alternative recommended by the commenter of increased local storage does not meet the project objectives. Specifically, increased local storage would not provide a drought- and disaster-resilient water supply, protect, maintain, and improve ecological resources and related beneficial uses of the SCRE and its watershed, improve municipal supply groundwater quality within the service area, and maintain compliance with the City of Ventura's VWRf NPDES permit.

The comment also asks whether a citywide purple pipe water system for nonpotable treated water has been considered. As discussed in the "Non-Potable Recycled Water Alternatives" section of the Alternatives chapter, DEIR pages 6-10 – 6-13, Ventura Water assessed multiple options for increasing non-potable water recycling in a report entitled *Amended Estuary Special Studies Phase 2: Facilities Planning Study for Expanding Recycled Water Delivery*. As the DEIR discusses in greater detail, the urban irrigation market is small and is characterized by numerous very small users dispersed throughout the City, requiring an extensive piping network. Conveying recycled water from the VWRf to these numerous customers would be an inefficient means of distributing a small quantity of the total discharge and would offset only a small portion of the potable demands. Agricultural reuse would provide an opportunity for a significant reduction in discharge volume, but would require advanced treatment and brine treatment and disposal. Decentralized treatment plants would not feasibly reduce discharge as needed to protect the ecology of the SCRE. Because these alternatives would not feasibly meet most project objectives, they were rejected from further consideration as alternatives to the proposed projects.

As noted by the commenter, the City is implementing conservation measures. But even with conservation, supplemental water will be needed. As documented in the DEIR Section 6.2.1 (as well as the Ventura Water 2018 Comprehensive Water Resources Report and Ventura Water 2015 Urban Water Management Plan), even with projected conservation water demands are projected to increase. The alternative recommended by the commenter, conservation, does not meet the project objectives noted above.

The comment states that the SWP Interconnection EIR did not adequately consider growth inducement. The DEIR for the proposed projects addresses growth inducement in Chapter 5, concluding that the proposed projects would not induce growth beyond the growth permitted by the General Plan and evaluated by the General Plan Final EIR. On page 5-4, the supply that would be provided by the SWP Interconnection is considered in the growth inducement analysis.

The comment also states that social and economic impacts should be considered. The Master Response on Project Costs addresses economic impacts of the proposed projects.

Debra Barringer I19

Response I19-1

The comment expresses support for the projects.

Randall Novak I20

Response I20-1

The comment focuses on the potential location of the AWPf on the corner of Harbor Boulevard and Olivas Drive and the proposed Marina Park Ocean Outfall and Pipeline.

Response I20-2

Public noticing requirements for a DEIR are described in Section 15087 of the State CEQA Guidelines. The City of Ventura made copies of the DEIR available at four local branch libraries, at the City of Ventura Planning Division, and online at <https://ca-ventura.civicplus.com/DocumentCenter/View/16149/2019-Ventura-Water-Supply-Projects-Draft-EIR>. The public notice was printed in the Ventura Star, the Ventura Breeze and the Vida Newspapers. Notices of Availability of the DEIR were mailed to over 400 addresses that are contiguous with proposed project components.

Response I20-3

A site alternative selection process identified three potential sites to construct the AWPf, as described on page 2-22 of the DEIR. A siting constraints report was prepared to evaluate eight possible sites for the AWPf. The screening criteria included: the parcel size and configuration, whether it was in the coastal zone, whether the site was within the FEMA flood zone, site ownership and willingness to sell, whether the site was subject to the SOAR initiative, seismic/fault zones, public acceptance, aesthetics, greenbelt program, length required for the pipelines, accessibility and water supply. All of these criteria were weighted for each AWPf site. Four sites were initially considered for inclusion in the DEIR; however, as noted on page 6-14, the potential Golf Course site was eliminated because it would be located within the Santa Clara River floodway. Ultimately three sites were carried into the EIR for further analysis.

Response I20-4

Since public utilities are necessary throughout the City, the location of necessary utilities within the coastal zone does not by itself suggest incompatible land use. The EIR notes on page 3.10-28 that development of the AWPf on the Harbor Boulevard site would require annexation to the City. A Local Coastal Plan (LCP) amendment may be necessary once the property is annexed into the City to change the land use designation. As the EIR states:

Annexation of the Harbor Boulevard site to the City of Ventura is subject to LAFCo approval, and LAFCo would review the proposed annexation for consistency with LAFCo's Annexation Policies and Procedures. Development of the AWPf on this site would promote efficient municipal services and facilities by locating the AWPf near the existing VWRf, and would not promote sprawl. It is a reasonable and compatible use of the land. Therefore, the construction of

the AWPf does not conflict with any policy or zoning provision adopted for the purpose of avoiding or mitigating an environmental effect.

The EIR further addresses compatibility with surrounding land uses. Mitigation Measures AES-1 and AES-2, on DEIR pages 3.1-25, require screening to minimize public views during construction and the development of a landscape plan, requiring aboveground buildings/structures to be designed with color palettes and vegetation screening as necessary to blend with the surrounding character of the site and to minimize contrasting features in the visual landscape. Page 3.1-14 describes visual impacts as follows:

[T]he visual change of constructing the AWPf on the disturbed open space could have a potential significant impact on the surrounding views of the area. However, the Harbor Boulevard AWPf sites would be across Harbor Boulevard from a commercial strip mall and would be similar in height as the buildings in the mall (two-story building). The largest building on the AWPf site would be the storage tank, which would be approximately 20 feet above ground. The site would not disrupt views from Harbor Boulevard to the harbor and ocean as the AWPf site would be located on the eastern side of Harbor Boulevard. Further, views from the golf course would be partially screened by existing vegetation that separate the properties. Once constructed, the AWPf would include landscaping to partially screen the facility from the surrounding roadways. As a result, the visual change of constructing the AWPf would not have a substantial adverse effect on a scenic vista.

All new light sources would be shielded and oriented downward to minimize light spillover on adjacent uses, as required by Mitigation Measure AES-3. The AWPf would not generate noise beyond the property boundaries or create a substantial increase in traffic trips, within the surrounding area. The EIR concludes that the AWPf would be compatible with surrounding land uses with the implementation of the identified mitigation measures.

Response I20-5

The EIR's analysis of Air Quality addresses odors. On page 3.3-33, the EIR notes that the proposed projects do not include any of the land uses identified by the VCAPCD as being associated with odors (such as wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, asphalt batch plants, painting and coating operations, fiberglass operations, food processing facilities, feed lots/dairies, petroleum facilities, chemical manufacturing operations and facilities, and rendering plants). During construction, the use of architectural coatings and solvents, as well as asphalt paving, would create odors within a limited area on a temporary basis. However, the proposed projects would be consistent with all applicable rules and regulations governing construction equipment and processes. During operation, the AWPf would treat tertiary treated water that has already undergone substantial treatment. The water entering the new AWPf would be the same quality as the water currently used for landscape irrigation at the golf course. As a result, nuisance odors would not be generated at the AWPf. Thus, the project would not create objectionable odors affecting a substantial number of people during construction or long-term operation.

Response I20-6

The AWPf site would be staffed 24-hours a day, as noted on DEIR page 3.13-17, and would be fenced for security, as noted on pages 3.1-14 and 3.1-24.

Response I20-7

The chemicals used during the treatment process would be stored on-site at the AWPf in accordance with applicable regulatory requirements. As noted on page 2-58, chemical storage facilities would include secondary concrete containment, alarm notification systems, and fire sprinklers. Table 2-8 in the Project Description (repeated in the section on Hazards and Hazardous Materials as Table 3.8-4) identifies the chemicals that the water purification process would use and the projected annual usage amounts.

As discussed on page 3.8-15, the main treatment process chemicals would be housed in various bulk storage tanks of up to 8,300 gallons, located inside or next to the process building within the AWPf site. Cleaning chemicals would be stored in smaller containers. Sumps and sump pumps within the chemical containment area and loading areas would collect and contain any chemicals accidentally released during operations. As discussed on page 3.8-19, chemical storage facilities would be completely secure and continuously monitored and would only be accessible to authorized personnel. Chemical storage facilities would include secondary concrete containment, alarm notification systems, and fire sprinklers. Operators and contractors would comply with all applicable regulations pertaining to handling, storage, use, and disposal of hazardous substances. Adherence to these requirements would ensure that impacts to the environment and public health and safety due to routine use of hazardous materials during operation would not occur.

As noted in the DEIR (see Table 2-3 on page 2-21), ozone would be used for water treatment at the AWPf. Ozone is widely used for water treatment due to its disinfection and oxidation qualities. Ozone is potentially a highly toxic material, but it has been utilized successfully throughout the water industry through careful design and operational considerations. Because ozone is generated and consumed on-site, no more than a few pounds is on-site at any one time. However, it is very important to keep ozone within the enclosed process components and avoid accidental releases within buildings and to the atmosphere. Ozone destruction units are provided to treat any unused ozone prior to discharge to the atmosphere. This discharge typically has a concentration less than OSHA's 8-hour threshold limit value of 0.10 ppm, by volume.

Bromate ion is formed upon ozonation of a water with bromide ion present. Most waters have some bromide ion, hence, bromate is often formed but is typically less than EPA's drinking water maximum contaminant level (MCL) of 10 ug/L on a quarterly running annual average basis. Some of the methods to mitigate bromate ion formation include pH reduction, ammonia feed upstream of ozonation, and chloramine feed upstream of ozonation. Most utilities with bromate ion concerns have been able to meet the EPA MCL by using one of these methods. One or more of these methods would be implemented if necessary to keep bromate ion to a value less than the drinking water MCL.

Response I20-8

The outfall is discussed on DEIR pages 2-13, 2-35, 2-48 and shown on Figures 2-2, 2-9, and 2-19. The ocean outfall would be installed by horizontal directional drilling techniques from Marina Park, emerging on the ocean floor 2,000 to 4,000 feet offshore at a depth of approximately 50 feet. As discussed on page 3.5-13 of the DEIR, the construction of the outfall would take approximately 6 months and would not include any long-term aboveground structures. Once the construction is completed, Marina Park would be restored to pre-construction conditions. As a result, the visitor experience would not be altered after the temporary construction period.

The outfall would discharge brine, a by-product of the advanced water treatment facility (AWPF), into the ocean. The brine would be disinfected pursuant to NPDES requirements to ensure that the proposed discharge would not change the bacterial or pathogen content of the water at the beach. As required by the SWRCB, any contaminants contained within an ocean discharge, regardless of origin, must meet California Ocean Plan Objective limits at the edge of a zone of initial dilution (ZID) surrounding the diffusers. The Ocean Plan is discussed on pages 3.11-38 through 3.11-40. As discussed in detail in pages 3.9-59 through 2.9-66 of Section 3.9.4, the effluent discharge under Phase 1 is not expected to result in any increases in organic or inorganic constituents that result in violation of Ocean Plan water quality objectives, and therefore would have a less than significant impact relative to water quality. See also DEIR, p. 3.11-49.

Response I20-9

The AWPF system would be fully enclosed and would not have any component that would expose treated water to adjacent agricultural helicopter deployed spraying.

The treatment wetlands would convey water back to the SCRE. The treatment wetlands and the SCRE are adjacent to one another and similarly near local agricultural operations. One area would not be subject to potential aerial spraying more than the other. The use of treatment wetlands would not increase the potential for pesticides to reach the SCRE.

Response I20-10

As analyzed in Section 3.13, Noise, the pump station would be designed to attenuate noise using acoustic designs and enclosures to comply with the local noise ordinance. The nearest noise-sensitive uses would be located beyond 1,300 feet from any of the proposed AWPF site. As stated on page 3.13-17:

The operation of mechanical equipment typical for developments like the AWPF, such as air conditioners, fans, and related equipment, may generate audible noise levels. Mechanical equipment for the facility would be located on rooftops or within buildings and would be shielded from nearby land uses to attenuate noise and avoid conflicts with adjacent uses. In addition, all mechanical equipment would be designed with appropriate noise control devices, such as sound attenuators, acoustics louvers, or sound screen/parapet walls, to comply with noise limitation requirements provided in Section 10.650.130 of the City of Ventura. The City would comply with the requirement to install mechanical equipment that would generate noise levels below this threshold, consistent with applicable regulatory requirements.

Mitigation Measure NOISE-2, on pages 3.13-17 – 3.13-18, states that the City must “document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible.” The City must establish and disseminate a 24/7 hotline telephone number for noise complaints and must designate a Noise Disturbance Coordinator to help resolve noise complaints, among other requirements.

Response I20-11

As analyzed in the EIR, the proposed projects are required to mitigate for construction impacts associated with air quality (including dust), noise, and transportation and traffic. For a list of mitigation measures required for the proposed projects, see Table ES-3 in the Executive Summary. Table ES-3 indicates the measures that will avoid, minimize, or otherwise reduce significant impacts to a less than significant level. Mitigation Measure AQ-1, on page ES-17, incorporates numerous requirements to reduce dust generation during construction. The noise mitigation measures shown on pages ES-43 through ES-45 ensure that noise levels during construction are minimized. Mitigation Measure TRAF-1, shown on pages ES-47 through ES-49, imposes requirements to reduce traffic impacts during construction.

Valley Fever is attributed to a naturally occurring spore (*Coccidioides immitis*) that is found in Ventura County soils. Exposure to the spore is generally attributed to uncontrolled dust emissions that occur along dirt roads and previously undisturbed soils. The potential exposure to Valley Fever increases with the disturbance of undeveloped topsoil within the first foot of depth. Mitigation Measure AQ-1 would require dust suppression BMPs during construction that would minimize the potential for dust emissions and exposure of people to Valley Fever. Once constructed, the project would not result in dust emissions that would increase the risk of exposure to Valley Fever.

Response I20-12

As noted on page 3.9-84, none of the proposed AWPf sites would be located within the designated tsunami hazard zone. The outfall infrastructure would be installed underground, minimizing the risk of damage due to a tsunami.

Response I20-13

As analyzed in Section 3.6, Geology, Soils, and Seismicity, the Harbor Boulevard site is at risk of liquefaction due to the shallow groundwater, creating a potentially significant impact related to seismic-related ground failure. To address this potential impact, Mitigation Measure GEO-1 requires the preparation of a soils report and a geotechnical investigation report prior to the construction of the Harbor Boulevard AWPf and any other facility at risk of liquefaction. The results of the study would inform the final designs, which must comply with California Building Code design requirements for construction within liquefaction zones. The EIR concludes that conformance to the building codes would minimize the potential impact.

Response I20-14

As discussed in Section 3.1 Aesthetics, the Harbor Boulevard site would be located within the coastal zone on a disturbed lot with sparse vegetation. To the west is the VWRf, a two-story

commercial strip mall and the harbor, to the north and south is open space and to the east is a golf course. The proposed project would comply with Mitigation Measure AES-2, requiring aboveground buildings/structures be designed to have color palettes and vegetation screening as necessary to blend with the surrounding character of the site and to minimize contrasting features in the visual landscape. The EIR concludes that the AWPf would be compatible with surrounding land uses since it would provide a public utility function and would be architecturally appealing. Please see also Response I20-4.

Response I20-15

Please see the Master Response on Project Cost. Section 3.19 of the EIR addresses energy use. Impact UTIL 3.19-8 specifically addresses the proposed projects' consistency with energy conservation plans. Table 3.19-5, on page 3.19-36, shows the proposed projects' operational energy use. As the DEIR states on pages 3.19-36 – 3.19-37:

The project building facilities would comply with or exceed the applicable provisions of Title 24 and the CALGreen Code. According to the CEC, Title 24's 2016 standards use 28 percent and 5 percent less energy for lighting, heating, cooling, ventilation, and water heating than Title 24's prior 2013 standards for residential and nonresidential uses, respectively (CEC 2016a). The project would comply with Title 24 energy efficiency requirements for fixtures within the facilities to maximize energy efficiency, including lighting, air conditioning, and appliance uses. The desalination process would include energy recovery devices and energy efficient pumps to maximize energy efficient in the treatment process.

The electricity demands of the Phase 1 facilities would be supplied by SCE, which is subject to the California Renewables Portfolio Standard Program. Over time, the electricity available to the proposed project will include greater contributions from renewable energy supplies of 33 percent by 2020 and 50 percent by 2030. As shown in Table 3.19-5, the Phase 1 facilities would represent approximately 0.39 percent of the county's annual electricity use. As such, the project would not cause wasteful, inefficient, and unnecessary consumption of energy during operation and would not conflict with energy conservation plans. The project would have a nominal effect on regional energy consumption, existing or reasonably foreseeable electricity supplies would be expected to meet the project's electricity demand, and project operation would not result in the need to construct new energy facilities or expand existing facilities.

Daniel Cormode I21

Response I21-1

Please see the Master Response on Project Cost, which describes the costs of the No Project Alternative, and the discussion of Benefits of the Proposed Projects in section 9.3 of Chapter 9, Introduction to the Final EIR. See also Section 3.14, Population, Housing and Environmental Justice. The EIR assesses potential impacts on low-income or minority populations and concludes that the proposed project would not have any significant impacts on the environment and would not have adverse impacts on the health of neighboring residents. The neighboring land uses would be minimally impacted from the implementation of the proposed AWPf. Additionally, the census data shows that the location of the proposed projects would not be within areas significantly characterized by low-income or minority populations.

Once constructed, the improved water quality would be experienced throughout the City, particularly in areas that currently receive lower water quality.

The EIR's discussion of Alternative 1, the No Project Alternative, addresses the impacts of not adopting the proposed projects. See pages ES-11, 2-39, and 6-15 through 6-17. As summarized on page 2-39:

This alternative would not result in the benefits to the ecology of the SCRE that the proposed project would provide. The City would be in violation of the Consent Decree and could also be in violation of the CWA, depending on the Regional Board's orders in the new NPDES Permit. The City would have no recycled water diverted for water supply. With no new water supply projects, the City would be unable to eliminate the supply deficits identified in Table 1-4 and Table 1-5 and could not adequately supply water to its residents and customers during dry years and drought conditions. Under this alternative, the City would be required to ration future water supplies. In addition, the City would continue to fail to meet the secondary MCLs for drinking water quality on its groundwater supplies.

Response I21-2

The EIR evaluates the most current designs developed for the project components. Please see Response I21-18. The DEIR evaluates all potentially significant impacts of construction and operation of the AWPf.

Response I21-3

The DEIR's summary of Ventura's water supply is based on the 2018 Comprehensive Water Resource Report (CWRR). See page 3.19-1 ("According to the 2018 Comprehensive Water Resources Report (CWRR), the City's current water supply is 21,381 acre-feet per year (AFY).") The CWRR provides an annual analysis of the City's water demand trends, current water demands, demand projections, and the current and future supply picture. The purpose of the CWRR is to track proposed development projects, consistently calculate the anticipated increase in water demand associated with each proposed development project, and then evaluate the impact on the current water supply. The CWRR specifically focuses on water demand of approved (entitled) projects and on near-term demand changes.

Response I21-4

The comment highlights uncertainties in the City’s projected future water supplies, supporting one of the project objectives of the need to provide a drought and disaster resilient water supply. As the previous response notes, the DEIR’s description of the City’s water supply was derived from the 2018 CWRR. This comment references the Draft 2019 CWRR. The 2019 CWRR (now final) describes a few minor changes in the City’s supply situation, but it does not affect any element of the environmental review of the proposed projects. The 2019 CWRR is described in this response and incorporated herein by reference.

Table 4-3, page 4-23 of the 2019 CWRR includes the summary of projected future water supply from existing and potential new sources.

This table updates Table 1-3 on page 1-20 of the DEIR. The first column, “Normal Supply,” is the same in both tables, except that the supply from Casitas is increased slightly in the 2019 CWRR (5,375, compared to 5,340).

The “Dry Year” column in Table 1-3 of the DEIR corresponds to the “2019 Supply Drought Impact” column in the 2019 CWRR. The water supply figures in the DEIR are based on slightly different assumptions. The water supply from Casitas assumes a 40 percent drought impact in the DEIR, while the 2019 report assumes a 30 percent drought impact. The supply from Ventura River/Foster Park is based on 5-year production averages from 2013–2017, while the 2019 CWRR uses the 2014–2018 period. The DEIR’s water supply figure for the Mound Groundwater Basin is based on 3-year average production from 2015–2017, while the 2019 CWRR uses the period from 2017–2018. The remaining water supply figures are the same.

The column headed “2030 Normal Supply” in Table 1-3 of the DEIR is not intended as a prediction that water supply will be normal in 2030. The use of a future “normal” water supply year in the DEIR helps to test whether the proposed projects are needed for water supply. Table 1-3 in the DEIR establishes that, even if water conditions are “normal” in 2030, the City would need an additional water supply. The supply from Casitas is, again, slightly larger in the 2019 report than in Table 1-3 of the DEIR, but the need for an additional water source remains.

For information on the 2030 multiyear drought scenario, see Table 6-4 on page 6-8 of the 2019 CWRR. Under drought conditions, the City would not have sufficient water without the proposed projects.

TABLE 4-3 SUMMARY OF PROJECTED FUTURE WATER SUPPLY FROM EXISTING AND POTENTIAL NEW SOURCES (FROM THE 2019 CWRR)

	Existing	Existing	Future			
Water Supply Source ^[1]	Normal Supply	2019 Supply Drought Impact (AF)	2020 Supply Drought Impact (AF)	2021 Supply Drought Impact (AF)	2025 Normal Supply (AF)	2030 Normal Supply (AF)
Casitas Municipal Water District	5,375	3,763 ^[2]	3,844 ^[2]	3,365 ^[3]	5,904 ^[4]	6,067 ^[4]
Ventura River / Foster Park	4,200	2,323 ^[5]	1,573 ^[6]	1,573 ^[6]	3,647–6,700 ^[7]	3,647–6,700 ^[7]
Mound Groundwater Basin	4,000	1,963 ^[8]	4,000 ^[9]	4,000 ^[9]	4,000 ^[9]	4,000 ^[9]
Oxnard Plain Groundwater Basin ^[10]	4,100	3,862	3,862	3,862	3,862	3,862
Santa Paula Groundwater Basin						
Original City Allocation ^[11]	3,000	3,000	3,000	3,000	3,000	3,000
City Acquired Water Rights ^[12]	40.9	40.9	40.9	40.9	40.9	40.9
Recycled Water	700	700	700	700	700	865 ^[13]
VenturaWaterPure	0	0	0	0	2,800	2,800–4,000
Total	21,415	15,651	17,020	16,541	23,954-27,007	24,282-28,535
State Water ^[14]					0-10,000	0-10,000

NOTE: Projected supply values to not take into account water quality for all sources or account for loss of one source.

[1] None of these numbers preclude the City's water rights.

[2] 30% drought impact based on 2017 agreement with casitas.

[3] Projects that Casitas will declare Stage 4 (40% reduction) if the drought continues to 2021.

[4] Casitas future supply is adjusted as demand increases within the Casitas service area based on the absorption rate in Table 3-8.

[5] Five-year production average from 2014-2018.

[6] Average of 2 most recent driest years (2015-2016).

[7] Based on the highest City production value in the past 10 years (2008-2017) and the intent of the City to restore production to the historical levels by 2025.

[8] Two-year average production (2017-2018).

[9] Ten-year average production (2000-2009); operational limitations removed once replacement wells come online.

[10] Fox Canyon Groundwater Management Agency (FCGMA) Emergency Ordinance E allocations were adopted by FCGMA Board on April 11, 2014. Temporary extraction allocation for FY 2016 = 3,862 AF.

[11] The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually.

[12] Water rights acquired for the past development of Tract 4632 and development of Phase 1 of Tract 5632 and Tract 5774.

[13] From the 2015 Urban Water Management Plan.

[14] Low range reflects potential limitations in wheeling capacity and uncertainty of SWP deliveries. High range assumes full allocation of the City's 10,000 AF per year entitlement. The average allocation from 2013-2018 was 39%.

Response I21-5

Chapter 2, Project Description Table 2-2, shows the annual average new water supply treated by the AWP for Phase 1a, Phase 1b and Phase 2.

Response I21-6

Chapter 6.0, Alternatives, includes a subsection 6.2.1, Alternative Water Supply Sources, that discusses the State Water Project Interconnection Project. Table 5-3 summarizes Ventura water supplies in normal years, dry years, and estimated 2030 supplies. Water supplies from Casitas Municipal Water District are included in this summary.

The reference to “in-lieu delivery” assumes that this aspect of the SWP Interconnection Project, if approved, would reduce overall water supplies. This is not the case. “In-lieu delivery” means that water from the SWP would be delivered to a Ventura Water customer in the Casitas service area, rather than directly delivered to Casitas, and this would offset demand on the Casitas system. SWP Interconnection Final EIR, p. 1-1. The source of water might change, but the quantity of water supply would not.

Response I21-7

The comment highlights uncertainties in the City’s projected future water supplies, supporting one of the project objectives of the need to provide a drought and disaster resilient water supply. Lake Casitas stores Ventura River diversions and storm water runoff from local watersheds. Casitas Municipal Water District treats and delivers water to customers, including the City, which purchases treated water for the portion of the City within the Casitas service area. Historically, the City has purchased about a third of its water supply from Casitas during “normal” or “non-drought” years.

The City’s 1995 water purchase agreement with Casitas required a minimum annual purchase of 6,000 AFY, which was subject to Casitas’ allocation program during drought periods. In May 2017, the City Council approved a new Water Services Agreement between the City and Casitas that establishes that Casitas shall supply the City with sufficient water to meet its in-district projected water demand, subject to Casitas’ Water Efficiency and Allocation Program (WEAP). If Casitas must implement its WEAP due to a water shortage, Casitas may adjust the City’s Allocation consistent with the percentage reduction for the WEAP stage (2019 Comprehensive Water Resources Report, May 29, 2019, p. 4-4).

The source of the statement that Lake Casitas will become dry by 2024 is not identified. The statement assumes “the current depletion rate,” but Casitas’ WEAP would not allow a depletion rate that resulted in the use of all water from Lake Casitas. The DEIR takes into account that fact that Casitas may reduce water supplies during drought years, as shown on Table 5-3. See the 2015 UWMP, the 2018 CWRR, and the 2019 CWRR for a further discussion of the City’s use and projected future use of water from Casitas Municipal Water District.

Response I21-8

The comment may be referring to the 2019 CWRR's discussion of the Ventura River Surface Water Intake and the Foster Park groundwater wells, at pages 4-4 to 4-5. Currently, the surface intake structure is unused due to channeling of the active river channel bypassing the structure. Four Foster Park groundwater wells were destroyed by 2005 winter storms, but three of the wells, as well as damaged pipelines, have been repaired. The City's normal water supply from the Ventura River / Foster Park is 4,200 AFY, as shown in Table 1-3 on page I-20 of the DEIR and Table 1-4 on page I-21.

Due to continued drought conditions and heightened environmental requirements, the City's ability to draw water from the Ventura River continues to be significantly challenged and impacted. During multiple dry years, the DEIR shows that the supply from the Ventura River/Foster Park system would be reduced. Table 1-5 shows that the supply would only be 1,298 AFY under conditions of multiple dry years. The 2019 CWRR updates this multiple dry year volume to 1,573 AFY a slight increase over previous projections. See Table 4-3 of the 2019 CWRR.

Response I21-9

Chapter 6.0, Alternatives, includes subsection 6.2.1, Alternative Water Supply Sources, that discusses the State Water Interconnection Project. As stated in that section, on pages 6-3 through 6-4, water from the State Water Project may be available during certain parts of the year but not others, making it an unreliable source. The SWP Interconnection Project would help to make up for losses in annual yield from Lake Casitas, the Ventura River, and groundwater. SWP water would compensate for these lost supplies, but would not result in the City having a greater annual volume of supply than it has historically had. The City of Ventura does not have storage opportunities to store water in above ground or underground reservoirs when it is available. As a result, the SWP Interconnection would augment supplies when available, but would not constitute a reliable, consistent water supply. The 2019 CWRR does not rely on the SWP Interconnection to meet future water demands. Please see also the Master Response on the State Water Project Interconnection.

Response I21-10

The term "final performance criteria" used in the comment appears to refer to the continued discharge level (CDL) to the SCRE during Phase 1, as shown in Table ES-1 on page ES-3. This recommendation may change somewhat if the RWQCB or other responsible agencies with permitting jurisdiction over natural resources refuse to permit, or impose conditions that are infeasible for the City to satisfy on any permit that would allow the diversion volume recommended by the SRP. The SRP recommended that discharges of treated wastewater from the VWRP to the SCRE should be limited to an annual average range of 0–0.5 MGD during closed berm conditions, which translates to diverting 90–100 percent of the 2016 dry-weather flows. As a result, the proposed project is being designed to accommodate 100 percent diversion. If the RWQCB and other agencies require a different diversion amount, the City would be required by law to size the AWP accordingly.

Response I21-11

Please see Response I21-1.

Response I21-12

Please see response I21-1 and the Master Response on Project Cost.

Response I21-13

Please see response I21-1 and the Master Response on Project Cost, which discusses the City's efforts to reduce the scale of rate hikes and outlines the significant public and private costs of the No Project Alternative. The comment does not provide any evidence to support the conjecture that the proposed projects would exacerbate the number of homeless persons, crime, and vagrancy. With respect to health and safety, please see the Master Response on Water Quality and Public Health.

Response I21-14

The DEIR's discussion of the No Project Alternative in section 6.3.1 on page 6-15 identifies ongoing water shortage as an impact of the alternative, noting that the foreseeable future would include water rationing and up to 50 percent demand reduction. Please see also the Master Response on Project Cost, which describes the costs of the No Project Alternative, and the discussion of Benefits of the Proposed Projects in section 9.3 of Chapter 9, Introduction to the Final EIR.

Response I21-15

The objectives of the SWP Interconnection are:

- Provide a near-term water supply source for the City to enhance supply reliability.
- Improve City water quality.
- Provide a backup supply for the City's other potential, long-term water supply options.
- Allow the City, Casitas and United to receive their SWP entitlements.
- Enable the City to deliver water to Calleguas during an imported water supply outage.

(SWP Interconnection Project, Final EIR, pp. 1-1 and 1-2.)

While the SWP Interconnection would have the potential to supply backup water for any element of the City's water supply, including the proposed projects, it is not necessary as an emergency backup supply. During necessary maintenance, or any emergency shutdown, the City's existing water supply could be used as a backup supply. The proposed projects and the SWP Interconnection are separate undertakings, each of which will be evaluated according to its own merits. Please see also the Master Response on the State Water Project Interconnection.

Response I21-16

The comment provides a table of the City's Capital Improvement Projects that shows cost associated with those potential projects. Several of the potential projects listed are independent of and not part of the proposed projects. Please see the Master Response on Project Costs for an updated estimate of the Proposed Projects and Alternatives.

Response I21-17

The comment includes a graph entitled "Lake Casitas Storage." The source of the graph is not provided. The graph projects storage in the lake through 2025, incorporating a straight-line reduction that eliminates all storage between approximately 2021 and 2025. The description of the graph states that the lake is "forecast" to be empty by 10/02/2014 "based on the current depletion rate." As discussed above, in Response I21-7, the current depletion rate would not continue, based on Casitas Municipal Water District's policies of reducing supplies during drought. In any event, if this projection were accurate, it would support the construction of the proposed projects based on the need for a stable, adequate water supply.

Response I21-18

Table 1-2, reproduced in the comment, was included in the EIR's explanation of the history of studies that provide the scientific basis for the determination of the Maximum Ecologically Protective Diversion Volume (MEPDV). The table shows 11 different discharge scenarios evaluated by the Phase 3 Estuary Study (Stillwater 2008). As explained in the DEIR on page 1-10, the table shows that the "current discharge" from the VWRP to the SCRE is 4.7 MGD during the critical dry-weather, closed-mouth condition, based on 2015/16 flows.

The Phase 3 Estuary Study, at page 226, explains the reason that the scientists employed the 205/16 dry-weather, closed-mouth flows:

For the purposes of evaluating future VWRP scenarios, the closed-mouth, dry-weather conditions occurring during 2015/2016 were selected to represent the most critical condition for assessing discharge scenarios as well as current conditions. The 2015/2016 conditions were selected since the berm morphology has receded since 2005 (Figure 3-1) so the 2015/2016 would best characterize the current SCRE conditions. Additionally, the influence of VWRP discharges on the SCRE under the below normal hydrologic conditions in 2015 and 2016 would potentially be larger since the VWRP discharges would make up a larger percentage of flows into the SCRE than in wetter water year types.

The 2015/2016 Average Dry Weather Flow (ADWF) entering the SCRE was approximately 4.7 MGD at the Wildlife Pond outlet (Site M-001A).

The comment states that the use of this figure underestimates the flow that must be diverted, citing the 7.76 MGD annual average flow figure from Table 1-1, "Historical Monthly Transfer Station Flow Values," on page 1-6. The calculation of the design capacity is explained on pages 2-17 through 2-18 of the DEIR:

VWRF effluent flows have varied historically based on hydrologic condition, season, and level of conservation. The new treated water supply is based conservatively on the 2016 (drought condition) flow used for the Phase 3 studies, and the required CDLs for Phase 1a, 1b and 2. However, to meet the CDL requirements the capacity of the AWPf must be greater to accommodate the variation in wastewater flows that have been observed in the historical record. The estimated total capacity for diversion and discharge to the SCRE (CDL) needs to be approximately 6.5 mgd. Therefore, at a CDL of 0.5 mgd, and the required AWPf capacity is 6 mgd. A 6 mgd AWPf would have the capacity to produce up to 5400 AFY even though the available flows to divert may not always reliably provide that much supply...

The Phase 1 project would be designed to deliver a minimum reliable supply of 4,000 AFY, and would also be designed to accommodate higher influent flows (up to 4 mgd for Phase 1a and 6 mgd for Phase 1b) to account for daily and monthly flow variability while still meeting the annual average CDL requirements during closed berm condition. As VWRF flows increase in the future, the CDL will be maintained and more flow will be diverted to the AWPf, dictating that the initial capacity be sized for greater than the minimum supply volume.

The diverted water to the AWPf would receive advanced treatment, producing a reliable minimum of approximately 3.6 MGD, or 4,000 AFY, of new potable water to be added to the water supply in Phase 1....The AWPf would also be designed to include additional treatment capacity to desalt and treat an additional 1.2 MGD (1,400 AFY) of groundwater from the Oxnard Plain Basin for Phase 1.

Thus, as the DEIR explains, capacity is based on the amount of diversion that is needed to protect the SCRE during closed-berm conditions, with additional capacity to accommodate the variation in wastewater flows. It is not based on the “average” flows, which include larger winter flows that can be released into the SCRE during open-mouthed conditions without harming the SCRE’s ecology.

The DEIR evaluates the diversion of 100 percent of the discharge of tertiary treated water during Phase 1, implementing a phased approach to diversion that commits to a CDL of 1.9 MGD by the end of year 2025, with a planned reduction to a CDL of 0 to 0.5 MGD during closed berm conditions by the end of year 2030. As Table ES-1 on page ES-3 shows, the CDL to the SCRE would be 1.9 million gallons per day (MGD) during Phase 1a, implemented by 2025, and 0–0.5 gallons in Phase 1b, implemented by 2030. This translates to a diversion of at least 90–100 percent of the 2016 dry-weather flows by the end of Phase 1. The Phase 1 flow targets may change somewhat if the Los Angeles Regional Water Quality Control Board (RWQCB) and other responsible agencies approve a different diversion volume than the current recommendation made by the SRP, which SRP concluded that discharges of treated wastewater from the VWRF to the SCRE should be limited to an annual average range of 0–0.5 MGD during closed berm conditions. If the RWQCB suggests a different diversion amount, the AWPf would be sized accordingly.

The DEIR has been modified in the following locations to correct errors:

Page 1-9

Specifically, the Regional Board recognized that the Consent Decree requires a determination, through scientific analysis, of the maximum ecologically protective diversion ~~discharge~~ volume (MEPDV).

Page 8-7 The following text has been added to the EIR:

MEPDV maximum ecologically ~~environmentally~~ protective diversion volume

Response I21-19

Please see responses I21-3 through I21-10. Please see also the 2015 UWMP, the 2018 CWRR, and the 2019 CWRR for a further discussion of the City's use and projected future use of water from the Ventura River.

Response I21-20

Phase 1 of the proposed projects would implement IPR, which is a method of injecting purified municipal wastewater into a groundwater basin and extracting it later to distribute as domestic water supply. Currently, regulations have not been finalized to achieve DPR permit approvals, but the SWRCB is actively in the process of developing regulations that may be in place concurrently with the development of the projects.

Response I21-21

One objective of the proposed projects is to address the issues cited by the City Council, by augmenting local water supply in an environmentally responsible and cost-efficient manner, providing a drought- and disaster-resilient water supply, and improving municipal supply groundwater quality within the service area. See DEIR at page ES-4, Project Objectives.

June Juett I22

Response I22-1

Mitigation Measure AQ-1, on page ES-17, incorporates numerous requirements to reduce dust generation during construction. The noise mitigation measures shown on pages ES-43 through ES-45 would ensure that noise levels during construction are minimized. Mitigation Measure TRAF-1, shown on pages ES-47 through ES-49, imposes requirements to reduce traffic impacts during construction.

To ensure that construction impacts are mitigated as set forth in the EIR, the City will prepare and implement a Mitigation Monitoring and Reporting Program (MMRP) to verify compliance with individual mitigation measures. The MMRP will list each mitigation measure for the projects, the appropriate timing for implementation of the mitigation, and the party responsible for its implementation. The table will also include a verification column to document that the mitigation has been implemented. In addition, during construction of the projects, the City will be required

to establish a 24/7 hotline telephone number to be used by the public to report undesirable project noise (Mitigation Measure NOISE-2).

Kioren Moss I23

Response I23-1

Please note that Phase 1 of the proposed projects would implement IPR, which is a method of injecting purified municipal wastewater into a groundwater basin and extracting it later to distribute as domestic water supply. Currently, regulations have not been finalized to achieve DPR permit approvals.

Please see the Master Response addressing Project Cost and Response I9-1, both of which address the reasons that the alternative of conveying tertiary-treated effluent to Oxnard would not meet most of the project objectives.

The use of tertiary treated water by United Water Conservation District (UWCD) or other agencies for purposes such as protection against sea water intrusion would not meet the project objectives of augmenting local water supply in an environmentally responsible and cost-efficient manner, providing a drought- and disaster-resilient water supply, and improving municipal supply groundwater quality within the service area. See DEIR at ES-4. Project Objectives. As the DEIR discusses on pages 6-13 – 6-14, surface spreading at UWCD was considered as a potential alternative, but was rejected from further consideration because regulatory requirements would lead to variations in the amount of water that could be diverted from the SCRE, because it could have environmental impacts on the Santa Clara River, and because the amount of water that would be credited is uncertain.

As discussed on page 1-19 of the DEIR, the State Water Project Interconnection is being pursued in parallel with the proposed projects to provide backup water supplies when available, but the interconnection is not considered a reliable, consistent water supply. Please see also the Master Response on the State Water Project Interconnection.

Response I23-2

The use of highly treated effluent to recharge groundwater does not meet all of the project objectives, including the local potable water supply objective. Please see also the response to comment I23-1. For a discussion of delivery to Oxnard, please see response to comments I9-1 and I9-2.

Mike Juett I24

Response I24-1

Please see Response I22-1.

Larry Permen I25

Response I25-1

Please see the Master Response on Water Quality and Public Health.

Laura Gulovsen I26

Response I26-1

Please see the Master Responses on Cost and on Water Quality and Public Health. Please see also Response I2-2, describing the availability of the DEIR.

Burt Handy I27

Response I27-1

Please see the Master Responses on Project Cost and on the State Water Project Interconnection. As discussed on page 1-19 of the DEIR, the State Water Project Interconnection is being pursued in parallel with the proposed projects to augment water supplies when available, but the interconnection is not considered a reliable, consistent water supply.

Chapter 6 of the DEIR evaluates five alternatives to the proposed projects, including Alternative 2: Zero Diversion Alternative, which would result in the construction of a desalination facility instead of the proposed projects. Under this alternative, the City would continue its current discharge to the SCRE and would be in violation of its NPDES Permit and Consent Decree, unless a new permit for discharge to the estuary could be negotiated. The lengthy permitting process for a desalination facility would likely delay implementation of a water supply solution until 2035, when the UWMP found that significant water shortages would occur. Therefore, this alternative likely would require the interim implementation of water rationing. See pages 6-17 – 6-18 of the DEIR. Table 6-1, on page 6-16 of the DEIR, compares all of the alternatives to the proposed projects.

Response I27-2

As described in Chapter 2, Project Description on pages 2-17 – 2-18, the new treated water supply is based conservatively on the 2016 (drought condition) flow condition used for the Phase 3 Estuary Study. Please see also Response I21-18.

As shown in Table 2-2 on page 2-18, Phase 1a of the proposed projects would yield a minimum annual average of 2.5 million gallons per day (MGD) in Phase 1a and an additional 1.1 MGD in Phase 1b. The AWP capacity would be designed to accept diverted VWRP tertiary discharges up to 6.0 million gallons a day (MGD), which produces 5,400 AFY (4.7 MGD) of purified water, after the concentrate wastes are removed.

The calculation in the comment applies a loss to a flow value from the VWRP. The values of available water and purified water production presented in Chapter 2 were based on measured flows from the outflow of the ponds into the SCRE, thereby accounting for loss in the ponds. The measured flows discharged into the SCRE are a better estimate of available water for purification than the calculation of available flow provided in the comment.

The calculation in the comment applies the loss in the ponds to the proposed wetlands. This is an incorrect assumption because it assumes that the loss in the proposed wetlands will be the same (on a unit basis) as the loss in the ponds. The wetlands would be constructed with a confining

layer to minimize percolation, and therefore the loss would effectively be due to evaporation only. While there would be some evaporative loss in the treatment wetlands, the evaporative loss in Ventura is expected to be relatively low. The Phase 3 Study includes a time series of daily evaporation rates from several sites. Values typically range from 0.05 inches per day to 0.25 inches per day on a seasonal basis. Using the range of 0.05 inches/day to 0.25 inches/day, the evaporative loss in the 35 acres of wetlands is estimated at 0.04 MGD to 0.2 MGD. This would be an additional loss of available water for purification, per requirement for maintaining the CDL to the SCRE. However, this loss, even at the high end of the range, is less than 5 percent of estimated purified water production and would be considered negligible.

The calculation in the comment also includes a reduction in available flow for purification due to diversion to recycled water (landscape irrigation). However, the flow diverted to landscape irrigation occurs upstream of the VWRP effluent meter and the meter from the ponds to the SCRE. The available flow values presented in Chapter 2 already account for the diversion of recycled water.

Response I27-3

Please see the Master Response on Project Cost, which provides information on the cost of the proposed projects compared to alternatives.

Suzanne McCombs I28

Response I28-1

The DEIR discusses potentially competing species needs in several chapters. As noted on DEIR page 1-16, the SRP focused on four listed species that rely on the SCRE for habitat. The SRP determined that the tidewater goby was the species that is most reliant on the SCRE for all aspects of its life history. However, the SRP also considered impacts on steelhead, western snowy plover, and California least tern for the life stages supported by the SCRE. As the DEIR states, the SRP Final Report found that “other beneficial uses would not be impaired by providing conditions supporting the aquatic beneficial uses. Moreover, the SRP believes that the aquatic life beneficial uses are the most sensitive to potential changes in discharge from the VWRP, and that protecting these uses will translate to overall protection of all of the SCRE beneficial uses.”

Consequently, the SRP Report indicates that SCRE-dependent species would all benefit from the projects, while other beneficial uses of the SCRE would not be harmed.

Section 3.4, Biological Resources, further evaluates the impacts of implementing the proposed project on endangered and protected species and identifies mitigation measure to offset potential impacts. The SRP Final Report can be found on the Ventura Water’s web site, <https://ca-ventura.civicplus.com/1081/6635/Library-of-Reports?activeLiveTab=widgets>

Response I28-2

The EIR describes the Consent Decree on page 1.9 and subsequent sections and describes how the proposed projects were designed to comply with the Consent Decree. As the comment states, the No Project Alternative, which would not meet Consent Decree requirements or state law,

likely would entail substantial litigation costs and penalties. See Master Response on Project Cost.

Response I28-3

Alternative 5, described in Section 6.3.5 (see DEIR pp. 6-21 – 6-22), would convey tertiary-treated effluent to Oxnard. The EIR concludes that the Alternative would not meet most of the project objectives, including the objective of providing future water supply to the City. The analysis notes that desalination would be required to supplement the future water supply. The Master Response on Project Cost provides information on the comparative costs of alternatives.

Response I28-4

The SWP Interconnection project would not augment water supplies, but would provide make up water to compensate for the City's reduced access to local supplies when available. Because the source cannot be relied upon from year to year, it is not included as a reliable supply to meet actual and projected demands. The proposed projects would maximize the use of groundwater storage to augment local water supplies.

Response I28-5

The DEIR states on page 2-20 that development of an IPR project would be implemented in Phase 1 if DPR is not allowed by the California DDW. Because DPR regulations have not yet been adopted, IPR would be implemented during Phase 1 of the proposed projects.

Response I28-6

On page 2-38, the DEIR states that implementation of ocean water desalination under Phase 2 would require subsequent CEQA approval. The EIR also confirms on page 3.19-40 that ocean water desalination would require more energy than the IPR project. Table 3.19-6 summarizes energy requirements for Phase 1 and Phase 2. Please see also the Master Response on Project Cost, which discusses the cost of desalination.

Response I28-7

Alternative 5 in the DEIR (Section 6.3.5, pp. 6-21 through 6-22) analyzes conveying tertiary-treated water from the VWRP in the amount of the approved MEPDV. The water would be conveyed by pipeline approximately 10 miles to the Oxnard Wastewater Treatment Plant. The treated water would be available to the City of Oxnard to reuse for nonlocal supply offset or to supplement the City of Oxnard's supply. Response to comments I9-1 and I9-2 address the suggestion that Ventura could repurchase this water from Oxnard. It is anticipated the cost would exceed that of the proposed projects, with no environmental benefits.

Response I28-8

A possible connection to the Calleguas outfall is one of the options for the proposed projects, as described in Chapter 2, Project Description on page 2-35. Figure 2-14 identifies the potential pipeline route. The EIR evaluates a concentrate discharge facility that would include a new ocean outfall or a connection to the existing Calleguas Salinity Management Pipeline ocean outfall.

Duane Georgeson I29

Response I29-1

The Master Response on Project Cost provides updated information on costs and service rates.

Response I29-2

Please see the Master Response on Project Cost.

Response I29-3

Please see the Master Response on Project Cost, which addresses the costs of the proposed projects.

Response I29-4

The Estuary Special Studies Phase 2: Facilities Planning Study for Expanding Recycled Water Delivery Report provided an initial review of the economic feasibility of implementing a potable reuse project. Please see the Master Response on Project Cost for updated preliminary cost estimates for the proposed projects.

Response I29-5

The 2018 VenturaWaterPure Direct Potable Water Reuse Demonstration Project Summary Report was available, without charge, on Ventura Water's web site at <https://ca-ventura.civicplus.com/1081/6635/Library-of-Reports?activeLiveTab=widgets>. The commenter was advised that the documents were available on line without charge, or photocopied at the City's usual rate.

Burt Handy I30

Response I30-1

Please see Response I27-2.

Response I30-2

The Master Response on Project Cost discusses the costs of the proposed projects, including maintenance and operations costs.

Response I30-3

The cost of IPR is included within the cost of the proposed projects, as explained in the Master Response on Project Cost. IPR requires that injected water remain underground for a sufficient period of time to meet State of California regulatory requirements before being available for extraction via either the same wells or downstream wells.an appropriate retention time (DEIR, p. 2-20). As the DEIR states on page 2-11, monitoring wells would be installed to comply with potable reuse permitting requirements and to monitor water quality in the groundwater basin(s). Injected water would not contaminate other water in the aquifer.

Response I30-4

Phase 2 of the proposed projects would provide additional water through desalination. Table 2-2 of the Project Description, on page 2-18 of the DEIR, summarizes the City’s projected water needs. Phase 1 of the proposed projects would be designed to deliver a minimum reliable supply of 4,000 AFY. The AWPf would also be designed to include additional treatment capacity to desalt and treat an additional 1.2 MGD (1,400 AFY) of groundwater from the Oxnard Plain Basin for Phase 1. Combining the 4,000 AFY of reliable recycled water with the 1,400 AFY of treated groundwater, the Phase 1 AWPf treatment would reliably produce a minimum of 4.8 MGD (5,400 AFY) of purified water for potable distribution and use. The groundwater supplies would be from existing groundwater allocation that the City has rights to and would not constitute a new water supply.

Since 4,000 AFY of new reliable water supplies is approximately 1,400 AFY below the future 2035 – 2040 dry-weather demand deficit of 5,400 AFY identified in the UWMP, the City would need to implement Phase 2 of the projects. As shown in Table 2-2 of the Project Description, the combined Phase 1 and Phase 2 AWPf would be designed to produce 6.7 MGD (7,400 AFY), including 5,400 AFY of new water supply, and 2,000 AFY of treated groundwater. The 2019 CWRR modifies the projected volumes slightly, as shown in Table 4-3 included in response to comment I21-4.

Response I30-5

The commenter asks if the State Water Project water allocation can be conveyed in the Metropolitan pipeline. The City has evaluated the State Water Project Interconnection Pipeline in a separate EIR. The separate EIR evaluates the most efficient ways of accessing SWP by wheeling it through Metropolitan’s and Calleguas’ systems.

The reference to “in-lieu delivery” assumes that this aspect of the SWP Interconnection Project, if approved, would reduce overall water supplies. This is not the case. “In-lieu delivery” means that water from the SWP would be delivered to a Ventura Water customer in the Casitas service area, rather than directly delivered to Casitas, and this would offset demand on the Casitas system. SWP Interconnection Final EIR, p. 1-1. The source of water might change, but the quantity of water supply would not.

Response I30-6

Please see Response I16-1 and the Master Response on the State Water Project Interconnection.

Response I30-7

The source of the cost estimates provided in the comment is not provided. The costs provided are substantially higher than the City’s current estimates developed by the City that are summarized in Master Response on Project Cost.

Response I30-8

Please see Response I30-6.

Response I30-9

Please see Response I30-6.

Response I30-10

Please see Response I30-6.

Response I30-11

The proposed project includes a 4.5 MG wet weather storage facility that would provide storage during periods of high flows when the ocean berm is not yet breached. It will not be used to store recycled water. Response I18-3 describes the City's consideration of using recycled water for localized (urban and agricultural) irrigation, and the reasons that this alternative was determined not to meet most of the project objectives.

Response I30-12

Section 6.1.2, Project Objectives, states that one objective of the proposed projects is to augment local water supply in an environmentally responsible and cost-efficient manner. It is not clear what statement in the DEIR is cited; section 7.2 lists EIR authors and consultants.

Please see Response I30-6 and the Master Response on the State Water Project Interconnection, which explain that the SWP Interconnection would help to provide backup City water supplies but would not provide a reliable new water source.

Response I30-13

The project objectives include the need to supplement the City's water supply. This need is based on the 2015 UWMP as further substantiated in the annual CWRRs. Tables 1-4 and 1-5 are taken directly from the City of Ventura 2015 Urban Water Management Plan (UWMP) Table 6-1. Section 3.4 of the 2015 UWMP provides a complete discussion of the groundwater sources and Table 3-4 of the 2015 UWMP provides further detail regarding the anticipated groundwater supplies during Normal, Single-Dry, and Multiple Dry Years, by groundwater source. The UWMP can be found on the Ventura Water's web site, <https://ca-ventura.civicplus.com/1081/6635/Library-of-Reports?activeLiveTab=widgets>.

Response I30-14

The 2.8 million gallons per day (MGD) available for diversion in Phase 1a, as shown in Table 2-1, is derived from 2016 data during low flow, dry weather conditions corresponding to a 4.7 million gallons per day discharge. Please see Response I27-2. Please note that Table 2-1 shows the quantity of water to be diverted. Table 2-2 shows annual average objectives for potable water.

Response I30-15

Table 2-2 lists the production yield anticipated based on the low flow, dry weather flow recorded in 2016 of 4.7 million gallons per day. Table 2-4 summarizes the corresponding concentrate discharge volumes. See response to comment I27-2.

Andrew Schneider I31

Response I31-1

Please see the Master Response on Project Cost and the Master Response on Water Quality and Public Health.

Comments Submitted During Water Commission Meeting

David Johnson I32

Response I32-1

The EIR identifies sea level rise impacts on page 3.9-22. The EIR concludes that the AWPf would be located inland from the coastal hazards associated with sea level rise including tsunamis. The ocean outfall would be located underground and would be protected from future coastal erosion. The City has not conducted a coastal hazard assessment of the existing ponds.

Randall Novak I33

Response I33-1

Table 2-9 of the DEIR, on page 2-60, identifies the CCC (California Coastal Commission) as a regulatory agency. The role of the CCC discussed on page 3.4-33, 3.9-25, 3.10-9, and 3.16-5. If the City certifies the EIR and approves the proposed projects, the City will coordinate with the CCC for a coastal development permit for development within the coastal zone. The components that would require a coastal development permit include the Harbor Boulevard AWPf site, concentrate outfall, treatment wetland, VWRf improvements and pipelines within the coastal zone. In addition, the Harbor Boulevard site may require an amendment to the Local Coastal Plan.

Response I33-2

As discussed on pages 3.13-23 – 3.13-25 of the DEIR, the horizontal directional drilling (HDD) operations at Marina Park for the construction of the ocean outfall may require 24-hour construction for several weeks and would result in noise levels up to 85 dBA at 25 feet. The pullback of the pipe from the shore to the diffuser location on the ocean floor, would be the phase that requires operating 24 hours per day. The pullback is the final stage of the HDD process. Pullback operation starts after the borehole is completed and has been enlarged to the required diameter. After this, a pipe is inserted into the enlarged borehole, 24-hour operations may be required because once the pipe pullback begins, the operation must be continuous until it is complete in order to avoid a potential collapse in the previously bored hole. A collapse would require the contractor to excavate at the point of collapse and would likely result in significant delays. Construction of the new outfall pipelines would therefore exceed City nighttime noise standards of 45 dBA. Implementation of Mitigation Measures NOISE-1, NOISE-2, NOISE-3, and NOISE-4 (see DEIR pages 3.13-17 – 3.13-18 and 3.13-25) would lessen the impacts of construction. Effective noise barriers, generator housings, and mufflers could reduce noise levels by up to a combined 16 dBA and reducing outfall construction noise levels to 69 dBA. However, since noise levels may still be greater than 45 dBA during nighttime hours and relocation of

affected residents is voluntary, the impact would be considered significant and unavoidable, lasting for a period of a few weeks. Once installed, no noise impacts would occur during operations.

Response I33-3

The commenter states that the EIR does not address the proposed projects' potential effect on ocean bacterial levels. As discussed in Section 3.9, Hydrology and Water Quality, on pages 3.9-19 through 3.19-33, the Ocean Plan establishes a set of narrative and numerical water quality objectives to protect beneficial uses. These objectives are based on bacterial, physical, chemical, and biological characteristics as well as radioactivity. The water quality objectives in the Ocean Plan apply to all receiving waters under the jurisdiction of the plan and are established for the protection of aquatic life and for the protection of human health from both carcinogens and noncarcinogens. The water quality objectives detail 21 objectives for protecting aquatic life, 20 for protecting human health from noncarcinogens, and 42 for protecting human health from exposure to carcinogens. The Ocean Plan also includes an implementation program for achieving water quality objectives. Effluent limitations for discharges regulated under the NPDES permit system incorporate the Ocean Plan water quality objectives for the protection of marine waters.

The Ocean Plan water quality objectives are to be met after the initial dilution of a discharge into the ocean. Initial Dilution is defined as the process which results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For a submerged buoyant discharge, characteristic of Phase 1 of the proposed projects and most municipal and industrial wastes that are released from the submarine outfalls, initial dilution is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally. For non-buoyant (also referred to as negatively buoyant, or dense) discharges, turbulent mixing results primarily from the momentum of the discharge and initial dilution in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution. Initial dilution occurs in an area known as the zone of initial dilution (ZID). Typically, constituent concentrations are permitted to exceed water quality objectives within the ZID, which is limited in size. Thus, in the case of the proposed projects, the Ocean Plan water quality objectives would apply at the edge or boundary of the ZID. Dilution occurring within the ZID from an operational discharge is conservatively calculated as the minimum probable initial dilution (D_m). The water quality objectives established in the Ocean Plan are considered in the context of the calculated D_m to derive the NPDES effluent limits for a wastewater discharge in-pipe (i.e., prior to ocean dilution).

Response I33-4

The proposed projects would include a system of conveyance pipelines to transfer treated water through the service area. On average, 100–200 feet of pipeline would be installed per day. Construction would involve trenching using a conventional cut-and-cover technique. Trenches would be backfilled at the end of each work day or temporarily closed by covering with steel

trench plates. As discussed on DEIR page 2-45, excavated suitable soils would be reused as backfill and other soils would be disposed of off-site.

Construction would occur mainly Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m. Section 10.650.150 of the municipal code exempts construction noise that occurs between 7:00 a.m. and 8:00 p.m. from noise standards. The construction activity would result in short-term construction noise in the immediate vicinity. The EIR includes mitigation measures that would lessen construction noise and ensure that impacts at sensitive receptors would be minimized. Mitigation Measure NOISE-1 requires that construction equipment be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices. Mitigation Measure NOISE-2 requires that the City provide a qualified “Noise Disturbance Coordinator” to respond to local complaints, should they arise. See DEIR pages 3.13-17 – 3.13-18. Further, the EIR requires the preparation of a traffic control plan (Mitigation Measure TRAF-1, pages 3.17-13 – 3.17-14)) that would provide detours around construction activities, if road closures are required. The Traffic Control Plan would also include a scheduling plan showing the hours of operation to minimize congestion during the peak hours and special events. The scheduling plan would ensure that congestion and traffic delay are not substantially increased as a result of the construction activities.

Response I33-5

Please see Response I20-4, addressing compatibility with neighboring land uses. As discussed in Section 3.1, Aesthetics, the proposed AWPf facilities and wells would look different from the vacant land and agricultural fields that currently exist within each proposed parcel. However, there are no sensitive views that would be impacted by the construction of the AWPf or wells. Nevertheless, implementation of Mitigation Measure AES-2 would ensure that the structures associated with the AWPf and wells be constructed of similar material or painted to match the character of the particular existing surrounding environment. Landscaping for vegetative screening would also help to ensure that the facilities are consistent with the character of surrounding areas.

Response I33-6

Please see Response I20-5. The AWPf would be treating tertiary-treated water, not raw wastewater. The effluent entering the new AWPf would be similar to the water currently used to irrigate the golf course. The project does not include any of the land uses identified by the VCAPCD as being associated with odors (such as wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, asphalt batch plants, painting and coating operations, fiberglass operations, food processing facilities, feed lots/dairies, petroleum facilities, chemical manufacturing operations and facilities, and rendering plants). The project would not create objectionable odors affecting the nearby residents.

Response I33-6

Please see the Master Response on Project Cost.

Mike Anderson I34

Response I34-1

Please see the Master Response on Project Cost.

Response I34-2

A five-year extension would result in many of the impacts addressed in the No Project Alternative, as discussed in the DEIR in section 6.3.1, on page 6-15. A five-year delay would potentially result in a violation of the Consent Decree and the NPDES permit. Delay also would ensure ongoing water shortage; the foreseeable future would include water rationing and up to 50 percent demand reduction. Please see also the Master Response on Project Cost.

Response I34-3

Please see the Master Response on Project Cost.

Matthew Doyle I35

Response I35-1

The comment supports potable reuse and groundwater injection.

Daniel Cormode I36

Response I36-1

The commenter submitted a comment letter to the Water Commission. The comment letter is addressed in Response I21.

CHAPTER 11

Changes and Errata

11.1 Introduction

This chapter describes the modifications that were made between the Draft Environmental Impact Report (DEIR) and the Final Environmental Impact Report (Final EIR). Modifications in the final document include all revisions related to public comments, updates, and clarifications, as determined necessary by the City of San Buenaventura (Ventura, or City), the lead agency. Chapter 11.2 references these revisions. None of the revisions result in changes to significance findings in the DEIR.

Some of the modifications in the Final EIR are not included in Chapter 11.2. Three new chapters are added to the Final EIR. Chapter 9, which includes an introduction to the Final EIR; Chapter 10, which includes the comments received during the 45-day comment period for the DEIR and the responses to those comments; and Chapter 11, which presents changes and errata that were addressed during the preparation of the Final EIR.

It should be noted that nonsubstantive changes that do not alter the meaning of the text, including errors in grammar, punctuation, spelling, acronyms, references, and typography, have been corrected for the final documents but are not included in this chapter.

11.2 Modifications to the DEIR

Revisions to the text as presented herein are incorporated into the Final EIR. Underlines indicate where additions were made to the original text. ~~Strikeout~~ indicates where the original text was deleted. The locations of revisions are identified according to section number and/or heading from the DEIR; table and figure numbers from the DEIR are used where applicable.

Executive Summary

- | | |
|------------|---|
| Table ES-3 | Table ES-3 was reformatted to have the project components line up with the proper Environmental Impact statement and Mitigation Measures. |
| Table ES-3 | CUL-5: In the event of the unanticipated discovery of archaeological materials during implementation of the proposed projects including offshore activities, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City on the significance of the resource. |

Table ES-37 On page ES-37, the text under the “Significance Determination” column for Impact LU 3.10-1 is revised to state as follows:

Less than Significant with Mitigation

AES-1 through AES-3, AG-1 (Harbor Boulevard and Portola Road AWP), and CUL-1 through CUL-5

Table ES-3 The following text has been added to the EIR:

Tribal Cultural Resources			
<p>CUL 3.18-1: The proposed projects could result in a significant impact if they would cause a substantial adverse change in the significance of a tribal cultural resource, defined in § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in § 5020.1(k), or</p> <p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe</p>	<p><u>Implement Mitigation Measure</u> <u>CUL- 4 and 5</u></p>	<p><u>Concentrate Discharge Facility</u></p>	<p><u>Less than Significant with Mitigation</u> <u>CUL:4 and -5</u></p>

Introduction

Page 1-9 The following text has been added to the EIR:

Specifically, the Regional Board recognized that the Consent Decree requires a determination, through scientific analysis, of the maximum ecologically protective diversion discharge volume (MEPDV).

Page 1-11 The following text has been added to the EIR:

NMFS published a Recovery Plan for endangered Southern California Steelhead in January 2012. As required by Section 4(f) of the Endangered Species Act, the recovery plan delineates reasonable actions that are believed to be required to recover and/or provide future protections for endangered Southern California steelhead.

Project Description

Page 2-4 The following footnote has been added to the EIR following the first reference to the abbreviation “CDL”.¹

¹All references to “discharges” and “discharge levels” in the EIR and these responses refer to average annual discharge levels during closed-berm conditions, calculated based on a water year (Oct. 1 to Sept. 30), unless open berm conditions are specifically mentioned, in which case discharge levels refer to average annual discharge levels during the steelhead migratory period when the berm has been opened due to high flows in the Santa Clara River.

Page 2-7 The text of the EIR is revised to state as follows:

During Phase 1A, an average annual continued discharge level (CDL) of 1.9 MGD to the SCRE will be maintained during closed berm conditions pursuant to recommendations of USFWS, NMFS, and CDFW, based upon their review and analysis of the Phase 3 Estuary Study, the SRP Report, and the TRT recommendations. It is anticipated that the compliance schedule in the VWRf NPDES permit renewal (scheduled for issuance this year) will establish an interim discharge limitation for flows to the SCRE of 1.9 MGD on an average annual basis, to be attained as soon as practicable, but not later than the end of 2025, based on the recommendations of USFWS, NMFS, and CDFW. During Phase 1B, a reduction in the CDL to 0 to 0.5 MGD on an average annual basis would be attained, based on the combined recommendations of the SRP, TRT, USFWS, NMFS, and CDFW, and subject to oversight by USFWS, NMFS and CDFW. It is anticipated that the updated NPDES permit issued by the RWQCB will authorize implementation of Phase 1A and include a reduction monitoring and implementation plan to evaluate future implementation of Phase 1B, which will require approval from the RWQCB Executive Officer. in the updated NPDES permit that will authorize implementation of Phase 1A the compliance schedule in the VWRf NPDES permit renewal (scheduled for issuance this year) will establish a final discharge limitation for flows to the SCRE not to exceed 0.5 MGD on an average annual basis, to be attained as soon as practicable, but not later than the end of 2030, based on these recommendations and subject to such oversight. The City is anticipating that Phase 1B could be implemented by 2030 pending RWQCB permit approval.

Page 2-17 During Phase 1A, an average annual continued discharge level (CDL) of 1.9 MGD (calculated on the basis of a water year, i.e., October 1 to September 30) to the SCRE will be maintained during closed-berm conditions pursuant to recommendations of USFWS, NMFS, and CDFW, based upon their review and analysis of the Phase 3 Estuary Study, the SRP Report, and the TRT recommendations. It is anticipated that ~~the compliance schedule in the VWRf NPDES permit renewal (scheduled for issuance this year) will~~ require the City to

~~limit establish an interim discharge limitation for flows~~ discharges to the SCRE during closed-berm conditions to a CDL of 1.9 MGD on an average annual basis, to be attained as soon as practicable, but not later than the end of 2025, based on the recommendations of USFWS, NMFS, and CDFW. During Phase 1B, ~~by 2030,~~ a reduction ~~in~~ during closed-berm conditions to ~~the a~~ CDL ~~to of~~ 0 to 0.5 MGD on an average annual basis would be attained, based on the combined recommendations of the SRP, TRT, USFWS, NMFS, and CDFW, and subject to oversight by USFWS, NMFS and CDFW. It is anticipated that ~~the impending~~ updated NPDES permit renewal when issued by the RWQCB, would address discharge reductions on this schedule through the City's preparation and submission to the Regional Board of a "transition plan" and/or "discharge reduction monitoring and implementation plan," which would require approval from the RWQCB Executive Officer, and would include periodic progress reports towards discharge goals, as well as any environmental issues encountered in reducing discharges, as described in BIO-5 and BIO-6. in the updated NPDES permit that will authorize implementation of Phase 1A the compliance schedule in the VWRP NPDES permit renewal (scheduled for issuance this year) will establish a final discharge limitation for flows to the SCRE not to exceed 0.5 MGD on an average annual basis, to be attained as soon as practicable, but not later than the end of 2030, based on these recommendations and subject to such

Table 2-6 The heading of Table 2-6 on page 2-41 of the EIR has been revised as follows:

**TABLE 2-6
CONSTRUCTION ASSUMPTIONS FOR THE PROPOSED PROJECT**

Project Site/Component	Estimated Construction Equipment (Quantity)	<u>Daily Construction Vehicle Trips, Total Truck Trips (roundtrips)</u>	Estimated Construction Duration
-------------------------------	--	--	--

Table 2-6A The EIR has been amended on page 2-44 to include an estimate of trip generation information for Phase 2, as shown below:

<u>Project Site/Component</u>	<u>Estimated Construction Equipment (Quantity)</u>	<u>Daily Construction Vehicle Trips, Total Truck Trips (roundtrips)</u>
<u>Phase 2 VenturaWaterPure</u>		
<u>Upgrades to Advanced Water Purification Facility</u>	<u>Construction:</u> <ul style="list-style-type: none"> • <u>Crane (1)</u> • <u>Forklifts (3)</u> • <u>Generator (1)</u> • <u>Tractors/Loaders / Backhoes (3)</u> • <u>Welder (1)</u> 	<u>Construction:</u> <ul style="list-style-type: none"> • <u>Worker (100)</u> • <u>Truck Trips (750)</u>

Project Site/Component	Estimated Construction Equipment (Quantity)	Daily Construction Vehicle Trips, Total Truck Trips (roundtrips)
	<u>Architectural Coating</u> <ul style="list-style-type: none"> • <u>Air Compressor (1)</u> • <u>Scissor Lift</u> • <u>Concrete Delivery Truck</u> • <u>Wiring Pulling Machine</u> 	<u>Architectural Coating</u> <ul style="list-style-type: none"> • <u>Worker (60)</u>
<u>Ocean Desalination Intake Facility</u>	<u>Intake Installation</u> <ul style="list-style-type: none"> • <u>Concrete/Industrial Saw (1)</u> • <u>Excavators (3)</u> • <u>Grader (1)</u> • <u>Rubber Tired Dozers (2)</u> 	<u>Excavation/Trenching</u> <ul style="list-style-type: none"> • <u>Worker (25)</u> • <u>Haul (500)</u>
	<u>HDD</u> <ul style="list-style-type: none"> • <u>Drill Rig (1)</u> 	<u>HDD</u> <ul style="list-style-type: none"> • <u>Worker (10)</u> • <u>Haul (500)</u>
		<u>Total Truck Trips - 1,545</u>

Page 2-50 The text of the EIR has been revised to state as follows:

The new high-density, concrete-coated steel outfall pipe would rest on the seafloor. If additional geotechnical investigations indicate piles would be required ~~piles to secure~~ prevent the outfall pipe from sinking into the ocean sea floor, ~~V~~yibratory pile installation would be utilized to minimize noise effects on marine life.

Page 2-59 The following text has been added to the EIR:

Concentrate Discharge Facility

Pipeline inspection, maintenance, and repairs would occur infrequently. Typical pipeline maintenance would entail the inspection and/or maintenance of valves and corrosion control. Cleaning of the diffuser would be conducted by divers using hand-held tools.

The frequency of maintenance activities would depend on the results of regular inspections. Periodic cleaning of the ports is routinely conducted for ocean discharge facilities and would be described in detail in permit conditions. Periodic inspections and cleaning of the diffuser would occur approximately once per year and involve one or two 20-40 foot boats conveying a small work crew to the outfall area. The inspection likely would be conducted within one or two days per year at most.

Page 2-60 Under the column “Reason for Permit or Approval,” the text of the entry for Ventura Local Agency Formation Commission is revised as follows:

If selected for the AWP, Harbor Boulevard or Portola Road site annexation from the unincorporated County to the City.

Table 2-9 Table 2-9 has been revised as follows:

TABLE 2-9
PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS*

Regulatory Agency	Permit	Reason for Permit or Approval
Bureau of Reclamation	Grant Approval	• Grant funding/NEPA compliance
U.S. Army Corps of Engineers	CWA Section 404	• Impacts to Waters of the United States from project components
U.S. Army Corps of Engineers	Rivers and Harbors Act Section 10	• Impacts from concentrate discharge and ocean intake infrastructure offshore
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 Consultation	• Impacts to listed species and critical habitats (diversion of VWRF discharges from SCRE; construction and operation of project components)
National Marine Fisheries Service	Endangered Species Act Section 7 Consultation	• Impacts to listed species and critical habitats (diversion of VWRF discharges from SCRE; construction and operation of project components)
California Department of Fish and Wildlife	California Water Code 1602 – Streambed or Lake Alteration Agreement	• Impacts to jurisdictional features such as bed and bank of streams, rivers, lakes and features subject to Fish and Game Code Section 1602 from project components (pipelines, storage tanks, constructed wetlands etc.)
	California Endangered Species Act 2081 or 2080.1 consistency determination	• Impacts to listed and fully protected species, as well as species of special concern from VWRF discharge diversions and construction and operation of project components
State Water Resources Control Board	Groundwater Recharge with Recycled Water Project Approval	• For IPR recycled water injection into groundwater (with RWQCB)
	Direct Potable Reuse Project Approval	• For DPR connection to potable drinking water system (with RWQCB)
	Water Code 1211 Petition	• For a change in use. Assessment to beneficial uses from VWRF discharge diversion
California Coastal Commission	Coastal Development Permit	<ul style="list-style-type: none"> • Development within coastal zone, including Harbor Boulevard AWP site, outfall, intake, treatment wetland, VWRF improvements and pipelines within the Coastal Zone (County of Ventura, cities of Ventura, Oxnard and Port Hueneme) • LCP Amendment for Harbor Site
State Lands Commission	State Tideland Lease Agreement	• Development on state land, including concentrate outfall and ocean water intake
California Department of Transportation	Encroachment Permit	• Installing pipelines in Caltrans roadways
Los Angeles Regional Water Quality Control Board	CWA 401 Water Quality Certification	• Consistency determination with US Army Corps of Engineers (USACE) 404 Permit for impacts to waters of the US that are also waters of the State
	Waste Discharge Requirements	• For discharge of fill into waters of the State that are not also waters of the US

Regulatory Agency	Permit	Reason for Permit or Approval
	Groundwater Recharge with Recycled Water Project Approval	<ul style="list-style-type: none"> For IPR recycled water injection into groundwater (with SWRCB)
	Direct Potable Reuse Project Approval	<ul style="list-style-type: none"> For DPR connection to potable drinking water system (with SWRCB)
	VWRF Effluent Discharge NPDES	<ul style="list-style-type: none"> For change in discharge to SCRE
	Ocean NPDES Discharge Permit	<ul style="list-style-type: none"> For discharge of concentrate to ocean
	NPDES Low Threat Discharge Permit	<ul style="list-style-type: none"> Backwash from flushing wells
	State-wide Stormwater NPDES for construction and industrial facilities	<ul style="list-style-type: none"> For runoff from construction activities For runoff from industrial facilities, such as AWPf
County of Ventura Department of Public Works	Well Permit	<ul style="list-style-type: none"> For construction of new wells in the Oxnard Basin
Ventura County Air Pollution Control District	Title V	<ul style="list-style-type: none"> Treatment plant emissions Diesel backup generators
Local Jurisdictions	Encroachment Permits	<ul style="list-style-type: none"> Public rights-of-way and private property access and use
Fox Canyon Groundwater Management Agency	<u>Groundwater ASR Project Approval Well Permit</u>	<ul style="list-style-type: none"> Construction of new wells in the Oxnard Plain Basin Well sites <u>for ASR 2 and 3</u>
Ventura Local Agency Formation Commission	Site annexation	<ul style="list-style-type: none"> Harbor Boulevard site annexation from the unincorporated County to the City <u>Portola Road site annexation from the unincorporated County to the City</u>
<u>Ventura County Public Works Agency</u>	<u>Floodplain Development Permit</u>	<ul style="list-style-type: none"> <u>Well sites 2 and 3, Calleguas Salinity Management Pipeline Connection 1, and the brine discharge pipeline would be located within a FEMA Special Flood Hazard Area.</u>
	<u>Encroachment Permit</u>	<ul style="list-style-type: none"> <u>Any facility within the District's Jurisdiction</u>
	<u>No Rise Certificate</u>	<ul style="list-style-type: none"> <u>Calleguas Salinity Management Pipeline Connection 1 crosses a regulatory floodway</u>

Figure 2-2 Figure 2-2 has been modified to show the location of the existing SMP outfall.

Aesthetics

Page 3.1-3 The text of the EIR is revised to state as follows:

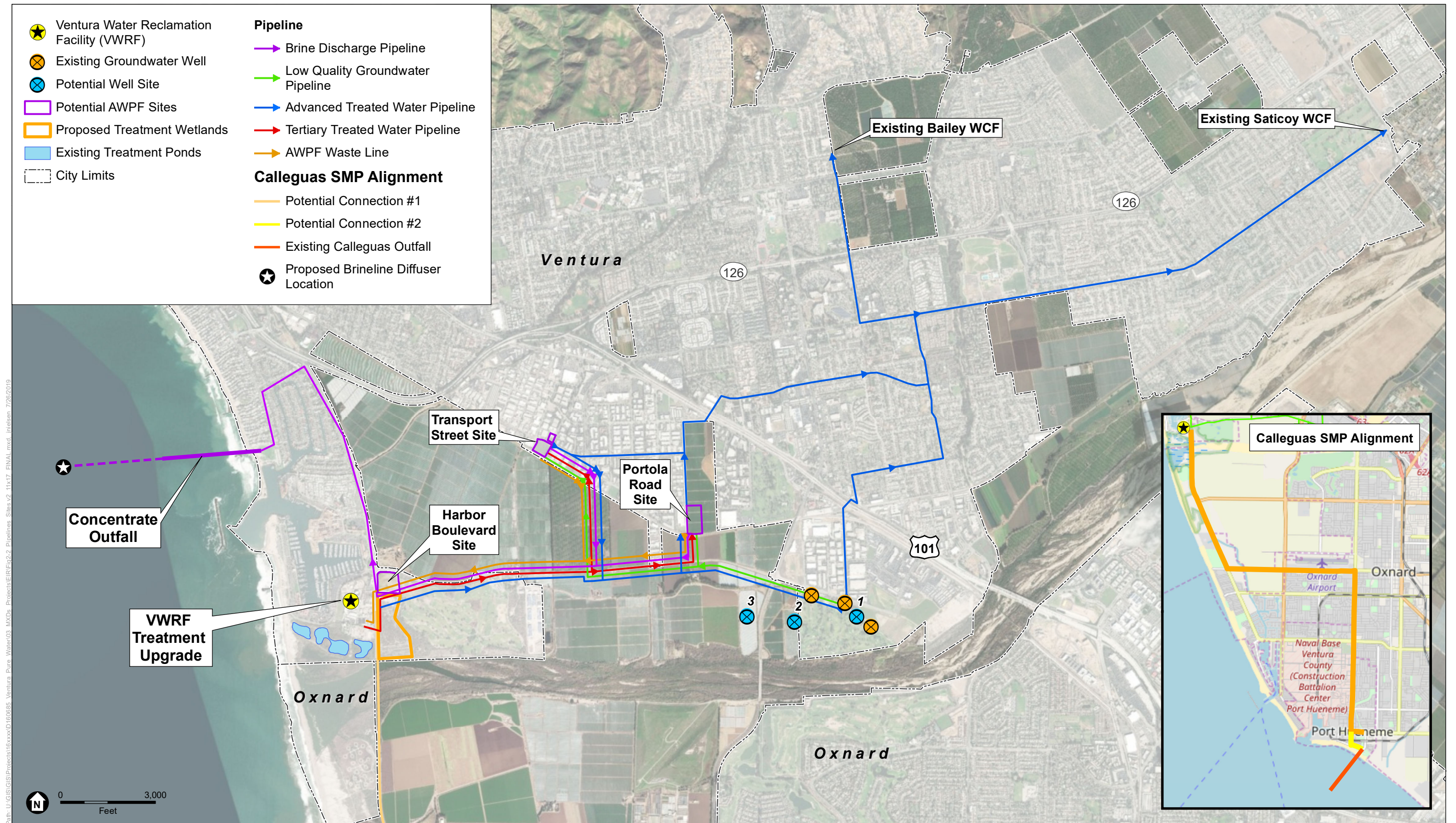
Advanced Water Purification Facility

- Harbor Boulevard Site:** The Harbor Boulevard Advanced Water Purification Facility (AWPF) site would be located within a vacant area of land within Ventura County. If the site is selected, it would be annexed to the City. ~~designated as coastal open space~~ The site is located within the coastal zone and is designated Commercial Planned-Tourist Oriented under the City's Local Coastal Plan. The site is located on the southeast corner of the intersection of Harbor Boulevard and Olivas Park Drive. The Harbor Boulevard site is bounded by agricultural fields to the north, Olivas Links Golf Course to the east, open space to the south, the Ventura Harbor to northwest, and the Ventura Wastewater Reclamation Facility (VWRF) to the west (see Figure 2-6).
- Transport Street Site:** The Transport Street AWPf site would be located within a vacant area of land designated as Industry Parks and Open Space, with agricultural uses to the south and commercial and industrial uses to the east, west, and north. Just north of the site is Transport Street (see Figure 2-7).
- Portola Road Site:** The Portola Road AWPf site would be annexed to the City because it is located within Ventura County's jurisdiction. The City's General Plan Planning Designation for the site is Industry. and would be located within a land use designation of Agriculture. The Portola Road site is surrounded by open land used for agriculture to the north and south and commercial uses to the west and east (see Figure 2-8).

Page 3.1-18 The following text has been added to the EIR:

The discharge pipeline to the Calleguas SMP would run along Harbor Boulevard, West 5th Street, and South Victoria Road terminating at an existing Calleguas Municipal Water District (Calleguas MWD) facility. Portions of the pipeline would travel along the coastal zone. Construction of the pipeline would require temporary ground disturbance within the pipeline. The presence of construction equipment and materials could be visible from public viewing areas. Potential impacts to ocean views could occur, but would not permanently or adversely affect scenic views or vistas within the project area. Given the short-term and temporary presence of construction equipment and materials, impacts to scenic vistas during construction would be considered less than significant.

Construction barges would be visible from the shore during temporary construction but would not impact scenic vistas or scenic views since they would be temporary, within an area that experiences substantial boat traffic already, and would be far enough from shore (0.4 to 0.75 miles offshore) to avoid blocking views.



SOURCE: ESRI, 2018; County of Ventura, 2018.

Ventura Water Supply Projects

Figure 2-2
Phase I Project Components

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Once constructed, the pipeline would be contained entirely underground and impact areas would be returned to pre-project conditions. Therefore, no substantial adverse effect on a scenic vista would occur.

Periodic cleaning of the diffuser ports is routinely conducted for ocean discharge facilities and would be described in detail in permit conditions. Periodic inspections and cleaning of the diffuser would occur approximately once per year and involve one or two 20-40 foot boats conveying a small work crew to the outfall area. The inspection likely would take approximately one or two days. The infrequent and temporary presence of boats in the diffuser area would not adversely affect scenic vistas.

Page 3.1-31 The following text has been added to the EIR:

Construction associated with the proposed new outfall may require 24-hour drilling in order to safely complete the drilling process. Temporary overhead nighttime lighting would be installed during the drilling period. The overnight lighting could spill over into neighboring residential, recreational development, or public roadways. However, implementation of Mitigation Measure AES-3 would require nighttime construction lighting be shielded and pointed away from surrounding light-sensitive land uses. Based on the temporary nature of construction activities and with implementation of Mitigation Measure AES-3, impacts associated with light and glare during construction activities would be reduced to a less than significant level.

Nighttime lighting on vessels would be required to comply with Mitigation Measure AES-3 to avoid unshielded light sources. The addition of lighted barges temporarily offshore would not result in significant impacts to aesthetics since they would be temporary, would be far enough from shore (0.4 to 0.75 miles), and lighting would be shielded to avoid significant glare.

Agriculture

Page 3.2-21 The text of the EIR is revised to state as follows:

The proposed pump station associated with the product water conveyance system would be constructed within the VWRF and within the proposed AWPf site. ~~As mentioned above, the Harbor Boulevard and Portola Road AWPf sites would be located within the County designated SOAR property. However,~~ Implementation of Mitigation Measure AG-1 would ensure that development of the AWPf on the potential proposed Harbor Boulevard or Portola Road site would comply with the SOAR program. Impacts would be less than significant impacts on agriculture.

Page 3.2-24 The text of the EIR is revised to state as follows:

Advanced Water Purification Facility

None of the proposed AWPf sites is located within Williamson Act contracted lands (see Figure 3.2-2a). Consequently, there would be no impact resulting from

conflicts with existing Williamson Act contracts. The Harbor Boulevard site is zoned under the County Local Coastal Plan (LCP) as Coastal Open Space-10 acre minimum (COS-10), but would be annexed to the City if selected. The City's LCP designation is Commercial Planned-Tourist Oriented. The other two sites are not located in the coastal zone. ~~and the zoning designations are Manufacturing Planned Development (MPD) for the Transport Street site.~~ The Portola Road site is located in the County and is currently zoned Agricultural Exclusive-40 acre minimum (AE-40), and Residential-Agriculture-1 acre minimum (R-A-1). ~~for the Portola Road site.~~ Upon annexation to the City, the Portola site would be subject to the City's General Plan Planning Designation, which is Industry. The Transport Street site is located in the City, and its zoning designation is Manufacturing Planned Development (MPD). There would be no conflict with zoning for agricultural use on any of the Transport Street AWPf sites following annexation.

~~The Harbor Boulevard AWPf would not be consistent with the zoning of COS-10. A categorical use permit and LCP amendment would be required for the construction of the Harbor Boulevard AWPf. The conversion of agricultural land to a non-agricultural for the Portola Road site would conflict with the existing zoning and would require a categorical use permit. In addition, the Harbor Boulevard and Portola Road sites are subject to additional protection under the County's SOAR initiative. However, the implementation of Mitigation Measure AG-1 would ensure that development of the AWPf on the proposed Portola Road site would comply with the SOAR program. Impacts would be less than significant.~~

Page 3.2-25: The text of the EIR is revised to state as follows:

The proposed pump station associated with the product water conveyance system would be constructed within the VWRf and within the proposed AWPf site. As discussed above, none of these sites is under a Williamson Act contract, and none of the sites would be zoned for agriculture after annexation to the City. ~~As mentioned above, the Portola Road AWPf would be located within the County-designated SOAR property. However, the implementation of Mitigation Measure AG-1 would ensure that development of the AWPf on the proposed Portola Road site would comply with the SOAR program. Impacts would be less than significant.~~

Page 3.2-25 The text of the EIR is revised to state as follows:

Groundwater Wells

The proposed projects include construction of up to six wells within the Oxnard Plain Basin (final configuration to be determined by detailed groundwater modeling). The proposed wells would not be located on land under a Williamson Act contract (see Figure 3.2-2c.) Well Sites 2 and 3 would be located in land designated as Prime Farmland and zoned for Agriculture SOAR. Well Site 1 would be located in land designated as Urban and Built-up Land and zoned for Parks. No change in zoning would be required for the construction of the wells, which are allowed in both the Agriculture and Parks zones with a use permit. Impacts would

~~be less than significant. Implementation of Mitigation Measure AG-1 would ensure that development of the wells would comply with the SOAR program. Impacts would be less than significant~~

Page 3.2-26 The text of the EIR has been revised to state as follows:

AWPF Expansion

To expand the AWPf, the individual advanced treatment processes facilities within the plant would be expanded, but no new treatment processes would be needed or added. The expansion project would occur several years after the original construction of the AWPf, if needed. The proposed AWPf sites are not located within Williamson Act contracted lands; however, the Portola Road AWPf site would be located within ~~the County SOAR designated land~~ land designated as Prime Farmland. If the Portola site is selected for the AWPf, Nevertheless, the impacts associated with the conversion of agricultural lands would have been mitigated as part of the original construction of the AWPf. The expansion project would occur entirely within the footprint of the AWPf and would not further impact land zoned for agricultural beyond what was previously analyzed for the AWPf construction. No impact would occur.

Air Quality

Page 3.3-6 The text of the EIR is revised to state as follows:

Existing Criteria Pollutants Levels at Nearby Monitoring Stations

The VCAPCD maintains a network of air quality monitoring stations located throughout Ventura County to measure ambient pollutant concentrations. These stations are located in El Rio, Ojai, Piru, ~~San Nicolas Island, Simi Valley, and Thousand Oaks, and Ventura.~~

Page 3.3-25 The following text has been added to the EIR:

AQ-2: During construction contractors shall comply with the following measures, as feasible, to reduce NO_x and ROC from heavy equipment as recommended by the VCAPCD in its Ventura County Air Quality Assessment Guidelines:

- All construction equipment shall meet or exceed Environmental Protection Agency Tier 3 certification requirements. The contractor shall be required to document the use of Tier 3 equipment or better.
- HDD drilling motors will comply with Tier 3 standards or greater and have particulate filters installed or the contractor shall provide justification to the City that the equipment is not available.
- The City shall establish a barrier around the HDD drilling site to minimize site lines, air emissions, and noise from the drilling activities.
- For pipeline installation work within 300 feet of sensitive receptors such as schools and health care facilities, the City shall coordinate with the school

or health care facility to schedule construction activities during periods that minimize disruption to receptors when feasible.

- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications. Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time.
- Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible

Page 3.3-25 The following text has been added to the EIR:

Concentrate Discharge Facility

Pipeline inspection, maintenance, and repairs would occur infrequently. Typical pipeline maintenance would entail the inspection and maintenance of valves and corrosion control. It is anticipated that required maintenance and inspection activities would not result in any substantial increases in traffic patterns throughout Ventura County. Thus, the maintenance and inspection activities would not substantially increase mobile emissions of criteria pollutants within the Basin. Therefore, mobile air quality impacts generated during operation of the proposed water conveyance system would be less than significant.

The addition of monthly maintenance activities would contribute minor sources of operational air emissions from workers commuting to the marina and boat engine emissions during the one or two days-worth of work per month. The use of one or two boats to access the mooring locations at the end of the discharge tunnels once a month or less often would not exceed daily emissions thresholds of significance. The contribution of emissions from maintenance activities would be less than significant.

3.3-26 The text of the EIR has been revised to state as follows:

The desalination treatment components would include construction at the AWPf for the new treatment equipment and new ocean intake, similar to the outfall. **Table 3.3-13** provides projected emissions resulting from excavating/trenching and drilling. The modelled emissions include emissions associated with construction of a new outfall since it would be required for ocean desalination, if it were not already built in Phase 1. VCAPCD has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NOx emissions over 25 pounds per day. As shown below, construction emissions from the proposed projects would exceed 25 pounds per day for NOx. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce construction emissions of criteria pollutants.

Table 3.3-13 EIR Table 3.3-13 has been revised as follows:

Table 3.3-13
Short-Term Regional Construction Emissions for the Ocean Desalination – Without Mitigation

Year	Maximum Daily Pollutant Emissions (lbs/day)					
	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2024	41 5	34 1 24	35 1 25	0	2 7	4 5
2025	41 5	32 1 24	35 1 25	0	4 6	4 5

Page 3.3-28 The following text has been added to the EIR:

The addition of monthly maintenance activities would contribute minor sources of operational air emissions from workers commuting to the marina and boat engine emissions during the one or two days-worth of work per month. The use of one or two boats to access the mooring locations at the end of the discharge tunnels once a month or less often would not exceed daily emissions thresholds of significance. The contribution of emissions from maintenance activities would be less than significant.

Biological Resources

Figure 3.4-10 Figure 3.4-10 has been added to the Final EIR to show the reconfiguration of the wetland site. Figure 3.4-10 is shown below.

Page 3.4-2 The text of the EIR is revised to state as follows:

Wildlife/Treatment Wetlands

Potential New Treatment Wetlands

The proposed site for new natural treatment wetlands is approximately 36.09 acres. The site is bordered by Harbor Boulevard to the west, Olivas Links Golf Course to the east, disturbed land to the north, and the Santa Clara River to the south. The site includes approximately 10 acres of disturbed habitat ~~is dominated by a chaparral vegetation community~~ including areas of arroyo willow thickets and coyote brush/mulefat thickets that are ~~is~~ generally disturbed by footpaths, and cleared areas. Transitional housing for the RiverHaven community is also located on the site. Due to the level of disturbance and human activity, trash and trampling of vegetation, special-status species are not expected to be present on the disturbed areas of the site.

The site for the potential new treatment wetlands also contains approximately 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. ~~22.67 acres of chamise chaparral community, mostly located in the center of the site.~~ These ~~This~~ communities ~~is~~ are characterized by chamise (*Adenostoma fasciculatum*), arroyo willow (*Salix lasiolepis*), saltbush (*Artiplex* spp.), mulefat (*Baccharis salicifolia*), coyote brush (*Baccharis pilularis*), Ceonothus (*Ceonothus* spp.), California buckwheat (*Eriogonum fasciculatum*), wild cucumber (*Marah fabaceus*), white sage (*Salvia apiana*), and California coffeeberry (*Rhamnus californica*). The dune mat habitat is dominated by beach suncup (*Camissoniopsis cheiranthifolia*), silver beach burr (*Ambrosia chamissonis*), red-sand verbena (*Abronia maritima*), sand aster (*Corethrogyne filaginifolia*), European sea rocket (*Cakile maritima*), and ice plant (*Carpobrotus edulis*). ~~These~~ vegetation communities stand in contrast to those portions of both the northern and southern areas of the site and the edges of the site that are ~~is~~ disturbed (approximately 13.42 acres). These disturbed portions are noticeable as several manmade trails have been created and large areas of vegetation have also been removed.

Page 3.4-61 The text of the EIR is revised to state as follows:

As part of the permitting process, the City will consult with the CDFW, USFWS, and NMFS to evaluate whether the proposed project will require formal consultation under the federal and state Endangered Species Acts. The City will be accessing funding from the United States Bureau of Reclamation (USBR), which will act as the federal lead agency if formal consultations with federal permitting agencies are necessary. Although no direct impacts to listed species would occur, reduced open water conditions could adversely affect ~~result in~~ potential take of a critical habitat or listed species. Therefore, the City ~~USBR~~ is required to prepare a Biological Assessment for submittal to USFWS and NMFS

under Section 7 of the Endangered Species Act. USBR will call upon NMFS to analyze all effects to the species and its critical habitat as described in the biological assessment and determine whether formal consultation is necessary, and if any measures are necessary to prevent jeopardy to steelhead.

Page 3.4-64 The text of the EIR is revised to state as follows:

Wildlife/Treatment Wetlands

...The new treatment wetland would ~~not~~ be located on a site that includes vegetation that could support special-status species, ~~habitat~~ including 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. During surveys conducted in April 2019, least Bell's vireo were heard in the area. It is unclear if the vireo were nesting or passing through. A Technical Memorandum summarizing the results of the April 2019 field survey is included in Appendix E of the Final EIR. The survey concludes that approximately 10 acres of the site contains habitat suitable for least Bell's vireo, and that the vireo may be nesting currently in the area. In addition, approximately 1.74 acres of dune habitat is located in the northeast corner of the site. These areas may also constitute an ESHA under the Coastal Act.

To achieve the water quality goal of 4 mg/l nitrate, the City would employ a combination of upgrades at the VWRP and constructed treatment wetlands, as noted on page 2-12 of the Project Description. The City would first design wetlands to be located in areas that would avoid or minimize impacts to ESHA. The coyote brush/saltbrush areas are not ESHA and do not contain sensitive habitats or support sensitive species. An area of approximately 10 acres on the southern portion of the site shown in **Figure 3.4-10** does not contain ESHA and could be utilized without affecting any ESHA and may be sufficient to meet the project's tertiary-discharge water quality goals. However, if more than 10 acres of constructed wetlands are needed, these sensitive habitat areas such as arroyo willow may be significantly adversely affected by implementation of natural treatment wetlands on the site. Mitigation Measure BIO-8 would require that any removal of the sensitive habitat areas be compensated by establishments and conservation of similar vegetative communities with similar habitat characteristics suitable for use by least Bell's vireo, either onsite as a part of treatment wetlands design, or offsite within the estuary.

Implementation of **Mitigation Measures BIO-1 through BIO-4 and BIO-8** would ensure that nesting birds are not adversely affected. Impacts would be less than significant.

Mitigation Measures: Implement Mitigation Measures BIO-1 through BIO-4 and BIO-8.

BIO-8: Prior to constructing treatment wetlands as part of Phase 1b, the City shall survey the site for the presence of sensitive habitats or

sensitive species. If sensitive habitats are identified that would be affected by the construction of the new treatment wetlands, the City shall compensate for such impacts by establishing riparian habitat through development of riparian habitat within the new treatment wetlands design, or offsite in the SCRE at a minimum ratio of 1:1. In addition, the City shall consult with USFWS and CDFW to ensure that appropriate mitigation and/or compensation is established to replace lost habitat value. The consultation shall satisfy federal and state Endangered Species Act consultation requirements, and shall implement the proposed mitigation ratio of at least 1:1, or such higher ratio as may be required by USFWS and CDFW.

Onsite mitigation within the treatment wetlands would be accomplished by establishment of riparian habitat at the edges of the treatment cells or within designed islands. If additional riparian acreage is required beyond that which can be incorporated into the treatment wetlands design, then riparian habitat may be established offsite within the SCRE, since the modeling of discharge reductions predicts a substantial increase in riparian habitat within the SCRE as a result of hydrological changes associated with discharge reductions proposed for Phase 1a and Phase 1b.

To achieve mitigation credit for new riparian habitat established pursuant to BIO-8, whether onsite or offsite, the City shall document the increase in riparian habitat at the mitigation site(s) as compared to existing conditions over a period of five years. The City would establish that the new riparian habitat is suitable for least Bell's vireo occupation based on standard metrics regarding the acreage of canopy cover, complexity of sub-canopy vegetation structure, and opportunity for new vegetation recruitment. The City may document the new riparian habitat acreage and ecological values created by mitigation performed within the Natural Treatment Wetlands pursuant to a 5-year Habitat Management and Monitoring Plan, and may document new riparian habitat acreage and ecological values created within the SCRE as part of the Monitoring, Assessment, and Adaptive Management Plan (MAAMP) to be implemented as Mitigation Measure BIO-6. In the event that sufficient riparian habitat to mitigate for all losses is not created onsite and/or within the SCRE, the City shall provide additional mitigation necessary to attain the ratio of at least 1:1 through the purchase of mitigation bank credits and/or the creation of additional riparian habitat, as determined through consultation with USFWS and CDFW.

Significance Determination: Less than Significant with Mitigation.

Page 3.4-74

The text of the EIR is revised to state as follows:

Wildlife/Treatment Wetlands

...As shown in Figure 3.4-~~103~~, an approximately ~~1035~~ to 30-acre treatment wetland may be constructed on vacant property to the east of the VWRP. The site currently supports ~~some chaparral habitat~~, approximately 10 acres of disturbed scrub habitat, 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. New treatment wetlands would be designed to avoid impacts to habitat areas that constitutes environmentally sensitive habitat areas (ESHAs), and would be located on the disturbed scrub habitat areas that do not support special status species to the greatest extent feasible. Depending on the volume of tertiary-treated effluent that continues to be discharged during Phase 1b operations, 10 acres of treatment wetlands may be sufficient to achieve the City's discharge quality objectives. If more than 10 acres of treatment wetlands are needed to achieve water quality goals, ~~Construction of the new treatment wetlands within the willow-thicket habitat may be required, which would may~~ eliminate sensitive habitat areas. Mitigation Measure BIO-8 requires that any removal of the sensitive areas be compensated by creation of replacement riparian at a minimum ratio of at least 1:1, meeting standard metrics designed to result in habitat that is suitable for use by least Bell's vireo. In addition, the removal of sensitive habitat would be subject to permitting under the state and federal Endangered Species Acts and the Coastal Act. ~~The affected areas are not designated as sensitive natural communities and do not support sensitive species.~~ As a result, impacts of the proposed projects, including the treatment wetlands, would be less than significant.

Mitigation Measures: Implement Mitigation Measure BIO-8.~~None required.~~

Significance Determination: Less than Significant with Mitigation.

Page 3.4-79

The text of the EIR is revised to state as follows:

Wildlife/Treatment Wetlands

...In addition, as shown in Figure 3.4-~~103~~, the proposed projects could involve the construction of an approximately ~~10 to 3035~~-acre treatment wetland on vacant property to the east of the VWRP. The site currently supports ~~some chaparral habitat, and~~ approximately 10 acres of disturbed scrub habitats, approximately 9.57 acres of arroyo willow thicket, 12.11 acres of coyote brush/saltbrush/mulefat thickets, and 1.74 acres of dune mat habitat located on an abandoned sand pile. New treatment wetlands would be designed to avoid the ESHA habitat types, and to be located on the disturbed scrub habitat types that do not support special status species to the greatest extent feasible. Depending on the volume of tertiary-treated effluent discharged during Phase 1b, 10 acres of treatment wetlands may be sufficient to achieve the City's discharge quality objectives. If more than 10 acres of constructed wetlands are needed, these sensitive ESHA habitat areas may be affected. Mitigation Measure BIO-8

requires that any removal of the sensitive habitat types must be compensated by creation of replacement riparian habitat at a minimum ratio of at least 1:1, meeting standard metrics designed to result in habitat that is suitable for use by least Bell's vireo. In addition, the removal of sensitive habitat would be permitted under the state and federal Endangered Species Acts and Coastal Act. ~~Construction of the new wetlands would eliminate these habitat areas.~~ The affected areas are not subject to Section 404 of the Clean Water Act. Once constructed, the new wetlands would provide important wetland and riparian habitats. ~~As a result, the proposed project would improve the biological values of the site.~~ Impacts of the proposed projects would be less than significant.

BIO-9: If the Harbor Site is selected as the location for the AWPf, the City shall comply with all requirements of the California Coastal Act, including compensation for any environmentally sensitive habitat area (ESHA) that has been documented on the Harbor Boulevard site since the enactment of the Coastal Act (1977). Compensation shall include replacement of ESHA at a minimum ratio of 1:1 locally within the coastal zone, or as required by the CCC. The replacement site may be the City-owned property to the south of the Harbor Site or another nearby site.

Mitigation Measures: Implement Mitigation Measure BIO-9. ~~None required.~~

Significance Determination: Less than Significant.

Cultural Resources

Page 3.5-42 The text of the EIR is revised to state as follows:

CUL-4: Prior to the start of ground-disturbing activities associated with the proposed projects, including development, preparation and implementation of project related geophysical surveys and other offshore data collection and construction activities, an archaeological monitor working under the supervision of the Qualified Archaeologist and a Native American monitor associated with the Barbareño/Ventureño Band of Mission Indians, or other locally affiliated tribe, shall monitor all project-related ground-disturbing activities within previously undeveloped project parcels, offshore areas, all jack-and-bore receiving pits, and all pot-holing activities within existing road rights-of-way. Previously undeveloped parcels requiring monitoring include the Harbor Boulevard, Transport Street, offshore areas, and Portola Road AWPf sites, as well as the new treatment wetlands parcel, and groundwater Well Sites 1, 2, and 3. For the pipeline alignments to be installed within existing road rights-of-way, a monitoring plan shall be prepared by the Qualified Archaeologist outlining the locations and timing of monitoring based on level of disturbance identified during pot-hole monitoring, as well as any geotechnical report to be prepared as part of project implementation. Prior to implementing offshore geophysical surveys, the City shall provide the

survey methods and plans to the Barbareño/Ventureño Band of Mission Indians for their information as part of the consultation.

Based on observations of subsurface soil stratigraphy or other factors during initial ground-disturbing activities across the project area, and in consultation with the City and Native American monitor, the Qualified Archaeologist may reduce or discontinue monitoring as warranted if the Qualified Archaeologist determines that the possibility of encountering archaeological deposits is low in a given area or during a given activity. Archaeological monitors shall maintain daily logs documenting their observations. Monitoring activities shall be documented in a Monitoring Report to be prepared by the Qualified Archaeologist at the completion of construction and shall be provided to the City and filed with the SCCIC within 6 months of construction completion.

CUL-5: In the event of the unanticipated discovery of archaeological materials during implementation activities associated with the proposed projects, including offshore data collection and construction activities, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. In the event that cultural resources are discovered on state lands, including discoveries made during any offshore activities, the California State Lands Commission shall also be notified. Construction shall not resume until the qualified archaeologist and, for offshore activities, the California State Lands Commission, has conferred with the City on the significance of the resource.

If it is determined that the discovered archaeological or cultural resource constitutes a significant resource, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with City and Barbareño/Ventureño Band of Mission Indians, or other locally affiliated tribe, that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource.

Page 3.5-47

The text of the EIR is revised to state as follows:

Concentrate Discharge Facility
New Outfall

The directional drilling operation for the outfall pipe would be located within Marina Park. Offshore construction would include dredging for the HDD exit and pipeline placement, outfall modifications, and pile driving. As noted above, the proposed projects would not impact known tribal, cultural or archeological resources that qualify as or have the potential to qualify as historical resources, including offshore resources. Further, The City consulted the shipwreck records maintained by the California State Land Commission, and altered the outfall location of the outfall described in this EIR to avoid all potential shipwreck sites. However, any submerged archaeological site or

submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant. Title to all 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 California State Lands Commission (Pub. Resources Code, § 6313). Therefore, given the archaeological sensitivity of the area, ground-disturbing and offshore activities associated with the construction of the new outfall may have the potential to impact unknown archaeological and cultural resources, including shipwrecks and Tribal cultural resources, that may qualify as historical resources under CEQA.

Implementation of **Mitigation Measures CUL-1** through **CUL-6** is required to ensure that the parcel in which the onshore and offshore construction activities, including the drilling operation for the new outfall, are subject to cultural resources survey, and that all onshore and offshore impacts associated with the construction of the new outfall to unknown tribal, cultural or archaeological resources qualifying as historical resources, including offshore resources, are less than significant.

Greenhouse Gas Emissions

Page 3.7-1 The text of the EIR is revised to state as follows:

Regional Setting

The proposed projects are located in the ~~Central~~ South Central Coast Air Basin, which covers San Luis Obispo, Santa Barbara, and Ventura counties.

Page 3.7-8 The text of the EIR is revised to state as follows:

Ventura County Air Pollution Control District

The project site is located in the ~~Central~~ South Central Coast Air Basin, which covers San Luis Obispo, Santa Barbara, and Ventura counties. VCAPCD monitors and regulates the local air quality in Ventura County and manages the AQMP.

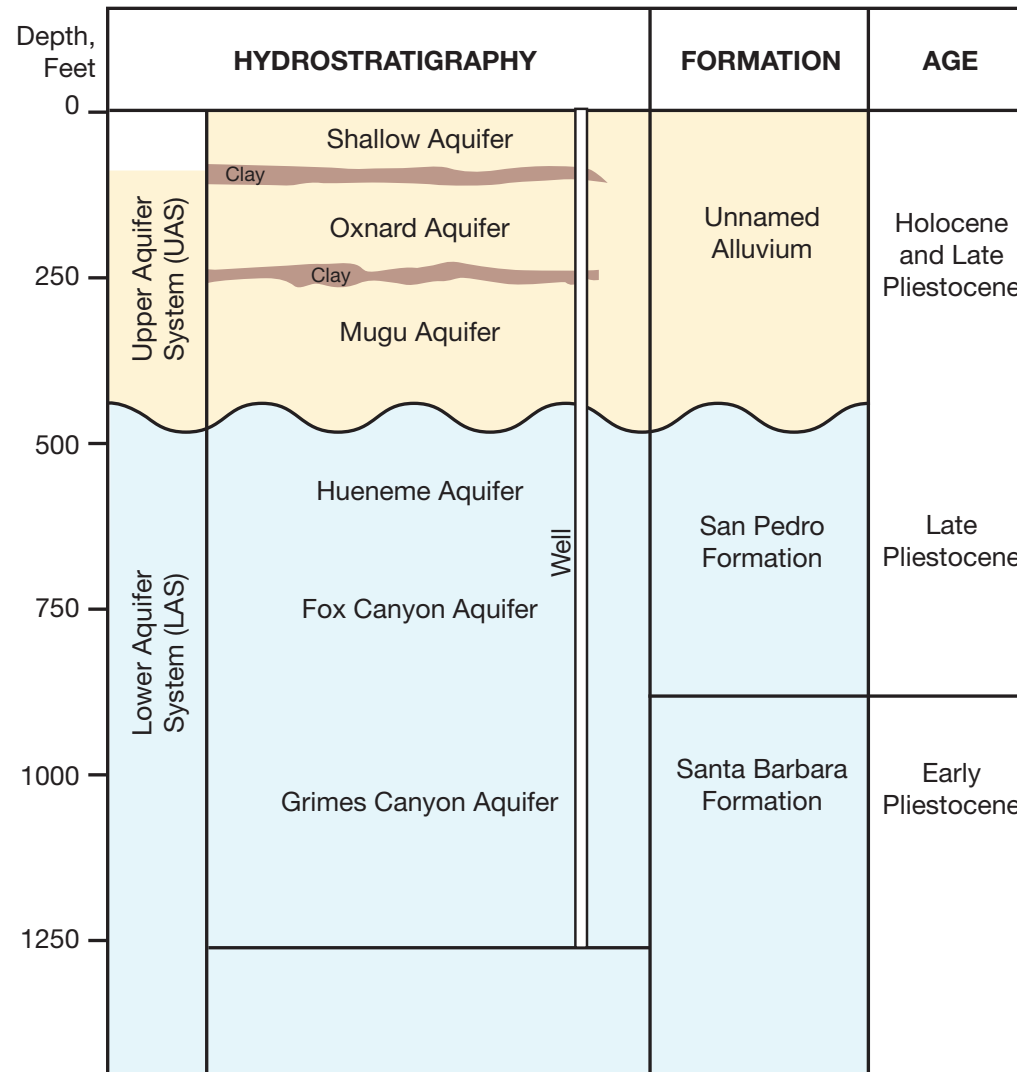
Hydrology and Water Quality

Figure 3.9-2 Figure 3.9-2 has been revised as follows:

Figure 3.9-3 Figure 3.9-3 has been removed from the EIR to avoid confusion regarding the intent of the project to utilize the Oxnard Subbasin.

Figure 3.9-4 Figure 3.9-4 has been removed from the EIR to avoid confusion regarding the intent of the project to utilize the Oxnard Subbasin.

Oxnard Plain Basin



D:\60685.00 - Ventura Water Pure Advanced Treatment\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Larry Walker Associates; Carollo

Ventura Water Supply Projects

Revised Figure 3.9-2
Oxnard Plain Aquifer System

3.9-7 The text of the EIR is revised to state as follows:

Groundwater Hydrology

The project area lies within the westernmost portion of the east-west Ventura Basin, a structural trough bounded on the north by the Santa Ynez and Topatopa Mountains, and the south by the Santa Monica Mountains (see Section 3.6, Geology, Soils, and Seismicity for discussion of geologic units and structure). The basins that would include groundwater-related project components ~~are~~ is discussed below.

Mound Basin

~~The groundwater hydrology information for the Mound Basin discussed below comes from the Mound Basin Assessment (UWCD 2012) or the Lower Santa Clara River Salt and Nutrient Management Plan (Larry Walker Associates 2015), unless otherwise cited. Note that the Mound Basin has some perched water at relatively shallow depths.~~

Location

~~The Ventura Basin called the Mound Basin, the Oxnard Plain Basin to the south, Forebay Basin to the southeast, and Santa Paula Basin to the east are shown on Figure 3.9-1. The Mound Basin is bounded on the north by the Santa Ynez and Topatopa Mountains (also referred to as the Ventura Foothills), the west by the Pacific Ocean, and the east by the Santa Paula Basin and Country Club Fault. Depending on the researcher, the southern basin boundary is either the Oak Ridge and Saticoy Faults (Carollo 2014) or the axis of the Montalvo Syncline (UWCD 2012).~~

Lower Aquifer System

~~The schematic in Figure 3.9-2 illustrates the hydrostratigraphy of the Mound Basin including aquifer systems and aquifers, and geologic formations. As shown, the San Pedro Formation is within the upper portions of the Lower Aquifer System that includes from shallower to deeper, the Hueneme and Fox Canyon Aquifers. The Lower Aquifer System is confined by the shallower confining layers in the Upper Aquifer System, as verified by the groundwater levels discussed below.~~

3.9-10 The text of the EIR is revised to state as follows:

~~The Mound Basin is within an east-west structural trough. Consequently, the depth interval of geologic units become shallower away from the central trough axis and toward the north and south edges of the trough. The majority of the lower portions of the San Pedro Formation consists principally of sand and gravel zones with variable thicknesses of interstratified clay and silt. Based on the production rate of Victoria Well No.2 in the eastern part of the Mound Basin, the~~

hydraulic conductivity of San Pedro Formation deposits is estimated at 100 feet per day (Hopkins 2013).

Groundwater Flow and Levels

The overall groundwater flow pattern is generally from east to west down the axis of each of the basins in the Santa Clara River Valley, as shown on **Figure 3.9-3** (Spring 2015) and **Figure 3.9-4** (Fall 2015) (Ventura County 2016). Note that groundwater flow during 2015 in much of the Mound Basin is to the south and southeast to the Oxnard Plain Basin and groundwater located further southeast in the Oxnard Plain Basin. Historical water level records suggest groundwater likely flows between the Oxnard Plain Basin and the Mound Basin, depending on climate, season, and local pumping. The southeastern flow direction also appears on groundwater flow maps in the Oxnard Plain Basin, as discussed further below in the Oxnard Plain Basin section.

Although there are some appreciable offsets on the faults bounding the Mound Basin, the low permeability Santa Barbara Formation that underlies the San Pedro Formation does not extend to sufficiently shallow depths to impede groundwater flow (UWCD 2012). In most cases, there is a significant thickness of the San Pedro Formation (aquifer materials) existing above the faults, or on both sides of the faults. Whether the faults themselves impede flow is not known. However, groundwater flow and basin recharge across these zones is considered most probable. The slope of the potentiometric surface within the basin is generally flat during dry periods and the gradient increases somewhat following periods of above-average rainfall. Groundwater elevations in many wells fall below sea level during dry periods.

3.9-13 The text of the EIR is revised to state as follows:

Lower Aquifer System

~~Similar to the Mound Basin, the~~ The Oxnard Plain Basin also consists of the Upper Aquifer System and Lower Aquifer System, with the Lower Aquifer System also confined by shallower confining layers. The Lower Aquifer System consists of, from shallowest to deepest, the Hueneme, Fox Canyon and Grimes Canyon Aquifers. The Hueneme and Fox Canyon are composed of the San Pedro Formation, where the screen intervals of the proposed wells would be constructed. The Oxnard Plain Basin is also an east-west structural trough. Consequently, the depth interval of geologic units become shallower away from the central trough axis and toward the north and south edges of the trough.

3.9-48 The text of the EIR is revised to state as follows:

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) of 2014, effective January 1, 2015, gives local agencies the authority to manage groundwater in a sustainable manner and allows for limited state intervention when necessary to

protect groundwater resources. The SGMA establishes a definition of sustainable groundwater management, establishes a framework for local agencies to develop plans and implement strategies to sustainably manage groundwater resources, prioritizes basins with the greatest problems (ranked as high and medium priority) and sets a 20-year timeline for implementation. The initial basin prioritization under SGMA uses the prioritization conducted by the California Department of Water Resources (DWR) in 2014 under the California Statewide Groundwater Elevation Monitoring program. The ~~Mound~~ Oxnard Subbasin is ranked as ~~high~~ medium priority. Fox Canyon Groundwater Management Agency (FCGMA) is the designated ~~The City of Ventura has created a~~ Groundwater Sustainability Agency (GSA) pursuant to SGMA. SGMA requires the creation of a GSA to develop and implement a Groundwater Sustainability Plan (GSP) that would manage and use groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results, defined as follows:...

Page 3.9-60 *Turbidity*

... As part of the proposed projects and as required by the USACE Section 10 permit conditions and RWQCB 401 Certification, dredge BMPs such as silt curtains,¹ gunderbooms,² operational controls, and in-water work-windows would be employed to minimize turbidity and suspended sediment. Silt curtains and gunderbooms reduce dispersal of suspended sediment and increased turbidity beyond the dredge site. Operational controls would be specific to the dredging method and would represent protocols that minimize bottom disturbance and the potential for resuspending sediment. Work windows are periods of time when special-status or listed species are not present in the area (see Section 3.11, Marine Biology). The BMPs would also be incorporated into Section 10 permit conditions and 401 Certification.

Page 3.9-62 *Dredge-Material Stockpiling, Transport, and Disposal*

...Approval to dispose of dredge material at LA-2 would require testing of the material to ensure compliance with the LA-2 requirements. Sediments from the proposed dredging area would be tested using standard USEPA protocols (according to an approved sampling and analysis plan) prior to dredging to determine the suitability of the material for unconfined, aquatic disposal or other disposal alternatives. If determined to be suitable for open ocean disposal, the dredged material could be disposed of at a designated ocean disposal site with approval from the USACE and USEPA's designated Contaminated Sediment Task Force and Southern California Dredged Material Management Team.

¹ Floating impermeable barrier intended to allow suspended sediment at a dredging site to settle out of the water column in a controlled area, minimizing the area that is affected by the increased suspended sediment.

² Similar to silt curtains but constructed of permeable geotextile fabrics. Designed to extend from the water surface to the project bottom and allow water to flow through the curtain while filtering suspended dredged sediment from the flow.

Mandatory compliance with Section 10 permit requirements, RWQCB water quality certification, and Waste Discharge Requirements as well as disposal of dredged materials would ensure the proposed projects are consistent with relevant regulations, plans, and policies. Water quality impacts relating to dredge-material transport and disposal would be less than significant.

Table 3.9-10 Table 3.9-10 has been modified as follows:

**TABLE 3.9-10
PROPOSED OPERATIONAL DISCHARGE EFFLUENT WATER QUALITY
VS. CALLEGUAS SMP NPDES PERMIT EFFLUENT LIMITATIONS**

Water Quality Constituent	Units	Calleguas SMP Ocean Discharge NPDES Daily Max Effluent Limitations ¹	VWRF Effluent discharged to SCRE	RO Concentrate
Copper	µg/L	730	6.1	9
Selenium	µg/L	4,400	2.9	18.2
Lead	µg/L	580	7	0.7
Nickel	µg/L	1,500	7.2	7.6
Ammonia (May to October)	µg/L	180,000	-	2
Ammonia (November to April)	µg/L	180,000	-	2

¹ The parameters listed within this table do not have average monthly limits for the Calleguas Salinity Management Pipeline NPDES Permit. Daily Max. limits are used for comparison.

SOURCE: Carollo 2016

Land Use

Page 3.10-8 The text of the EIR is revised to state as follows:

- The Harbor Boulevard site is zoned under the County Local Coastal Plan (LCP) as Coastal Open Space-10 acre minimum (COS-10). If the Harbor site is selected, it would be annexed to the City and would be subject to the City's LCP designation (Commercial Planned-Tourist Oriented). The other three sites are not located in the coastal zone, and the zoning designations are Manufacturing Planned Development (MPD) for the Transport Street site and Agricultural Exclusive-40 acre minimum (AE-40) for the Portola Road site under County zoning. If selected, the Portola Road site would be annexed to the City. The City's General Plan Planning Designation for the site is Industry. In addition, the Harbor Boulevard and Portola Road sites are further subject to additional protection under the County's Save Open Space and Agricultural Resources (SOAR) initiative, discussed below.

Page 3.10-8 The text of the EIR is revised to state as follows:

- Zoning designations for the proposed groundwater wells include Agriculture (A), and Parks (P). ~~Well Sites 2 and 3 are subject to the SOAR initiative.~~

Page 3.10-12 The following text is added to the EIR:

County of Ventura Agricultural Urban Buffer Policy

The County of Ventura adopted the Agricultural Urban Buffer Policy in July 2006. The policy outlines objectives of protecting the health and safety of the public by lessening exposure of urban areas to agricultural dust, noise, and odors, and to protect agricultural operations and land from vandalism, pilferage, trespassing and complaints against standard legal agricultural practices. The policy provides guidelines to mitigate conflicts between the urban and agricultural interface.

Ventura County General Plan: Coastal Area Plan

The Ventura County Coastal Area Plan and Coastal Zoning Ordinance constitute the LCP for the unincorporated portions of Ventura County's coastal zone. The main goal of the Coastal Area Plan is to ensure that the local government's land use plans, zoning ordinances, zoning maps, and implemented actions meet the requirements of and implement the provisions and policies of the Coastal Act. The LCP specifically applies to development in the unincorporated portions of the Coastal Zone of Ventura County. The existing wildlife treatment ponds and the proposed Harbor Boulevard AWP site, the wildlife/treatment wetlands, and concentrate outfall are located in the Coastal Zone boundary (Ventura County 2018).

Page 3.10-16 The text of the EIR is revised to state as follows:

Chapter 3: Our Well Planned & Designed Community

Land in the City's planning area is divided into eight Planning Designations. The proposed projects are located within Agriculture, Residential-Low, Residential-Medium, Public and Institutional, Commercial, and Parks and Open Space land uses. If selected for the AWP, the Portola Road site would be annexed to the City, which has designated the area for Industry. The General Plan Planning Designations which are described below:

Page 3.10-19 The following text is added to the EIR:

City of Ventura Municipal Code

Chapter 24.270 - A Agricultural Zone

Chapter 24.270 establishes the Agricultural ("A") Zone and prescribes use types and other regulations for this zone. The following use type is permitted, subject to a use permit:

- Utility or Equipment Substations

Page 3.10-21 The text of the EIR is revised to state as follows:

Save Open Space and Agricultural Resources

In 1995, the first Save Open Space and Agricultural Resources (SOAR) initiative was approved by voters in the city of Ventura. SOAR is a series of initiatives that require a vote of the public before agricultural land or open space areas can be rezoned for development. Eight city SOAR initiatives require the city councils to obtain the approval of their citizens before urban development can occur beyond a City Urban Restriction Boundary (CURB) or before rezoning agricultural land within the city's sphere of influence (SOAR 2018). ~~The proposed Harbor Boulevard and Portola Road sites are located in SOAR-protected areas.~~

3.10-28 The text of the EIR is revised to state as follows:

Consistency with Plans and Policies Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect: The construction of the Harbor Boulevard AWP site would occur within the local coastal zone and is currently subject to Open Space and COS designations under the County's LCP. If selected, however, the site would be annexed to the City. Development at this site would require a coastal development permit and annexation to the City of Ventura. In addition, use of the site may require an LCP amendment since it is ~~zoned Open Space (COS)~~ designated Commercial Planned-Tourist Oriented in the City's LCP. This is not an agricultural or open space land use designation and is not subject to SOAR.

Annexation of the Harbor Boulevard site to the City of Ventura is subject to LAFCo approval, and LAFCo would review the proposed annexation for consistency with LAFCo's Annexation Policies and Procedures. Development of the AWP on this site would promote efficient municipal services and facilities by locating the AWP near the existing VWRF, and would not promote sprawl. It is a reasonable and compatible use of the land. Therefore, the construction of the AWP does not conflict with any policy or zoning provision adopted for the purpose of avoiding or mitigating an environmental effect.

~~This site is also subject to the County SOAR policies and to General Plan Policy 3D. Mitigation Measure AG-1, requiring a conservation easement to mitigate for the loss of open space on the proposed Harbor Boulevard site, would ensure consistency with the SOAR program and General Plan policies intended to avoid or mitigate an environmental effect.~~

Page 3.10-29 The text of the EIR is revised to state as follows:

Consistency with Plans and Policies Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect: Development of the Portola Road AWPf would convert land designated for agriculture to a non-agricultural use and would conflict with the above goals and policies. Mitigation Measure AG-1, requiring an agricultural conservation easement to mitigate for the loss of Prime Farmland on the proposed Portola Road site, would ensure consistency with the goal of continuing to protect agricultural lands, SOAR program. Further, development at this site would require ~~the~~ annexation to the City of Ventura. Annexation of the Portola Road site to the City of Ventura is subject to LAFCo approval, and LAFCo would review the proposed annexation for consistency with LAFCo's Annexation Policies and Procedures. Development of the AWPf on this site would promote efficient municipal services and facilities by locating the AWPf near the existing VWRf, and would not promote sprawl. It is a reasonable and compatible use of the land. Therefore, the construction of the AWPf does not conflict with any policy or zoning provision adopted for the purpose of avoiding or mitigating an environmental effect.

Page 3.10-31 New Wildlife/Treatment Wetland

The proposed new wildlife/treatment wetlands would be located in land designated as ~~Public and Institutional~~ Parks and Open Space on City-owned property adjacent to the existing VWRf. The land is zoned for Parks. Currently, the land is vegetated open space. The construction of the wetland would occur within the coastal zone and would require a coastal development permit. The new treatment wetland would be consistent with City of Buenaventura LCP policies 15.5, Flood Plain; 15.8, Coastal Conservancy; and 15.11, Public Services. The wetland would not include habitable structures in the floodplain and would enhance the local coastal area by adding a new wetland. Once constructed, the treatment wetlands would be visually and functionally compatible with all surrounding land uses, including the Santa Clara River, just south of the proposed site. The construction of the wetlands would require excavation and has the potential to affect archeological resources. As a result, Mitigation Measures CUL-1 through CUL-5 are required.

Figure 3.10-1b through 3.10-d The land use layers have been corrected.

Marine Biology

Page 3.11-46 The text of the EIR is revised to state as follows:

Underwater Noise

Underwater noise would be produced by marine vessels and in-water construction activities, especially pile-driving ~~and demolition of any offshore structures~~ resulting in short-term elevated underwater noise levels. If anchor pilings are required to secure portions of the outfall to the seafloor ~~prior to reburial~~, the use of either impact or vibratory pile drivers to install the anchor pilings would result in the generation of underwater noise that could be harmful or disturbing to fish, marine mammals, and sea turtles.

Page 3.11-48 The text of the EIR is revised to state as follows:

Until a precise outfall location has been developed, Since it is unknown at this time it cannot be determined whether anchor piles will be required for the construction of the outfall nor what kind of anchor piling design would be required (i.e. the quantity of anchor piles needed, the diameter and composition of the anchor piles, pile spacing, or the type of pile driving equipment that will be used), ~~the potential effects, if any, of underwater noise generated from project related pile driving activities cannot be estimated. Additionally, the specific effects to marine biological resources cannot be determined.~~ However, ~~b~~Based on similar projects, however, potential effects to fish, marine mammals, and sea turtles can be estimated and maximum underwater noise thresholds at which no impacts occur can be determined (Caltrans 2015).

The key to creating a pile driving program that generates very low underwater noise levels and sufficient attenuation distances such that underwater noise impacts can be feasibly mitigated, if necessary, starts with pile diameter and composition. Table 3.11-5A provides a summary of calculated noise effects associated with the types of piles that could be used for the proposed project. (The final design has not yet been determined, so several choices are provided). As illustrated by this table, the attenuation distances to achieve desired noise levels (SEL cumulative threshold) varies between pile type and construction method. Vibratory methods result in much less noise (and therefore, smaller impact areas) than percussive methods. The methods under consideration by the City to anchor the outfall (a potential list is included in the Table) would result in small areas of effect (generally less than 108-meter circumference from the source) compared to the example provided in the comment letter (1,502-meter circumference). Vibratory methods could result in areas of effect less than 10 meters from the source. These short distances are within the general underwater construction area where the commotion created by the activities will likely discourage pelagic wildlife from entering the area in any case. The EIR concludes that this small area of effect would be less than significant, subject to concurrence from the regulatory agencies.

TABLE 3.11-5A:**ESTIMATED VIBRATORY AND IMPACT HAMMER PILE-DRIVING UNDERWATER NOISE GENERATION AND ATTENUATION LEVELS RELATIVE TO ESTABLISHED CRITERIA LEVELS**

Pile Type	Equip. Type	Distance to Sound Level Thresholds (meters) for Non-impulsive Sound Sources ²								Attenuation Equipment
		SEL Cumulative Threshold		150 dB (Fish-Behavioral) ³	SEL Cumulative Threshold					
		187 dB (Fish ≥2g)	183 dB (Fish < 2g)		183 dB (Low-Frequency Cetaceans)	185 dB (Mid-Frequency Cetaceans)	155 dB (High-Frequency Cetaceans)	185 dB (Phocid Pinnipeds)	203 dB (Otariid Pinnipeds)	
12-inch Steel Pipe Pile ¹	Vibratory	1	1	12	1.8	0.1	2.2	1.0	0.1	None
13-inch Steel Pipe Pile ¹	Vibratory	1	1	25	46.4	1.7	55.3	24.8	1.8	None
16-inch Steel Pipe Pile ¹	Vibratory	0	1	-	4.6	0.2	5.5	2.5	0.2	None
16-inch Fiberglass/concrete pile ¹	Vibratory	0	0	-	0.4	0.0	0.5	0.2	0.0	None
Pile Type	Equip. Type	Distance to Sound Level Thresholds (meters) for Impulsive Sounds Sources ²								Attenuation Equipment
		SEL Cumulative Threshold		150 dB (Fish-Behavioral)	SEL Cumulative Threshold					
		187 dB (Fish ≥ 2 g)	183 dB (Fish < 2 g)		183 dB (Low-Frequency Cetaceans)	185 dB (Mid-Frequency Cetaceans)	155 dB (High-Frequency Cetaceans)	185 dB (Phocid Pinnipeds)	203 dB (Otariid Pinnipeds)	
12-inch Steel Pipe Pile ³	Percussive	1	1	100	20	108	29.5	12.1	0.9	None
13-inch Steel Pipe Pile ³	Percussive	0	0	215	20	108	29.5	12.1	0.9	None
16-inch Steel Pipe Pile ³	Percussive	2	3	-	58.5	5.2	86.5	35.6	2.5	None
16-inch Fiberglass/concrete pile ³	Percussive	0.0	0.0	-	4.3	0.4	6.4	2.6	0.2	None

NOTES:

¹ Vibratory pile driving hammers have been documented to reduce underwater noise levels a minimum of 14-15 dB and up to 28-29 dB, depending on the pile type, water depth, and type of hammers being used (Caltrans 2015). Estimating the potential underwater noise attenuation distances for steel pipe and fiberglass/concrete pilings using a vibratory hammer, underwater noise levels documented for impact hammers were reduced by 14 dB.

² NOAA 2018b, NOAA 2016b; NMFS 2016; Caltrans 2015

³ Time duration for using an impact hammer to set any pilings to desired depth assuming the vibratory hammer cannot, by itself, achieve required anchor depth was <1 hour. Calculations assumed 50 blows per piling, XLogR = 15, pulse duration = 0.8 seconds, 2.0 weighting factor adjustment.

Page 3.11-49 The following text is added to the EIR:

Outfall Operations

Following construction, the operation of the outfall pipeline, including the discharge of the reverse osmosis (RO) treated effluent could potentially result in localized impacts from toxicological impacts of effluent constituents to marine biota, depending on the concentration of the constituent in the wastewater discharge.

Periodic inspections and cleaning of the diffuser would occur annually at a minimum and would be accomplished by divers using hand-held tools. Cleaning methodologies would follow standard best management practices used on ocean disposal facilities, subject to NMFS and USACE permit conditions, and would not significantly disrupt marine species that rely on habitat created by the hard surface of the diffusers.

Page 3.11-50 Mitigation Measure Marine-2 has been revised to read as follows:

MARINE-2: Prior to the initiation of any offshore pile driving activities for the project, the City of Ventura shall prepare a Construction Plan that outlines the details of the piling installation approach. The information provided in this plan shall include, but not be limited to:

- The type of piling and piling size to be used.
- The method of pile installation to be used.
- Noise levels for the type of piling to be used and the method of pile driving (vibratory or impact).
- Calculation of potential underwater noise levels that could be generated during pile driving using methodologies outlined in Caltrans 2015 and NOAA 2016b.
- A schedule of when pile-driving would occur.

~~If the results of the calculations provided in the detailed Construction Plan for pile-driving indicate that underwater noise levels are < 183 dB for fish at a distance of ≤ 10 meters and ≤ 120 dB for marine mammals for a distance ≤ 500 meters, then the Plan will recommend that no further measures are required to mitigate underwater noise.~~ If calculated noise levels are > 183 dB at ≤ 10 meters or > 120 dB at a distance of ≤ 500 meters, ~~then the~~ City of Ventura shall develop a NMFS-approved sound attenuation reduction and monitoring plan. This plan shall detail the sound attenuation system, detail methods used to monitor and verify sound levels during pile-placement activities, and describe all BMPs undertaken to reduce impact hammer pile-driving sound in the marine environment to an intensity level of less than 183 and 120 dB at distances of 10 meters and less, and 500 meters and less, respectively. These performance standards assure compliance with NMFS cumulative SEL and peak SPL acoustic metrics. The sound-monitoring results shall be made available to NMFS. The Construction Plan shall be presented to the NMFS Environmental Review Officer prior to commencement of construction for review and approval.

The plan shall incorporate, but not be limited to the following BMPs, which have been shown to reduce underwater noise levels and possible impacts to fish and marine mammals:

- Pile -driving shall be conducted only between June and November to avoid gray whale migration, unless NMFS in their Section 7 consultation with the USACE determines that the potential effect to marine mammals is less than significant.
- At least 1,600-foot (500-meter) safety zone (or as otherwise required by NMFS) shall be established and maintained visually monitoring around the sound source for the protection of marine mammals and sea turtles in the event that construction sound levels are unknown or cannot be adequately predicted to be harmful to marine mammals:-
- A NMFS-approved biological monitor will conduct daily surveys before and during impact hammer pile driving to inspect the work zone and adjacent ~~Santa Monica Bay~~ waters for marine mammals. The monitor will be present as specified by NMFS Fisheries during the pile-driving phases of construction.
- Work activities shall be halted when the biological monitor observes that a marine mammal or sea turtle enters the 1,600-foot (500-meter) established safety zone and shall cease until the mammal has been gone from the area for a minimum of 15 minutes.
- A “soft start” technique shall be used in all impact hammer sourced pile driving, giving marine mammals an opportunity to vacate the area.

Other BMPs will be implemented if the biological monitor determines they are necessary, such as bubble curtains or an air barrier, to reduce underwater noise levels to the performance standards applicable pursuant to in this mitigation in Table 311-5A, or at those more stringent thresholds established by NMFS for acute and chronic levels 10 meters and 500 meters, or such other more stringent distances as may be established by NMFS within a distance of 500 meters (1,600 feet), if feasible.

Alternatively, to meet these noise criteria, the City of Ventura may consult with NMFS directly and submit evidence to the satisfaction of the Environmental Review Officer. In such case, City of Ventura shall comply with NMFS recommendations and/or requirements to meet the noise criteria. The BMPs listed above provide examples of measures that are normally used to reduce noise impacts to below the noise criteria.

Transportation and Traffic

Page 3.17-13 Mitigation Measure TRAF-1 has been revised as follows:

TRAF-1: Prior to the start of construction facilities that would occur within a roadway right-of-way, the City of Ventura shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will show all signage,

striping, delineated detours, flagging operations, and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City's Public Works Director and Fire and Police Chiefs. The Traffic Control Plan shall be provided to the County Transportation Department for review prior to commencement of construction. When construction activities disrupt travel on major collectors or arterials, electronic signs shall be used to provide the public, on all transportation modes, with current construction information and the availability of alternate travel routes.

The Traffic Control Plan shall be prepared in accordance with the City of Ventura's traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties and that emergency access will not be restricted. Additionally, the Traffic Control Plan shall also include a scheduling plan showing the hours of operation to minimize congestion during the peak hours and special events. Haul routes will be identified based on County-approved truck routes. The scheduling plan will ensure that congestion and traffic delay are not substantially increased as a result of the construction activities. Further, the Traffic Control Plan will include detours or alternative routes for bicyclists using on-street bicycle lanes as well as for pedestrians using adjacent sidewalks.

In addition, the City shall provide written notice at least 2 weeks prior to the start of construction to owners/occupants along streets to be affected during construction. During construction, the City will maintain continuous vehicular and pedestrian access to any affected residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time. Access will be reestablished at the end of the workday. If a driveway needs to be closed or interfered with as described above, the City shall notify the owner or occupant of the closure of the driveway at least 5 working days prior to the closure. The Traffic Control Plan shall include provisions to ensure that the construction of the proposed projects do not interfere unnecessarily with the work of other agencies such as mail delivery, school buses, and municipal waste services. The Traffic Control Plan shall identify that damage to the condition of the roadways due to the use of construction related vehicles including soil haul trucks be repaired pursuant to County Transportation Department standards.

The City shall also notify local emergency responders of any planned partial or full lane closures or blocked access to roadways or driveways required for construction of the proposed project facilities. Emergency responders include fire departments, police departments, and ambulances that have jurisdiction within the proposed project area. Written notification and disclosure of lane closure location must be provided at least 30 days prior to the planned closure to allow for emergency response providers adequate time to prepare for lane closures.

Tribal Cultural Resources

Page 3.18-5 Table 3.18-1 has been revised as follows:

TABLE 3.18-24
SUMMARY TRIBAL CULTURAL RESOURCE IMPACT DETERMINATIONS

Impacts	3.18-1 Historical Resource	3.18-2 Significant to Native American Tribe
Phase 1		
Advanced Water Purification Facility	NILTSM	NILTSM
Water Conveyance System	NILTSM	NILTSM
Groundwater Wells	NILTSM	NILTSM
Wildlife/Treatment Wetlands	NILTSM	NILTSM
VWRF Treatment Upgrade	NILTSM	NILTSM
Concentrate Discharge Facility	NILTSM	NILTSM
Phase 2		
AWPF Expansion	NILTSM	NILTSM
Ocean Desalination	NILTSM	NILTSM

LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant impact with mitigation
 NI = No Impact
 SU = Significant and Unavoidable impact, even after implementation of mitigation

Page 3.18-6 The text of the EIR is revised to state as follows:

Advanced Water Purification Facility

No tribal cultural resources have been identified within the project area. Therefore, ground-disturbing activities associated with the construction of the Advanced Water Purification Facility (AWPF) would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Water Conveyance System

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the water conveyance system would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5

both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Groundwater Wells

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the aquifer storage and recovery wells would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Wildlife/Treatment Wetlands

No tribal cultural resources have been identified within the project area. Therefore, ground-disturbing activities associated with the reconfiguration of the existing ponds or the construction of the new treatment wetlands would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

VWRF Treatment Upgrade

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the treatment upgrade would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Barbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Page 3.18-7

The text of the EIR is revised to state as follows:

Concentrate Discharge Facility

No tribal cultural resources have been identified within the project area. Therefore, ground disturbing activities associated with the construction of the new outfall, or the discharge pipeline to the Calleguas Salinity Management Pipeline would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 through CUL-6 both provide for coordination with the Garbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 through CUL-6 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 through CUL-6.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Phase 2

AWPF Expansion

No tribal cultural resources have been identified within the project area. Therefore, activities associated with the expansion project would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 and CUL-5 both provide for coordination with the Garbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 and CUL-5 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 and CUL-5.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Ocean Desalination

Desalination Facility

No tribal cultural resources have been identified within the project area. Therefore, activities associated with the desalination facility operations would not cause a substantial adverse change in the significance of a tribal cultural resource. Mitigation Measures CUL-4 through CUL-6 both provide for coordination with the Garbareño/Ventureño Band of Mission Indians that would ensure impacts to Tribal cultural resources in addition to other archaeological resources are less than significant. Implementation of CUL-4 through CUL-6 would minimize impacts to Tribal cultural resources.

Mitigation Measures: ~~None required.~~ CUL-4 through CUL-6.

Significance Determination: ~~No Impact.~~ Less than significant with mitigation.

Acronyms

Page 8-7 The following text has been added to the EIR:

MEPDV maximum ecologically ~~environmentally~~ protective diversion volume

CHAPTER 12

References

The following references are in addition to the those identified as part of the DEIR.

Addenda Staff Recommendation to Agenda Item 13.5, Tuesday, September 10, 2002, County of Ventura, Appeal No. A-4-VNT-02-201 (Shozi)

Carollo, 2019-RO Concentrate Disposal Alternatives Memorandum, July 8, 2019.

Carollo, 2019-Estimated Project Costs for Ventura Water Supply Projects and Alternatives, September 12, 2019

CEC, 2016a. Electricity Consumption by County – Ventura, Available online at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>, Accessed May 2018.

ESA, 2019- Vegetation Mapping of the Proposed Treatment Wetlands Site Technical Memorandum, May 20, 2019.

Kramer, S., D. Revell, and E. Stein. 2018. SRP Recommendations – DRAFT. Prepared for the City of Ventura, Ventura, California. Harrison, R. L., E. A. Keller, E. Kelley, and L. A.

Memorandum of Agreement to Implement Tertiary Treated Flows Consent Decree and Stipulation Dismissal in Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay v City of San Buenaventura Case No.: CV 10-02072-GHK (PJWx), February 13, 2017.

Pub. Resources Code, § 21002.1(c).

Pub. Resources Code, § 21080(e)(2) Pub. Resources Code, § 21082.2(c).

Pub. Resources Code, §§ 21002, 21002.1(c), 21061.1, 21081(a)(3), and 21081(b).

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- Technical Review Team Comments on SRP Report on Phase III Report, June 26, 2018.
- The *Tertiary Treated Flows Consent Decree and Stipulated Dismissal with the Wishtoyo Foundation Ventura Coastkeeper, Heal the Bay* filed with the U.S. Central California District Court February 3, 2012, executed among the City, the Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay

Appendix E

Estimated Project Cost for Ventura Water Supply Projects and Alternatives

VENTURA WATER PURE

City of Ventura

To: Susan Rungren, General Manager; Gina Dorrington, Assistant General Manager

Prepared By: Lydia Holmes, Elisa Garvey

Office: WCO

Date: September 12, 2019

Project No.: 9483C.00

Subject: Estimated Project Costs for Ventura Water Supply Projects and Alternatives

Purpose

The purpose of this memorandum (memo) is to provide information regarding the costs of the proposed VenturaWaterPure project (proposed project) and alternatives to the proposed project. This memo summarizes the estimated costs of the proposed project and of the alternatives evaluated in the EIR.

The cost estimate herein is based on current conditions and assumes that construction will occur at the proposed project locations. This estimate is based on professional opinion of estimated costs at this time and is subject to change as the project design matures. Staff and Consultants have no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. These estimated costs are not a guarantee that proposals, bids or actual construction costs will not vary from the costs presented as shown.

Project Objectives

Over the course of the project development for VenturaWaterPure, starting with the Phase 1 Estuary Studies in 2009, there have been numerous options considered. Some options were dismissed early, because they were too expensive, were not feasible, or would not meet most of the goals of the project. Alternatives that were potentially feasible and that might meet most of the objectives of the project were evaluated in the EIR.

As discussed in the EIR, the project objectives are:

- Augment local water supply in an environmentally responsible and cost-efficient manner.
- Provide a drought and disaster-resilient water supply.
- Protect, maintain, and improve ecological resources and related beneficial uses of the Santa Clara River Estuary (SCRE) and its watershed.
- Improve municipal supply groundwater quality within the service area.
- Maintain compliance with the City of Ventura's Ventura Water Reclamation Facility (VWRF) National Pollutant Discharge Elimination System (NPDES) permit.

Cost of the Proposed Project

The proposed VenturaWaterPure Project includes:

- Phase 1A: Divert all but 1.9 mgd tertiary treated flows from discharge to the SCRE to an Advanced Water Purification Facility (AWPF) (advanced treatment including reverse osmosis) for indirect potable reuse (IPR) providing highly purified, high quality water.
- Phase 1B IPR: Divert all but 0 - 0.5 mgd to the AWPF (expand advanced treatment) for additional IPR
- Phase 1B DPR/GW RO: Add direct potable reuse (DPR) facilities to blend highly purified water into potable supply without injecting into groundwater basin first. Add treatment (reverse osmosis) for reducing salt in portion of existing groundwater supplies for water quality improvements.
- Phase 2: Implement Ocean Desalination if full diversion to CDL of 0-0.5 mgd is not allowed resulting in inadequate flow to meet supply needs. Provides new high-quality water supply. Evaluated at a programmatic level in the EIR.

Table 1 relates the proposed project to the project objectives.

Table 1 - Comparison of the Proposed Project to Project Objectives

Objective	Metric/Value	How met?
Augment local supply	5,400 AFY	Augment supply through potable reuse
Protect SCRE and meet NPDES Permit requirements	Provide CDL to SCRE no greater than 1.9 mgd (Phase 1a) and then 0 to 0.5 mgd (Phase 1b), during closed berm	Reduces discharges to the SCRE in accordance with best available science
Improve water quality	Meet Secondary MCL TDS = 1000 mg/l	Purified water IPR decreases TDS in potable supply. Additional water quality benefit from implementing DPR and groundwater reverse osmosis in future.

The cost of the VenturaWaterPure Project are shown in Table 2, with a range shown based on differences in AWPF sites being considered in the EIR. Estimated costs are higher for AWPF locations further from the VWRf. More detail on the cost estimates is shown in Appendix A (and included in the Basis of Design Report). In addition to the AWPF project costs for the VenturaWaterPure project, the Consent Decree includes a water quality goal of 4 mg/l nitrate. To meet this goal, the City could employ a combination of upgrades at the VWRf and constructed treatment wetlands. The treatment wetlands have been estimated (by separate consultant) to cost \$11M for construction. This cost is included in Table 2 to incorporate all known project related costs.

Phase 2 costs could include ocean desalination, if discharge reduction in Phase 1b does not provide for potable reuse sufficient to meet water needs. Costs for desalination facilities presented herein are based on costs presented to the California Public Utilities Commission for the Monterey Desalination facilities, with cost adjustments incorporated for the amount of flow and associated facilities scaling. The Monterey Desalination facilities are the most comparable desalination facilities in California to potential facilities in Ventura due to a number of factors including, but not limited to, the need for a new intake and facilities' sizing, and therefore provide the best cost-basis for potential Ventura facilities. Other recent desalination efforts in California have included retrofitting of existing inoperable facilities, thereby requiring far less new infrastructure, and not providing a useful cost-bases for potential Ventura facilities.

Table 2 - Cost Summary of VenturaWaterPure, \$ Millions in 2019 dollars

Project Element	Phase 1A IPR	Addition for Phase 1B IPR + Wetlands	Total Phase 1 costs (1A +1B) IPR Project	Addition for DPR	Addition for GW RO
Implemented by	2025	2030	-		2030 or later
Immediate Project of IPR Only					
Construction Cost in 2019	\$156M (Site 2) to \$172M (Site 5)	\$23 M AWPf + \$11 M wetlands = \$34 M	\$190M (Site 2) to \$206 M (Site 5)		
Annual O&M Costs	\$5.6 M	\$1.1 M	\$6.7 M		
Future Project of DPR and GW RO					
Construction Cost in 2019				\$36.7	\$16.2 - \$17.6
Annual O&M Costs				\$0.8 M	\$1.1 M

Notes:

- (1) Costs are not included for Phase 2 future costs.
- (2) Costs for *maximum* acreage of treatment wetlands based on estimate from ESA. Less acreage may be required.
- (3) Cost range shown based on difference in site. Appendix A shows detailed costs for all sites. Assumes new outfall cost rather than pipeline to Calleguas outfall. Does not include land acquisition costs.

Costs of Potential Alternatives to the Proposed Project

The EIR evaluates a range of reasonable alternatives to the proposed project, as summarized in Table 3, below. It is important to note that not all of these alternatives meet all the project objectives.

Table 3 – Project Alternatives in EIR

Alternative	Description
Proposed project	Divert discharge from the SCRE, construct AWPf for potable reuse, blend with groundwater to meet MCLs.
EIR Alternative 1 – No Project	No diversion of VWRf discharge from the SCRE. No new water supply or water quality improvement.
EIR Alternative 2 – 0% Diversion	No diversion of VWRf discharge from the SCRE. Ocean Desalination required to meet supply and quality goals.
EIR Alternative 3 - 60% Diversion	Diversion of discharge would remain at Phase 1a level. Ocean desalination required to meet supply and quality goals.
EIR Alternative 4 – 100% Diversion in Phase 1	All discharge diverted to VenturaWaterPure.
EIR Alternative 5 – Convey Tertiary Effluent to Oxnard	All discharge diverted to Oxnard for disposal or use by Oxnard. Ocean desalination required to meet supply and quality goals.
EIR Alternative 6 – Use Fairground Outfall	Rehabilitate existing outfall instead of building new outfall

Table 4 provides estimates of the potential costs of the alternatives to the proposed projects. Some of these costs, such as construction costs, can be quantified. Other costs are more difficult to quantify, such as the costs of water rationing if sufficient new water supplies are not provided to meet the needs of planned future growth.

Table 4 – Summary of Costs of the Proposed Projects and Alternatives, based on 2019 dollars

Alternative	Construction Cost	Annual O&M Cost	Additional Diversion Cost	Costs that are difficult to quantify or cannot be quantified (see discussion below)
Proposed project	\$190-206 million, depending on site (IPR)	\$6.7 million	None - included in project	
Alternative 1: No project alternative	0	Cost of developing and implementing rationing; cost of litigation and agency enforcement	None- no diversion	Failure to comply with legal requirements (SCRE protection; meeting secondary MCLs); litigation; potential penalties from regulators; penalties for failure to implement Consent Decree; costs of developing/implementing rationing; lost economic potential (public and private)
Alternative 2: Zero Percent Diversion	\$250 million desalination facility (for 5,400AFY)	\$10 million	None- no diversion	Failure to comply with legal requirements; penalties for failure to implement Consent Decree; potential penalties from regulators
Alternative 3: 60 Percent Diversion	<u>\$290–306 million =</u> \$190-206 million, depending on site + \$100 million for smaller desalination facility (for 2000 AFY)	\$10.7 million	Potential future cost of additional diversion	Potential penalties for failure to comply with legal requirements of certain agencies; penalties for failure to implement Consent Decree; to meet MEPDV, permit agencies may require additional diversion
Alternative 4: 100 Percent Diversion in Phase 1	\$190-206 million, depending on site	\$6.7 million	None- included in alternative	Without proposed project stepdown period, regulatory concern may prevent approval
Alternative 5: Conveyance of Discharge to Oxnard	<u>\$311 million =</u> \$61 million for pipeline + \$250 million for desalination	\$10.4 million plus annual fee to Oxnard	None- included in alternative	Legal and institutional costs to reach agreements with Oxnard
Alternative 6: Rehabilitation of Existing Fairgrounds Outfall	\$190-206 million, depending on site, plus extra cost to rehabilitate outfall	\$6.7 million	None- included in alternative	Existing outfall may not be capable of rehabilitation; greater costs of mitigation for adverse environmental impacts.

As shown in the last column of Table 4 and as discussed in the Final EIR's master response on costs, there are costs that are difficult to quantify, including potential costs of litigation, the potential costs of penalties if the Regional Board's orders in the new NPDES permit cannot be met, the potential penalties and other damages that could be assessed under the Consent Decree, the potential cost of

penalties for failing to meet secondary MCLs, and the cost of implementing and enforcing a water rationing program. These penalties accrue for violation of state and federal law, even if there is no violation of the Consent Decree and/or if its obligations under the Consent Decree are extended.

If the City selects an alternative that also violates the Consent Decree, the most immediate litigation cost, likely would be the initiation of lawsuits by the parties to the Consent Decree. The parties to the Consent Decree could sue to enforce the Consent Decree and to collect the penalties prescribed thereby, as well as their attorneys' fees and other damages that a federal judge might assess. In addition, the City would not simply be free of its obligations to protect the SCRE under state and federal law if it violated the Consent Decree, so new litigation claims would likely also be filed against the City for new violations of state and federal law, and for penalties and damages associated with those violations, as well as for attorneys' fees under third party citizen suit provisions of the federal Clean Water Act. This litigation also would lead to delay that would cause the City's cost of compliance to increase, and the City would incur substantial legal fees and court costs (including, potentially, attorneys' fees payable to the City's opponents). If the City willfully disobeyed the Consent Decree, it could even be subject to contempt proceedings and court fines.

The discharge reduction that would be achieved by the proposed project is not solely a response to the Consent Decree, but is also responds to federal Clean Water Act and California Porter Cologne requirements that must be implemented via conditions established by the Regional Water Quality Control Board's in the City's VWRf NPDES permit, which is renewed by law approximately every 5 years. Under state law (the Enclosed Bays and Estuaries Policy and the Recycled Water Policy), the Regional Board specifically required the City to conduct in-depth studies to help determine whether discharge practices should be modified over time, to better protect SCRE habitat and water quality, as a condition of its 2002, 2008 and 2013 NPDES permits. See EIR, pp. 1-7 – 1-9. Regional Board Order R4-2013-0174 for VWRf discharges required the City to prepare the Phase 3 Estuary Study, and seek review of that Study by the Scientific Review Panel. The Regional Board further addressed the relevance of the information required by the Consent Decree to the VWRf NPDES permit requirements (EIR, p. 1-9). If the City were to fail to reduce discharge to the SCRE, in violation of possible requirements in its new NPDES permit, it could be subject to enforcement actions, including monetary penalties on a per gallon of discharge and/or per day basis. Failure to comply with secondary MCLs similarly could result in enforcement actions.

If an alternative is selected that does not adequately augment the City's water supply, the City would have to impose water rationing. The mandatory water restrictions that the state imposed during the 2015 drought may provide some guidance as to the costs, both public and private, that this would involve. The state instructed water authorities to raise rates on heavy water users, to reward conservers and punish wasters. Punitive measures, such as fines, could be imposed. Private costs would include reduced property values. The likelihood of reduced economic opportunities, based on the City's inability to permit new businesses, residential and/or commercial development and other economic ventures, would be both a public and private cost.

These public and private costs are more difficult to quantify than construction costs. In particular, a determination by the City not to comply with the Consent Decree or NPDES would be a fundamental assault on the rule of law. If the City fails to protect the ecology of the SCRE, costs to the species that rely on the SCRE, including endangered species, are also difficult to quantify.

Appendix A

VENTURAWATERPURE COST ESTIMATES

Basis of Costs

For the alternatives presented herein, cost estimates were developed following the Association for the Advancement of Cost Estimating (AACE) International Recommended Practice No. 18R-97 to a Class 5 estimate level. Appropriate for preliminary budget approval at early stages in design progression, Class 5 estimates use stochastic estimating methods such as parametric or other modeling techniques. Typical accuracy ranges for Class 5 estimates are -20 percent to - 50 percent on the low side and +30 percent to +100 percent on the high side.

Costs are shown in 2019 dollars. The RS Means location factor for LA is 1.134. Table A.1 summarizes the contingencies used in developing the cost estimates.

Table A.1 - **Cost Estimate Contingencies & Adders**

Cost	Amount	Cumulative Amount ⁽¹⁾
Direct Cost	A	A
Construction Contingency	30% of A	30% of A
Subtotal	B	130% of A
General Contractor Overhead, & Profit	15% of B	20% of A
Subtotal	C	150% of A
General Conditions	15% of C	22% of A
Subtotal	D	172% of A
Sales Tax	7.75% of D/2	6.7% of A
Total Construction Cost ⁽²⁾	E	179% of A
Engineering, Legal, & Administrative Fees	30% of E	54% of A
Owner's Reserve for Change Orders	5% of E	9.0% of A
Total Project Cost	F	243% of A

(1) Cumulative amount is with respect to purification treatment facility cost.

(2) Cost in 2019 dollars. Costs should be escalated to represent future dollars.

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Purification Treatment Facility Cost

Table A.2 summarizes the costs for the AWPf.

Table A.2 - AWPf Cost Estimate Summary

Element	Phase 1A IPR	Additional Cost for Phase 1B IPR	Additional Cost for DPR	Additional Cost for GW RO
EQ Tanks (VWRF, AWPf, and Process Waste)	\$8,911,000	\$0	\$0	\$0
Ozone/BAC	\$9,179,00	\$625,000	\$0	\$0
Process Building	\$3,918,000	\$0	\$0	\$0
UF System	\$4,353,000	\$2,399,000	\$0	\$0
RO System	\$2,654,000	\$863,000	\$0	\$0
UV AOP System	\$1,236,000	\$0	\$0	\$0
ESB	\$0	\$0	\$721,000	\$0
WTP UF	\$0	\$0	\$5,723,000	\$0
Chemical Storage	\$1,927,000	\$197,000	\$45,000	\$0
Lime & CO ₂ Stabilization	\$1,445,000	\$0	\$0	\$0
Civil/Yard Piping ⁽¹⁾	\$1,682,000	\$205,000	\$318,000	\$0
El&C ⁽¹⁾	\$8,827,000	\$1,073,000	\$1,666,000	\$0
Greensand Filter	\$0	\$0	\$0	\$1,100,000
Groundwater RO System	\$0	\$0	\$0	\$5,650,000
Total Direct Cost	\$44,140,000	\$5,370,000	\$8,330,000	\$6,750,000
Contingency	\$13,250,000	\$1,620,000	\$2,500,000	\$2,030,000
Subtotal	\$57,390,000	\$6,990,000	\$10,830,000	\$8,780,000
General Contractor Overhead, Profit & Risk	\$8,610,000	\$1,050,000	\$1,630,000	\$1,320,000
Subtotal	\$66,000,000	\$8,040,000	\$12,460,000	\$10,100,000
General Conditions	\$9,900,000	\$1,210,000	\$1,870,000	\$1,520,000
Subtotal	\$75,900,000	\$9,250,000	\$14,330,000	\$11,620,000
Sales Tax ⁽²⁾	\$2,950,000	\$360,000	\$560,000	\$460,000
Total Estimated Construction Cost	\$78,850,000	\$9,610,000	\$14,890,000	\$12,080,000
Engineering, Legal, & Administrative Fees	\$23,660,000	\$2,890,000	\$4,470,000	\$3,630,000
Owner's Reserve for Change Orders	\$3,950,000	\$490,000	\$750,000	\$610,000
Total Project Cost⁽³⁾	\$106,500,000	\$13,000,000	\$20,200,000	\$16,400,000

Notes:

- (1) Civil/yard piping and El&C costs are estimated to be 5% and 25%, respectively, of the combined costs for EQ tanks, ozone/BAC, process building, UF system, RO system, UV AOP system, ESB, WTP UF, chemical storage, and lime and CO₂ stabilization.
- (2) Sales Tax applied on 50% of subtotal to represent tax on equipment and materials only.
- (3) The cost estimate herein is based on our perception of current conditions at the project location. This estimate reflects our professional opinion of accurate costs at this time and is subject to change as the project design matures. Carollo Engineers have no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. Carollo Engineers cannot and does not warrant or guarantee that proposals, bids or actual construction costs will not vary from the costs presented as shown.

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Infrastructure Costs

Costs for infrastructure required for water conveyance between the VenturaWaterPure components (VWRF, AWPf, wells, Bailey WCF, and outfall) are based on pipeline lengths and pumping requirements described in the BODR. All pipelines will be assumed to be constructed to their buildout (Phase 1B) capacities while pump stations will be constructed at current stage capacity, with room for expansion. An additional 20 percent contingency is added to allow for complexity in upgrading the pump stations for the expansions. If DPR is added, the cost includes a separate pump station at the groundwater injection wells and a dedicated pipeline to Bailey WCF, assumed to be at Phase 1B flows. Table A.3 summarizes infrastructure costs requirements for Site 2. Tables A.4 and A.5 summarize the infrastructure costs for Sites 3 and 5. Infrastructure costs assume discharging the RO concentrate at the VWRF, with a separate pump station and pipeline to send concentrate (and other waste streams) to a new outfall.

Table A.3 - Site 2 Infrastructure Requirements

Item	Phase 1A IPR	Additional Cost for Phase 1B IPR	Additional Cost for DPR	Additional Cost for GW RO ⁽³⁾
Pipelines	\$12,770,000	\$0	\$9,815,000	\$2,485,000
Pump Stations	\$3,635,000	\$1,165,000	\$2,360,000	\$520,000
Injection Wells	\$12,120,000	\$6,060,000	\$0	\$0
Total Direct Cost	\$28,530,000	\$7,230,000	\$12,180,000	\$3,010,000
Contingency	\$8,560,000	\$2,170,000	\$3,650,000	\$900,000
Subtotal	\$37,090,000	\$7,230,000	\$15,830,000	\$3,010,000
General Contractor Overhead, Profit & Risk	\$5,560,000	\$1,410,000	\$2,370,000	\$900,000
Subtotal	\$42,650,000	\$10,810,000	\$18,200,000	\$3,910,000
General Conditions	\$6,400,000	\$1,620,000	\$2,730,000	\$680,000
Subtotal	\$49,050,000	\$12,430,000	\$20,930,000	\$5,180,000
Sales Tax ⁽¹⁾	\$1,900,000	\$480,000	\$810,000	\$200,000
Total Estimated Construction Cost	\$51,000,000	\$12,900,000	\$21,700,000	\$5,400,000
Engineering, Legal & Administration Fees	\$15,300,000	\$3,870,000	\$6,510,000	\$1,620,000
Owner's Reserve for Change Orders	\$2,550,000	\$650,000	\$1,090,000	\$270,000
Total Estimated Project Cost⁽²⁾	\$68,900,000	\$17,400,000	\$29,300,000	\$7,300,000

Notes:

- (1) Sales Tax applied on 50% of subtotal to represent tax on equipment and materials only.
- (2) The cost estimate herein is based on our perception of current conditions at the project location. This estimate reflects our professional opinion of accurate costs at this time and is subject to change as the project design matures. Carollo Engineers have no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. Carollo Engineers cannot and does not warrant or guarantee that proposals, bids or actual construction costs will not vary from the costs presented as shown.
- (3) Costs for Groundwater RO assume that DPR is implemented, as there is shared infrastructure. Extra costs would be incurred if no DPR.

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Table A.4 - Site 3 Infrastructure Requirements

Item	Phase 1A	Additional Cost for Phase1B (IPR)	Additional Cost for DPR	Additional Cost for GW RO ⁽³⁾
Pipelines	\$19,955,000	\$0	\$9,815,000	\$2,465,000
Pump Stations	\$4,620,000	\$1,555,000	\$2,360,000	\$595,000
Injection Wells	\$12,120,000	\$6,060,000	\$0	\$0
Total Direct Cost	\$36,700,000	\$7,620,000	\$12,180,000	\$3,060,000
Contingency	\$11,010,000	\$2,290,000	\$3,650,000	\$920,000
Subtotal	\$47,710,000	\$9,910,000	\$15,830,000	\$3,980,000
General Contractor Overhead, Profit & Risk	\$7,160,000	\$1,490,000	\$2,370,000	\$600,000
Subtotal	\$54,870,000	\$11,400,000	\$18,200,000	\$4,580,000
General Conditions	\$8,230,000	\$1,710,000	\$2,730,000	\$690,000
Subtotal	\$63,100,000	\$13,110,000	\$20,930,000	\$5,270,000
Sales Tax ⁽¹⁾	\$2,450,000	\$510,000	\$810,000	\$200,000
Total Estimated Construction Cost	\$65,600,000	\$13,600,000	\$21,700,000	\$5,500,000
Engineering, Legal & Administration Fees	\$19,680,000	\$4,080,000	\$6,510,000	\$1,650,000
Owner's Reserve for Change Orders	\$3,280,000	\$680,000	\$1,090,000	\$280,000
Total Estimated Project Cost ⁽²⁾	\$88,600,000	\$18,400,000	\$29,300,000	\$7,400,000

Notes:

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- (3) Costs for Groundwater RO assume that DPR is implemented, as there is shared infrastructure. Extra costs would be incurred if no DPR.

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Table A.5 - Site 5 Infrastructure Requirements

Item	Phase 1A	Additional Cost for Phase 1B (IPR)	Additional Cost for DPR	Additional Cost for GW RO ⁽³⁾
Pipelines	\$20,445,000	\$0	\$9,815,000	\$1,860,000
Pump Stations	\$4,405,000	\$1,435,000	\$2,360,000	\$430,000
Injection Wells	\$12,120,000	\$6,060,000	\$0	\$0
Total Direct Cost	\$36,970,000	\$7,500,000	\$12,180,000	\$2,290,000
Contingency	\$11,090,000	\$2,250,000	\$3,650,000	\$690,000
Subtotal	\$48,060,000	\$9,750,000	\$15,830,000	\$2,980,000
General Contractor Overhead, Profit & Risk	\$7,210,000	\$1,460,000	\$2,370,000	\$450,000
Subtotal	\$55,270,000	\$11,210,000	\$18,200,000	\$3,430,000
General Conditions	\$8,290,000	\$1,680,000	\$2,730,000	\$510,000
Subtotal	\$63,560,000	\$12,890,000	\$20,930,000	\$3,940,000
Sales Tax ⁽¹⁾	\$2,460,000	\$500,000	\$810,000	\$150,000
Total Estimated Construction Cost	\$66,000,000	\$13,400,000	\$21,700,000	\$4,100,000
Engineering, Legal & Administration Fees	\$19,800,000	\$4,020,000	\$6,510,000	\$1,230,000
Owner's Reserve for Change Orders	\$3,300,000	\$670,000	\$1,090,000	\$210,000
Total Estimated Project Cost ⁽²⁾	\$89,100,000	\$4,020,000	\$29,300,000	\$5,500,000

Notes:

- (1) Sales Tax applied on 50% of subtotal to represent tax on equipment and materials only.
- (2) The cost estimate herein is based on our perception of current conditions at the project location. This estimate reflects our professional opinion of accurate costs at this time and is subject to change as the project design matures. Carollo Engineers have no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. Carollo Engineers cannot and does not warrant or guarantee that proposals, bids or actual construction costs will not vary from the costs presented as shown.
- (3) Costs for Groundwater RO assume that DPR is implemented, as there is shared infrastructure. Extra costs would be incurred if no DPR.

Concentrate Treatment and Disposal Alternatives

In addition to pipelines to a new outfall as shown in the previous section, the AWPf will require brine disposal via a new outfall or connection to the Calleguas Municipal Water District Salinity Management Pipeline (SMP / Hueneme Outfall). New outfall costs are being developed through the Outfall/Intake Feasibility Study. For now, we are using a rough estimate of costs for a new outfall based on the construction cost of the Hueneme Outfall. Table A.6 shows costs for brine disposal alternatives. Construction cost estimates range from \$26.6 to 39.5 million. In addition to construction costs, Calleguas would charge an ongoing discharge fee of approximately \$1 million a year. This fee would be based on actual discharge volume and would need to be confirmed through a negotiation and permitting process with Calleguas.

Table A.6 - RO Concentrate and or Tertiary Disposal Options

Outfall Option	Total Construction Cost (2019 Dollars)	Total Project Cost (2019 Dollars)
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New Outfall ⁽¹⁾	\$26,600,000	\$35,900,000
Pipeline to Calleguas SMP/ Hueneme Outfall ⁽²⁾	\$39,460,000	\$53,270,000

Notes:

- (1) Outfall costs are based on the construction of the Hueneme Outfall. Costs do not include conveyance from the VWRP to the outfall.
- (2) Costs include a 16-in pipeline from the VWRP to the Calleguas SMP connection to convey RO concentrate and other waste streams (including tertiary flows) up to 8 mgd.

Summary of Construction and Project Costs

Tables A.7 summarizes the capital costs for all the project elements. The range of costs shown for infrastructure costs reflect the variability of costs due to site. As the new outfall cost is a lower cost than the cost to tie into Calleguas, the concentrate disposal costs shown below is for the new outfall. If the Calleguas outfall is used, the costs increase by approximately \$13 million.

Table A.7 - Capital Cost Summary Table (\$M)

Project Element	Phase 1A IPR	Additional Cost for Phase 1B (IPR)	Total for Phase 1 IPR	Additional Cost for DPR	Additional Cost for GW RO
AWPF	\$44.1	\$5.4		\$8.3	\$6.8
Infrastructure Requirements	\$28.5 - \$37	\$7.2 - \$7.6		\$12.2	\$2.3 - \$3.1
Ventura Outfall	\$14.9	\$0.0		\$0.0	\$0.0
Total Direct Cost	\$87.6 - \$96	\$23.6 - \$24		\$20.5	\$9 - \$9.8
Construction Cost of AWPf & Infrastructure	\$156.4 - \$171.5	\$22.6 - \$23.2	\$179 - \$194.7	\$36.7	\$16.2 - \$17.6
Treatment Wetlands Construction Cost	\$0	\$11		\$0.0	\$0.0
Total 2019 Construction Cost	\$156.4 - \$171.5	\$33.6 - \$34.2	\$190 - \$205.6	\$36.7	\$16.2 - \$17.6
Total Project Cost ⁽¹⁾	\$211.1 - \$231.5	\$45.4 - \$46.2	\$256.5 - \$277.7	\$49.6	\$21.9 - \$23.8

Notes:

- (1) Total project costs include construction costs as well as additional costs for engineering, legal, administration and change orders.
- (2) Ocean water desalination infrastructure is developed as part of a separate study.
- (3) The cost estimate herein is based on our perception of current conditions at the project location. This estimate reflects our professional opinion of accurate costs at this time and is subject to change as the project design matures. Carollo Engineers have no control over variances in the cost of labor, materials, equipment; nor services provided by others, contractor's means and methods of executing the work or of determining prices, competitive bidding or market conditions, practices or bidding strategies. Carollo Engineers cannot and does not warrant or guarantee that proposals, bids or actual construction costs will not vary from the costs presented as shown.

Operations and Maintenance Costs

Tables A.8 – A.11 summarize the capital and operations & maintenance costs. O&M costs were calculated for infrastructure based on a predicted flow and pumping energy. Injection wells require a certain amount of maintenance to flush the wells and maintain injection capacity. Annual pump station and pipeline maintenance costs were based on a percentage of total direct costs. Consumables includes the estimated annual cost to be set aside for the periodic replacement of media, membranes and UV lamps. No staffing

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was allocated to the infrastructure. O&M costs vary per site. Costs presented within these tables represent total costs per phase, assuming that costs from the previous phase are still in effect.

Table A.8 - AWPf Annual O&M Cost Estimate

O&M component	Phase 1A	Additional Cost for Phase 1B (IPR)	Additional Cost for DPR	Additional Cost for GW RO
Electricity	\$1,481,000	\$339,000	\$143,000	\$280,000
Chemicals	\$545,000	\$307,000	\$70,000	\$102,000
Consumables	\$526,000	\$236,000	\$6,000	\$119,000
Labor	\$2,531,000	_(1)	_(1)	\$525,000
Total	\$5,083,000	\$882,000	\$219,000	\$1,026,000
Total for Phase 1 IPR		\$5,965,000		

Notes:

(1) Phase 1A provides sufficient staffing for Phase 1B flow and DPR additions.

Table A.9 - Site 2 Infrastructure O&M Cost Estimate

Item	Phase 1A Annual Costs	Additional Annual Cost for Phase 1B (IPR)	Additional Annual Cost for DPR	Additional Annual Cost for GW RO
Pumping Energy Cost	\$170,000	\$85,000	\$509,000	\$46,000
Groundwater Well Maintenance Cost	\$150,000	\$75,000	\$0	\$0
Pump Station Maintenance Cost	\$36,400	\$11,700	\$23,600	\$5,200
Pipeline Maintenance Cost	\$63,900	\$0	\$49,100	\$12,400
Total Estimated O&M Cost	\$420,300	\$171,700	\$581,700	\$63,600
Total for Phase 1 IPR		\$592,000		

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Table A.10 - Site 3 Infrastructure O&M Cost Estimate

Item	Phase 1A Annual Costs	Additional Annual Cost for Phase 1B (IPR)	Additional Annual Cost for DPR	Additional Annual Cost for GW RO
Pumping Energy Costs	\$239,000	\$120,000	\$509,000	\$55,000
Groundwater Well Maintenance Cost	\$150,000	\$75,000	\$0	\$0
Pump Station Maintenance Cost	\$46,200	\$15,600	\$23,600	\$6,000
Pipeline Maintenance Cost	\$99,800	\$0	\$49,100	\$12,300
Total Estimated O&M Cost	\$535,000	\$210,600	\$581,700	\$73,300
<i>Total for Phase 1 IPR</i>		<i>\$745,600</i>		

Table A.11 - Site 5 Infrastructure O&M Cost Estimate

Item	Phase 1A Annual Costs	Additional Annual Cost for Phase 1B (IPR)	Additional Annual Cost for DPR	Additional Annual Cost for GW RO
Pumping Energy Cost	\$213,000	\$106,000	\$509,000	\$32,000
Groundwater Well Maintenance Costs	\$150,000	\$75,000	\$0	\$0
Pump Station Maintenance Costs	\$44,100	\$14,400	\$23,600	\$4,300
Pipeline Maintenance Cost	\$102,200	\$0	\$49,100	\$9,300
Total Estimated O&M Cost	\$509,300	\$195,400	\$581,700	\$45,600
<i>Total for Phase 1 IPR</i>		<i>\$704,700</i>		

Appendix F

Santa Clara River Stream Flow Analysis



The Scientific Review Panel (SRP) concluded that:

"During winter months when the Santa Clara River is openly flowing through the estuary into the ocean, higher VWRF discharges such as the volume being currently discharged could be allowed, and would not be expected to adversely affect beneficial uses."¹

Analysis of recent historical flows in the lower Santa Clara River indicates that, even when VWRF is treating up to 8 mgd (≈ 12 cfs) of treated wastewater,² the discharge constitutes less than 3% of the total flow in the river during winter months under open berm conditions (see Table 1).

Table 1: Average Daily Flow in the Lower Santa Clara River³

Month	Open Berm	Closed Berm
January	714 cfs	171 cfs
February	204 cfs	13 cfs
March	517 cfs	16 cfs
April	94 cfs	5 cfs
May	47 cfs	<1 cfs
June	23 cfs	<1 cfs
July	<1 cfs	<1 cfs
August	<1 cfs	<1 cfs
September	<1 cfs	<1 cfs
October	5 cfs	4 cfs
November	4 cfs	1 cfs
December	221 cfs	7 cfs
Dec. - Mar. period	413 cfs	54 cfs

Given the location of VWRF's outfall (D-1) less than one-half mile from the beach,⁴ and the volume and velocity of flows in the river during winter months when the berm is open, any effluent discharged to the SCRE will be flushed into the Pacific Ocean in under 5 minutes.⁵

¹ Scientific Review Panel. SRP Recommendations - Final. Technical Memorandum dated June 25, 2018; pg. 26.

² Discharge data from Stillwater Sciences. City of Ventura Special Studies - Phase 3: Assessment of the Physical and Biological Conditions of the Santa Clara River Estuary, Ventura County, CA. See Figs. 3-14 & 3-15 on pg. 56.

³ Stream flow data from Santa Clara River at Victoria Ave. bridge crossing; period of record: 10/1/07 - 12/31/16.

⁴ Outfall location from: Stillwater Sciences. City of Ventura Special Studies - Phase 3: Assessment of the Physical and Biological Conditions of the Santa Clara River Estuary, Ventura County, CA. See map Fig. 2-1 on pg. 23.

⁵ During open berm conditions in December, when average daily stream flow is 221 cfs, the velocity of the river will range from 15-30 mph (depending on the depth of water).

Appendix G

Vegetation Mapping of the Proposed Treatment Wetland Site

memorandum

date May 20, 2019

to Gina Dorrington, City of Ventura

cc Miles Hogan, City of Ventura

from Tom Barnes, ESA

subject Vegetation Mapping of the Proposed Treatment Wetlands Site

This memorandum provides the results of detailed vegetation mapping that was conducted by ESA on May 6, 2019 at the proposed treatment wetlands site for the Ventura Water Supply Projects located along Harbor Boulevard. After meeting with the California Coastal Commission (CCC) on April 15, 2019, we understand that the CCC requested more focused vegetation mapping of the wetland property than what was previously documented by ESA in February 2019. The purpose of the focused vegetation mapping effort was to determine if sensitive natural communities and wetlands, defined by California Department of Fish and Wildlife (CDFW) and CCC, respectively, are present on this site, including Environmental Sensitive Habitat Areas (ESHA) as described in the City of Ventura's Local Coastal Program (LCP).

On May 6, 2019, ESA biologists Greg Ainsworth and Travis Marella re-characterized and mapped the vegetation on the treatment wetlands site. Vegetation communities were characterized (where applicable) in accordance with *A Manual of California Vegetation*, 2nd Ed. (Sawyer et al. 2009). The assessment consisted of walking throughout the majority of the site to observe the vegetation and to compile a list of representative plant species within each community. Based on the focused assessment, it was determined that there are five (5) vegetation communities onsite as depicted on **Figure 1** (attached), which includes the following: Dune Mat - *Ambrosia chamissonis* Herbaceous Alliance; Arroyo Willow Thickets – Mulefat Thickets - *Salix lasiolepis* - *Baccharis salicifolia* Shrubland Alliance; Coyote Brush – Saltbush – Mulefat Thickets - *Baccharis pilularis* - *Atriplex lentiformis* - *Baccharis salicifolia* Shrubland Alliance; Giant Reed Breaks – *Arundo donax* Semi-Natural Herbaceous Stands; and non-native forbs and grasses. Additionally, areas that are devoid of vegetation from footpaths, dirt roads, permanent and temporary structures, and the parking area near the northern boundary are also identified. These onsite vegetation communities are described in detail below.

Vegetation Communities

Dune Mat - Ambrosia chamissonis Herbaceous Alliance

This community is located in the northeast portion of the site and comprises 1.74 acres. Dominant species that characterize this community include beach suncup (*Camissoniopsis cheiranthifolia*), silver beach burr (*Ambrosia chamissonis*), red-sand verbena (*Abronia maritima*), sand aster (*Corethrogyne filaginifolia*), European sea rocket (*Cakile maritima*), and ice plant (*Carpobrotus edulis*). Other species observed in smaller concentrations include telegraph weed (*Heterotheca grandiflora*), giant reed (*Arundo donax*), crownbeard (*Verbesina* sp.), black mustard (*Brassica nigra*) and pampas grass (*Cortaderia selloana*). This community is bordered by the parking area and footpaths.

This community is a S3/G3 sensitive community. Sensitive natural communities and habitats are those defined by the CDFW as having a reduced range and/or are imperiled due to various forms of impact. Evaluation is done at both State (within California[S]) and Global (natural range within and outside of California[G]), each ranked from 1 (very rare and threatened) to 5 (demonstrably secure). Natural communities and habitats with state ranks of S1-S3 are considered sensitive and require review when evaluating CEQA impacts.

Arroyo Willow Thickets – Mulefat Thickets - Salix lasiolepis - Baccharis salicifolia Shrubland Alliance

This community is located primarily within the central portion of the site and consists of 9.57 acres. This community supports a tree layer dominated by arroyo willow (*Salix lasiolepis*) and mulefat (*Baccharis salicifolia*). This community is heavily dominated by these two species; however, other species are present as well, but in low concentrations, such as Fremont cottonwood (*Populus fremontii*), black mustard, tocolote (*Centaurea melitensis*), tamarisk (*Tamarix* spp.), and tree tobacco (*Nicotiana glauca*). There are several footpaths that meander throughout this community as well as encampments; however, the community as a whole is intact and not very fragmented by these disturbances. Two to three breeding pairs of least Bell's vireo (*Vireo bellii pusillus*), a federally endangered species, were observed and heard vocalizing within this community.

Coyote Brush – Saltbush – Mulefat Thickets - Baccharis pilularis - Atriplex lentiformis - Baccharis salicifolia Shrubland Alliance

This community essentially surrounds the Arroyo Willow Thickets - Mulefat Thickets community on the site and consists of 12.11 acres. This community is dominated by a combination of coyote brush (*Baccharis pilularis*), mulefat, and saltbush (*Baccharis pilularis*). In some portions within this community there is a herbaceous layer that is dominated with black mustard and non-native grasses, such as red brome. Other species observed within this community in low concentrations includes tree tobacco, California sagebrush (*Artemisia californica*), myoporum, poison hemlock (*Conium maculatum*), tocolote, and tamarisk. There are several footpaths that meander throughout this community.

Giant Reed Breaks – Arundo donax Semi-Natural Herbaceous Stands

This is a homogeneous community that is comprised of giant reed (*Arundo donax*) located at the southern portion of the site and comprises 0.53 acre.

Non-Native Forbs and Grasses

This community generally occurs on the outer fringe of the site and comprises 4.27 acres. This community is disturbed by various footpaths and other ground disturbances. Areas that are dominated with non-native forbs and grasses generally occur along the fringes of the Coyote Brush-Saltbush-Mulefat Thicket community. Dominant non-native forbs and grasses within this community include red brome and black mustard, respectively. Other species observed include tocolote, poison hemlock, and tamarisk.

Disturbed

Disturbed areas are generally devoid of vegetation and mostly consist of footpaths, dirt roads, encampments and temporary structures, as well as, the parking area at the northern boundary of the site. These disturbed areas comprise 7.67 acres of the site.

Wetlands

The U.S. Army Corps of Engineers (USACE) defines a wetland based on three key parameters: hydrology, soil, and vegetation. Positive wetland indicators of all three parameters are normally present in USACE-defined wetlands. Conversely, the CCC (and CDFW) requires one of these three parameters to be present to be considered a wetland under the California Coastal Act. Therefore, a resource would be considered by the CCC to be a wetland based on the presence of wetland hydrology, hydric soils, or hydrophytic vegetation. The CCC identifies the upland limit of a wetland as: a) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; b) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or c) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not (14 CCR Section 13577).

The Arroyo Willow Thickets – Mulefat Thickets - Shrubland Alliance meets the CCC's single parameter criteria to be considered a wetland based on the prevalence of arroyo willow. Arroyo willow often occur on stream banks and benches, slope seeps, and stringers along drainages. Arroyo willow has a National Wetland Plant List wetland indicator status of facultative wetland (FACW) (Lichvar, et al. 2016). USACE's wetland indicator status denotes the probability of individual species of vascular plants occurring in freshwater, brackish and saltwater wetlands in the Arid West Region of the United States. FACW plants have an estimated probability of 67% – 99% of occurring in wetlands, but occasionally may be found in non-wetlands. The Arroyo Willow Thickets – Mulefat Thickets – community that comprises 9.57 acres is considered a wetland community in accordance with the CCC's and CDFW's wetland parameter criteria.

It should be noted that the Coyote Brush – Saltbush – Mulefat Thickets is a mesophytic community (i.e, plants which are neither adapted to particularly dry nor particularly wet environments) and is therefore not considered a wetland in accordance with the CCC's criteria described above.

Environmentally Sensitive Habitat Areas

Environmentally sensitive habitat areas (ESHA) as defined in accordance with the Coastal Act of 1977 include “Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and

developments” (Section 30107.5). The Arroyo Willow Thickets – Mulefat Thickets community and Dune Mat - Herbaceous community are considered ESHA under the City of Ventura’s Local Coastal Program, since the Arroyo Willow Thickets – Mulefat Thickets community is a wetland community and because the Dune Mat - Herbaceous community is a CDFW Sensitive Natural Community (City of Ventura 1989.) As such, approximately 9.57 acres of the treatment wetland site are considered ESHA.

References

California Coastal Commission (CCC). 2011. Definition and Delineation of Wetlands in the Coastal Zone.

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