

# EXECUTIVE SUMMARY

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## Ventura Water Supply Projects DEIR

### ES.1 Introduction

To comply with the California Environmental Quality Act (CEQA) of 1970, the City of San Buenaventura (Ventura, or City) has developed the Ventura Water Supply Projects Environmental Impact Report (EIR). 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 proposed projects would achieve the goals of protecting the ecology of the SCRE while augmenting local potable water supplies.

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.

This Draft EIR has been prepared in compliance with the CEQA (as amended), codified at California Public Resources Code Sections 21000 et seq. and the CEQA Guidelines in the California Code of Regulations, Title 14, Division 6, Chapter 3.

### ES.2 Background

One objective of the proposed projects is to protect the ecology of the SCRE. Ventura Water is party to a Consent Decree<sup>1</sup> for the protection of the SCRE. The Consent Decree expresses the City’s commitment to pursue “environmentally protective, sustainable, and integrated water supply and wastewater discharge practices. . . [including] infrastructure options for Ventura’s reclamation and diversion of an ecologically appropriate volume”<sup>2</sup> of tertiary-treated flows

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<sup>1</sup> 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.

<sup>2</sup> *Id.* at 5.

produced by the existing VWRF and currently discharged to the SCRE. The Consent Decree requires such diverted flows to be dedicated to “water reclamation uses,” including local water supply augmentation to the maximum extent feasible. The Consent Decree does not replace any federal, state, or local law or permit requirement, and its implementation is subject to the completion of environmental review, including this EIR.

Another objective of the proposed projects is to develop a reliable potable water supply. The City’s water and wastewater department (Ventura Water) provides water and wastewater services to approximately 109,000 residents and businesses within the city limits and provides water service to some limited areas within unincorporated Ventura County. The City provides wastewater collection and treatment services for approximately 98 percent of city residences as well as McGrath State Beach Park and the north coast communities (County Service Area No. 29).

In June 2016, the City Council adopted 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. The UWMP concludes that the City’s existing water supplies may be insufficient to meet future dry year demands. As discussed in greater detail in Chapter 1, 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. In the 2016 water year, the Ventura Wastewater Reclamation Facility (VWRF) discharged approximately 4.7 MGD during the dry season to the SCRE. The VenturaWaterPure Project would maximize the diversion of this discharge to augment the City’s potable water supplies.

Therefore, the City is proposing to divert discharge of tertiary treated wastewater from the SCRE in order to protect the ecology of the SCRE in accordance with the Consent Decree, and to develop reliable potable water supplies for the Ventura Water service area. In addition, to improve potable water quality, a portion of the City’s existing groundwater supplies may be treated to meet secondary MCLs. If sufficient water is not available from the diversion of discharge, the City may also need to develop desalination facilities to meet 2035 water needs.

### **ES.3 Proposed Diversion Volume and Continued Discharge Level**

The City has conducted extensive analysis of the SCRE, including estimated ecological effects of reduced discharges on the SCRE. This analysis is compiled in several reports and reviews mandated by the Consent Decree, including the Phase 1, 2, and 3 Studies, the Technical Review Team (TRT) Report, and the Scientific Review Panel (SRP) Final Report and the TRT review supporting the conclusions and recommendations in the SRP Final Report. The findings of the reports and reviews are discussed in Section 1.6 and the analysis is used to support a proposed diversion volume and continued discharge level.

The SRP Final Report (supported by the TRT Review) recommends a Continued Discharge Level (CDL) range of 0 – 0.5 MGD (on an average annual basis) during closed berm conditions. This conclusion was founded on the beneficial effects of discharge reduction to ecological conditions

in the SCRE. Based on the SRP's recommendation, Phase I of the proposed project would reduce discharges to the SCRE to an average annual rate of 0 to 0.5 MGD during closed berm conditions.

During winter months, reflecting the steelhead migratory period, when the berm is open due to high Santa Clara River flows, higher discharges of tertiary flow to the SCE would be permitted, subject to diverting 6 MGD to the Advanced Water Purification Facility (AWPF) (after completion of Phase 1) first to provide a steady, constant influent flow for purification. Higher discharges of tertiary treated flow in excess of the CDL 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; or drawing down stored flows to assure sufficient storage capacity during closed berm conditions.

The anticipated discharge regime for the project is subject to emergency discharges at any time when capacity of the VWRP is exceeded, as necessary to prevent inundation, flooding, and/or spills at the treatment plant, to effect repairs and maintenance required to assure consistent compliance with other water quality limitations in the permit, or to protect public health and safety. Anticipated, scheduled repairs, maintenance and public health and safety activities shall be conducted during open berm conditions to the maximum extent feasible. Short-term emergency discharges of tertiary treated flow to the SCRE in such situations would not be expected to adversely affect beneficial uses."

Since the publication of the SRP Final Report, the City has met with and received feedback on the proposed projects from state and federal wildlife agencies, as discussed further in Section 2.4. Based on the scientific record and feedback from the agencies, the City is proposing additional phasing to the implementation approach that would commit 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. This phased implementation approach, as summarized in **Table ES-1**, is the basis of the proposed project's designed flow rate and minimum treatment capacity. As VWRP flows increase in the future, the CDLs will be maintained and more flow will be diverted to other uses.

**TABLE ES-1**  
**PHASES 1A AND 1B DISCHARGE AND DIVERSION SCENARIOS**

	VWRP continued discharge level (CDL) to SCRE	Minimum VWRP flow diverted to other uses <sup>(1)</sup>
	MGD	MGD
Phase 1a: Implemented by 2025	1.9	2.8
Phase 1b: Implemented by 2030	0 – 0.5	4.2 – 4.7

1. Based on discharge data from 2016 during low flow, dry weather conditions. As VWRP flows increase there will be additional flows diverted, while CDL will be maintained.

SOURCE: Stillwater Sciences 2018

During closed-berm conditions, for Phase 1A, an average annual continued discharge level (CDL) of 1.9 MGD to the SCRE would be maintained 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 VWRP 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. For 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 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 oversight.

## **ES.4 Project Objectives**

The key objectives of the proposed Ventura Water Supply Projects 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 VWRP NPDES permit.

## **ES.5 Project Description**

### **The Ventura Water Supply Projects – Design Capacity**

The Ventura Water Supply Projects would divert tertiary-treated water discharge before it enters the SCRE, and develop new water supplies to augment the City's water supply portfolio and meet future water demands described in the 2015 UWMP and 2018 CWRR. Consistent with the City's 2015 UWMP, approximately 5,400 AFY of new water supply is needed by 2035 to meet the projected water demand.

VWRP 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 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, 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.

**Table ES-2** shows the AWPf production objectives by phase, including new water supply resulting from diversion and treatment of SCRE discharge for potable reuse, groundwater water quality improvements, and (if consistent diversion of 100 percent of discharge is not permitted during Phase 2) ocean desalination, for all phases of the Ventura Water Supply Projects. Also shown in Table ES-2 is the expected reliable water supply generated from each source.

**TABLE ES-2**  
**POTABLE WATER SUPPLIES AND AWPf PRODUCTION OBJECTIVES**

Phase/Component	Treated Groundwater (Annual Average)		Minimum New Treated Water Supply (Annual Average)	
	AFY	MGD	AFY	MGD
<b>Phase 1</b>				
Phase 1a by 2025 (CDL of 1.9 MGD)	1,400	1.2	2,800	2.5
Phase 1b by 2030 (CDL of 0 – 0.5 MGD)			1,200	1.1
<b>Phase 1 Total New Water Supply</b>	<b>1,400</b>	<b>1.2</b>	<b>4,000*</b>	<b>3.6*</b>
<b>Phase 2: One Option Would Be Implemented</b>				
Option A: 100 Percent Diversion (CDL of 0 MGD)	600	0.5	1,400*	1.2*
Option B: Desalination	600	0.5	1,400	1.2
<b>Phase 1+2 Total New Water Supply</b>	<b>2,000</b>	<b>1.7</b>	<b>5,400</b>	<b>4.8</b>

\* Phase 1 total reliable water supplies would be a minimum of 4,000 AFY when discharge to the SCRE is at or near 0.5 MGD CDL (at 90 percent diversion of 2016 dry flows). When diversion approaches 100 percent, and the discharge to the SCRE is at or near 0 MGD CDL, Phase 1 water supplies would be higher because more water would be diverted from the SCRE to the AWPf. For purposes of reliability, the new water supply listed here from Phase 1b represents a conservative reliable supply volume. These numbers are based on 2016 dry flow conditions in a drought year. As VWRf flows increase there will be additional flows diverted for water supply, while the CDL will be maintained. Phase 2 Option A would implement a consistent 0 MGD CDL during closed berm conditions, resulting in a reliable future water supply of 5,400 AFY and 4.8 MGD.

SOURCE: Carollo 2018

The reliable new supplies summarized in Table ES-2 are calculated using the 2016 dry flow conditions as worst case flow conditions while limiting discharges through the existing wildlife ponds to the SCRE to meet the phased CDL requirements. The Phase 1 project would be designed to deliver a minimum reliable supply of 4,000 AFY, and the Phase 1 facility 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 would be maintained and more flow would 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. Phase 1 would produce a range of 1.2 – 1.7 MGD concentrate discharge during the advanced water treatment process.

The AWPf would be also 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. The City's potable water supply that originates from their groundwater wells does not currently meet

secondary MCLs. The California Division of Drinking Water (DDW) (formerly the California Department of Public Health) has required the City to improve mineral water quality in the groundwater supply (CDPH 2011). The City has calculated that the addition of approximately 1.2 MGD (1,400 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 MCLs. The amount of desalted groundwater needed to meet objectives for Phase 2 would expand to 2,000 AFY.

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. As a result, the Phase 1 reliable new supply of 4,000 AFY remains approximately 1,400 AFY below the future 2035–2040 dry-weather demand deficit of 5,400 AFY identified in the UWMP.

To meet its projected water needs, the City would need to implement Phase 2 of the project, which would include either increasing the diversion of tertiary treated wastewater to a consistent CDL of 0 (100 percent diversion), or constructing an ocean desalination facility. Phase 2 Option A would increase the minimum production of a new reliable water supply to 5,400 AFY of from the VWRf. This would be the preferred option subject to regulatory approvals.

If Option A is not approved and/or does not meet the City's water supply needs, a new ocean desalination facility would be constructed (Option B). This addition of 1,400 AFY of new reliable water supply, when added to the 4,000 AFY of new water supply from Phase 1, would result in a total of approximately 5,400 AFY of reliable new water supply compared with current supplies. In Phase 2, an additional 600 AFY of groundwater desalting would be needed to meet secondary MCLs.

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 as summarized in Table ES-2.

## **The Ventura Water Supply Projects – Phase 1 Components**

### **VenturaWaterPure Project Overview**

VenturaWaterPure would include diversion of the VWRf tertiary-treated flows and low-quality groundwater to a new AWPf to produce highly purified water. The groundwater would be pumped from the Oxnard Plain Basins. Once treated at the AWPf, the water would be used for groundwater augmentation and/or direct potable reuse.

The diverted VWRf tertiary-treated discharge would be conveyed to the AWPf for purification, and then conveyed via pipelines and pumping stations to groundwater injection wells to supplement the City's water supply for indirect potable reuse (IPR), or conveyed directly to the Bailey WCF and/or the Saticoy WCF for disinfection and distribution for direct potable reuse (DPR).

IPR would be implemented through the construction of groundwater wells, pipelines, and pump stations (needed for injection, extraction, and /or conveyance). Extracted groundwater would be conveyed to the Bailey WCF for disinfection and/or to an existing reservoir for distribution. Alternatively, the extracted groundwater would be disinfected at the point of extraction and conveyed to a nearby water distribution system pipeline.

The system would also be constructed so that DPR may be employed as an option if approved by the State Water Resources Control Board (SWRCB) consistent with regulations currently under development by the SWRCB.

## **Advanced Water Purification Facility**

The proposed AWPf would be located within the City of Ventura or in nearby unincorporated Ventura County within a 5- to 20-acre site. Three alternative AWPf locations have been identified, referred to as the Harbor Boulevard site, Transport Street site, and Portola Road site. Water would be stored in equalization basins at the VWRf site and pumped to the AWPf site for treatment. Tertiary treated water would be diverted prior to the existing wildlife ponds, however, flows would remain to the ponds to maintain their use and character. Flows out of the existing wildlife ponds would be managed to meet the CDL requirements into the estuary.

The proposed AWPf would treat water to exceed Title 22 compliance criteria and would include equalization/storage, ozone (O<sub>3</sub>), biologically active carbon (BAC) filters, ultrafiltration (UF), reverse osmosis (RO), and ultraviolet/advanced oxidation process (UV/AOP). For DPR, product water would enter an engineered storage buffer (ESB) followed by an additional UF and final disinfection.

An electrical substation would be constructed on the AWPf to connect to the surrounding grid and support the energy demands of the treatment process. Chemicals used in the treatment process would be stored in a secure chemical storage area on the AWPf site. An administration building and workers' parking area would be constructed on-site to accommodate operation workers. Delivery truck access, truck parking, and unloading areas would be accommodated on the AWPf site. In addition, the AWPf would include a wet weather storage facility with a capacity of 4.5 MG that would provide storage during periods of high flows when the SCRE mouth (berm) is closed and not yet breached.

A concentrate waste stream would be produced during the RO treatment process. A concentrate pump station would be constructed on the AWPf site to convey concentrate back to the VWRf where it will be pumped either to the new ocean outfall or to the Calleguas Salinity Management Pipeline (SMP). The RO process for Phase 1 would generate approximately 1.2 MGD (1,400 AFY) of concentrated effluent.

## **Water Conveyance System**

The project would require installation of several pipelines to convey source water and product water throughout the new system. The following pipelines would be constructed as part of the project:

- 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 Buenaventura Golf Course to the AWPf. While the existing well pumps may be sufficient to convey the water to the AWPf, an additional pump stations may be needed.
- A PVC pipeline conveying purified water from the AWPf to groundwater wells in the Oxnard Plain groundwater basins for the IPR project and/or to the Bailey WCF and/or Saticoy WCF for the DPR project.
- A PVC pipeline conveying extracted groundwater from the groundwater wells to the Bailey WCF for the IPR project
- A PVC pipeline to return backwash waste or emergency shutdown water will be constructed between the AWPf and VWRF and returned to the influent of the VWRF for retreatment.

The pipelines would be constructed within public rights-of-way where feasible. A new pump station would be constructed at the AWPf to pump the water to the groundwater wells (i.e., IPR. Additional pumping would be required at the well site as discussed below to deliver water either extracted water or DPR water to the Bailey WCF and/or Saticoy WCF. . These alignments may change during final design, but would remain in the public rights-of-way.

## **Groundwater Wells**

The proposed projects include construction of up to six wells within the Oxnard Plain 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 Plain Basin. The wells in the Oxnard Plain 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.

## **Wildlife/Treatment Wetlands**

As part of the proposed project 20 to 30 acres of wildlife/treatment wetlands may be constructed east of the VWRF to provide additional treatment to the effluent prior to being discharged to the SCRE. In addition, one or more of the existing ponds may be filled to create a depth less than 3 feet, and vegetation may be established. If new wildlife/treatment wetlands are constructed, a new pipeline and pump station would be constructed on the VWRF site to convey the non-diverted, tertiary-treated water to the new wildlife/treatment wetlands. A new point of discharge may be constructed from the new wetlands as an outlet to the SCRE or alternatively, discharge from the wetlands may be returned to the existing outfall channel. The City will review opportunities to provide public access to the treatment wetlands that may include nature trails and informational amenities.



## **VWRF Treatment Upgrades**

VWRF treatment upgrades 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. The treatment upgrades would be constructed on the existing VWRF property and may include the addition of aeration blowers, primary treatment improvements, filter replacements and other system upgrades. Equalization storage basins and pump stations would be located at the VWRF for delivering flows to the VWRF. A new outfall pump station would also be constructed at the VWRF for delivering concentrate and tertiary treated flows if needed during wet weather events to the outfall.

## **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 the AWPf capacity during wet weather events or during times of emergency shut down. This EIR evaluates two potential concentrate discharge facility options: either a new outfall or a discharge pipeline to the Calleguas Municipal Water District's (Calleguas) existing SMP ocean outfall.

If a new ocean outfall is constructed it would be located just north of the Ventura Harbor, installed with directional drilling techniques from Marina Park, and would emerge on the ocean floor 2,000 to 4,000 feet offshore. Once emerged, an extension of the outfall would be attached and placed along the ocean floor until the sea depth to outfall reaches approximately 50-foot depths. A diffuser would be installed at the end of the outfall with discharge portals designed to maximize efficient dilution and to protect wildlife. A pipeline would be constructed from the AWPf to the VWRF and then to the ocean outfall within public rights-of-way where feasible. An alternative to a new outfall would be to construct a new 8- to 16-inch-diameter concentrate pipeline and pump stations to convey concentrate from the proposed AWPf to the existing Calleguas SMP ocean outfall. The pipeline would be constructed within public rights-of-way where feasible.

Similar to the new outfall, the exact alignment route of the conveyance pipelines would be contingent on the chosen AWPf site. The concentrate would be discharged to the ocean through the existing SMP ocean outfall, subject to SMP capacity availability and approval from Calleguas.

## **The Ventura Water Supply Projects – Phase 2 Components**

Phase 2 of the proposed projects would augment water supplies to meet future water needs, including the accommodation of planned growth, either through increasing the consistent and reliable amount of recycled water produced or construction of an ocean desalination facility. This would be accomplished through either the expansion of treatment capacity AWPf as a first option pending regulatory approvals, or, if this option is not approved or does not meet the City's water

supply needs, through construction of an ocean desalination facility. Phase 2 would also increase the amount of treated groundwater.

### **OPTION A: AWPf Expansion**

In Phase 2, the City would pursue Option A to divert the remaining wastewater flows from the VWRf to the AWPf to reach a CDL of 0 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 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. To expand treatment capabilities at the AWPf, the individual advanced treatment processes facilities within the plant would be expanded, but no new treatment processes, infrastructure, pipelines, or related infrastructure would be needed or added. The full footprint and impacts of the expansion of the AWPf for additional tertiary flows is included in the Phase 1 project level impacts analysis. Additional flow routing modifications and/or storage would be required at the VWRf site to accommodate a CDL of 0.

### **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 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 approximately an additional 1.2 MGD (1,400 AFY) of desalinated water. The total amount of water produced would be dependent on the remaining demand not met by recycled water. The treatment facility would include similar treatment processes as the AWPf, but would be dedicated to the ocean water source.

A new ocean water intake system would be constructed to convey ocean water to the new treatment facility. Ocean water would be collected in conformance with the California Ocean Plan requirements. A subsurface intake system would be constructed unless proven to be infeasible. A subsurface intake system would be sized to intake approximately 3.5 to 6.9 MGD (3,900 to 7,730 AFY) of ocean water through slant wells, beach wells, or infiltration galleries. The design of the intake system would comply with the California Ocean Plan Amendment specifically regulating ocean desalination facilities.

The additional concentrate produced by the treatment process would be discharged to the ocean via the concentrate discharge facility described as a component of Phase 1. This facility would consist of either new ocean outfall or discharge through the existing Calleguas SMP ocean outfall. A new NPDES discharge permit or amendment would be required. The desalination option is currently being analyzed at a programmatic level in this EIR, and would require additional CEQA review as a project prior to any approval.

## ES.6 Project Alternatives

As set forth in the CEQA Guidelines (Section 15126.6), an EIR must describe and compare a range of reasonable alternatives to a project, or alternative locations for a project, that could feasibly attain most of the basic project objectives but avoid or substantially lessen any significant environmental impacts associated with the project. An EIR must consider a reasonable range of feasible alternatives to facilitate informed decision making and public participation. An EIR need not consider every conceivable alternative to a project and is not required to consider alternatives which are infeasible. The lead agency shall select a range of project alternatives and disclose its reasoning for selecting those alternatives.

### Project Alternatives

Five alternatives were selected for detailed analysis. The goal for selecting these alternatives is to identify alternatives that would avoid or lessen the significant environmental effects of the project, while attaining most of the project objectives. A general description of each alternative to the proposed project is provided below.

#### Alternative 1: No Project

Under this alternative, the tertiary-treated discharge from the VWRP 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 the SCRE. 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, would risk violating the CWA (depending on the Regional Board's orders in the new NPDES permit) and 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 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 with respect to its groundwater supplies.

#### Alternative 2: Zero Percent Diversion

Under this alternative, the tertiary-treated discharge from the VWRP 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 the SCRE. Under this alternative, the City would need to seek to construct the ocean desalination facility project to produce 4.8 MGD (5,400 AFY) of new water supply and 1.8 MGD (2,000 AFY) of groundwater desalting to eliminate the supply deficits and to improve water quality of its potable supply. This alternative would not result in the benefits to the ecology of the SCRE that the proposed projects would provide. Because zero percent diversion is not the MEPDV, the City would be in violation of the Consent Decree, and likely the CWA depending on the Regional Board's orders in the new NPDES permit.

### **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. 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. Up to 2,000 AFY of groundwater desalting would be implemented similar to the proposed project. This alternative would not result in the benefits to the ecology of the SCRE that the proposed projects would provide and would not divert the MEPDV as defined by the SRP.

### **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. This alternative would not require the construction or reconfiguration of wildlife/treatment wetlands because 100 percent of the tertiary-treated effluent would be diverted for beneficial reuse. However, the existing wildlife ponds would be maintained to some extent as a terminal wetlands during dry-weather flow. This alternative also 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 projects, 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**

Under Alternative 5, 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 the City of Oxnard's supply. The project would not augment water supplies for the City. Under this alternative, the City would need to develop an ocean desalination facility to produce 4.8 MGD (5,400 AFY) and 1.8 MGD (2,000 AFY) of groundwater desalting to eliminate the City's supply deficits and meet future water supply and potable water quality needs.

### **Alternative 6: Rehabilitation of Existing Fairgrounds Outfall**

Under Alternative 6, all of the 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 discharge. These outfalls served the former Seaside Sewage Treatment Plant, which was owned by the City of Ventura. Both pipelines emanate from a single point on the fairgrounds property.

## Environmentally Superior Alternative

CEQA requires that an EIR identify an environmentally superior alternative, other than the No Project Alternative (CEQA Guidelines Section 15126.6(e)(2)). The proposed projects are the environmentally superior alternative because it comports with the SRP/TRT Report conclusions of a range of 0 – 0.5 MGD CDL. Among the alternatives to the proposed projects, Alternative 4: 100 Percent Diversion in Phase 1 is the environmentally superior alternative. Some of the alternatives would be consistent with the Consent Decree, providing ecological benefits to the SCRE similar to the proposed projects, but would also result in greater construction and operational impacts. Alternative 4 would avoid these additional impacts and would provide ecological benefits to the SCRE. As a result, Alternative 4 is the environmentally superior alternative.

## ES.7 Areas of Known Controversy

Pursuant to Section 15123(b)(2) of the CEQA Guidelines, a lead agency is required to include areas of controversies raised by agencies and the public during the public scoping process in the EIR. Commenting parties have identified issues of concern. These issues include air quality/GHG, agricultural resources, biological resources, cultural resources, energy and hydrology and water quality impacts.

## ES.8 Summary of Impacts

**Table ES-3** presents a summary of the impacts and mitigation measures identified by the EIR, as discussed in greater detail in Chapter 3. The level of significance for each impact was determined using significance criteria (thresholds) developed for each category of impacts; these criteria are described in the appropriate sections of Chapter 3. Significant impacts are those adverse environmental impacts that meet or exceed the significance thresholds; less than significant impacts do not exceed the thresholds. Table ES-3 indicates the measures that will avoid, minimize, or otherwise reduce significant impacts to a less than significant level.

**TABLE ES-3**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE VENTURA WATER SUPPLY PROJECTS**

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
<b>Aesthetics</b>			
<b>AES 3.1-1:</b> The proposed projects could result in a significant impact if they would have a substantial adverse effect on a scenic vista.	None Required.	Advanced Water Purification Facility	Less than Significant
		Water Conveyance System	No Impact
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrades	No Impact
		Concentrate Discharge Facility	Less than Significant
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant
<b>AES 3.1-2:</b> The proposed projects could result in a significant impact if they would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	None Required.	Advanced Water Purification Facility	Less than Significant
		Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrades	No Impact
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	No Impact
<b>AES 3.1-3:</b> The proposed projects could result in a significant impact if they would substantially degrade the existing visual character or quality of the sites and their surroundings.	<b>AES-1:</b> Prior to the start of construction, the city of Ventura shall prepare a Construction Management Plan. The Construction Management Plan shall, at a minimum, indicate the equipment and vehicle staging areas, areas for stockpiling of materials, temporary opaque fencing material, and haul route(s). Staging areas shall be sited and/or screened to minimize public views to the maximum extent practicable.  <b>AES-2:</b> Aboveground buildings/structures shall 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.	Advanced Water Purification Facility	Less than Significant with Mitigation AES-1, AES-2
		Water Conveyance System	Less than Significant with Mitigation AES-1
		Groundwater Wells	Less than Significant with Mitigation AES-1, AES-2
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation AES-1

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
<b>AES 3.1-4:</b> The proposed projects could result in a significant impact if they would create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.		VWRF Treatment Upgrades	No Impact
		Concentrate Discharge Facility	Less than Significant with Mitigation AES-1
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant with Mitigation AES-1
	<b>AES-3:</b> Lighting used during temporary nighttime construction or for permanent security purposes shall be shielded and directed downward or pointed away from surrounding light-sensitive land uses.	Advanced Water Purification Facility	Less than Significant with Mitigation AES-3
		Water Conveyance System	No Impact
		Groundwater Wells	Less than Significant with Mitigation AES-3
		Wildlife/Treatment Wetlands	No Impact
		VWRF Treatment Upgrades	No Impact
		Concentrate Discharge Facility	No Impact
	Phase 2 Components	No Impact	
<b>Agricultural Resources</b>			
<b>AG 3.2-1:</b> The proposed projects could result in a significant impact if they would convert Prime Farmland, Unique Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	<b>AG-1:</b> Mitigation shall be provided for the loss of state-designated Prime Farmland or Farmland of Local Importance and/or open space in existence at the time property in the project area containing such state-designated farmland or open space is developed. Prior to developing such state-designated farmland, agricultural lands of equivalent acreage (a 1:1 ratio), and with soil and farming conditions equivalent or superior to the state-designated farmland that would be converted, shall be set aside in perpetuity. One or more permanent, irreversible agricultural easements may be purchased for the benefit of the City or other qualifying entity acceptable to the City, or funds may be provided to a local, regional, or statewide organization or agency whose	Advanced Water Purification Facility	Less than Significant with Mitigation AG-1
		Water Conveyance System	Less than Significant with Mitigation AG-1
		Groundwater Wells	Less than Significant with Mitigation AG-1
		Wildlife/Treatment Wetlands	No Impact
		VWRF Treatment Upgrade Project	No Impact
		Concentrate Discharge Facility	No Impact

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	purpose includes the acquisition and stewardship of agricultural easements, to be earmarked for the purchase of permanent, irreversible agricultural easements. The protected acreage shall be set aside prior to the commencement of any development activity.	Phase 2 Components	No Impact
<b>AG 3.2-2:</b> The proposed projects could have a significant impact if they would conflict with existing zoning for agricultural use, or a Williamson Act contract.	<b>Implement Mitigation Measure AG-1.</b>	Advanced Water Purification Facility	Less than Significant with Mitigation AG-1
		Water Conveyance System	Less than Significant with Mitigation AG-1
		Groundwater Wells	No Impact
		Wildlife/ Treatment Wetlands	No Impact
		WWRF Treatment Upgrade Project	No Impact
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	No Impact
<b>AG 3.2-3:</b> The proposed projects could result in a significant impact if they would conflict with existing zoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 45260, or timberland zoned Timberland Production (as defined by Government Code section 51104[g]).	None Required.	All Components	No Impact
<b>AG 3.2-4:</b> The proposed projects could result in a significant impact if they would result in the loss of forest land or conversion of forest land to non-forest use	None Required.	All Components	No Impact
<b>AG 3.2-5:</b> The proposed projects could result in a significant impact if they would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use	<b>Implement Mitigation Measure AG-1.</b>	Advanced Water Purification Facility	Less than Significant with Mitigation AG-1
		Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	No Impact
		WWRF Treatment Upgrade Project	No Impact
		Concentrate Discharge Facility	No Impact
		Phase 2 Components	No Impact



Environmental Impact	Mitigation Measures	Project Component	Significance Determination
<b>Air Quality</b>			
<b>AQ 3.3-1:</b> The proposed projects could have a significant impact if they would conflict with or obstruct implementation of the applicable air quality plan	None Required.	All Components	Less than Significant
<b>AQ 3.3-2:</b> The proposed projects could have a significant impact if they would violate any air quality standard or contribute substantially to an existing or projected air quality violation	<b>AQ-1:</b> The following control measures provided in the VCAPCD Ventura County Air Quality Assessment Guidelines to minimize the generation of fugitive dust (PM10 and PM2.5), ROC, and NOX during construction activities shall be implemented during construction: <ul style="list-style-type: none"> <li>The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.</li> <li>Pre-grading/excavation activities shall include watering the areas to be graded or excavated before grading or excavation operations commences. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.</li> <li>Fugitive dust produced during grading excavation and construction activities shall be controlled by the following activities: <ol style="list-style-type: none"> <li>All trucks shall be required to cover their loads as required by California Vehicles Code Section 23114.</li> <li>All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization material, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.</li> </ol> </li> <li>Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil</li> </ul>	Phase 1 Components	Less than Significant with Mitigation AQ-1, AQ-2
		AWPF Expansion	Less than Significant
		Ocean Desalination	Less than Significant with Mitigation

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally safe dust suppressants to prevent excessive fugitive dust.</p> <ul style="list-style-type: none"> <li>• Signs limiting traffic to 15 miles per hour or less shall be posted onsite.</li> <li>• During periods of winds 25 miles per hour or greater (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties) or at the direction of the City, all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off site or onsite. The site superintendent/supervisor shall use discretion in conjunction with the VCAPCD in determining when winds are excessive.</li> <li>• Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day if visible soil material is carried over to adjacent streets and roads.</li> <li>• Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.</li> </ul> <p><b>AQ-2:</b> During construction contractors shall comply with the following measures, as feasible, to reduce NOX and ROC from heavy equipment as recommended by the VCAPCD in its Ventura County Air Quality Assessment Guidelines:</p> <ul style="list-style-type: none"> <li>• Minimize equipment idling time.</li> <li>• Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications.</li> </ul>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<ul style="list-style-type: none"> <li>Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time.</li> <li>Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.</li> </ul>		
<b>AQ 3.3-3:</b> The proposed projects could have a significant impact if they would 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)	None Required.	All Components	Less than Significant
<b>AQ 3.3-4:</b> The proposed projects could have a significant impact if they would expose sensitive receptors to substantial pollutant concentrations	None Required.	All Components	Less than Significant
<b>AQ 3.3-5:</b> The proposed projects could have a significant impact if they would create objectionable odors affecting a substantial number of people	None Required.	All Components	Less than Significant
<b>Biological Resources</b>			
<b>BIO 3.4-1:</b> The project 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.	<p><b>BIO-1:</b> Prior to the start of construction in areas that could encounter sensitive species, a qualified biologist shall provide Worker Environmental Awareness Program (WEAP) training to all construction workers onsite. The training shall include materials to aid workers in identifying sensitive habitats, plants, and wildlife that should be avoided; applicable laws and regulations protecting such resources; and proper avoidance and communication procedures to protect sensitive biological resources, as well as common wildlife whenever possible.</p> <p><b>BIO-2:</b> Prior to construction activities within 50 feet of sensitive habitat, a qualified biologist shall survey a 500-foot radius for the presence of sensitive species that could be affected by construction noise and disruption. If construction activities could generate noise in excess of 65 dBA for prolonged periods (averaged over an 8-hour day) in areas where the ambient noise level is less than 65 dBA and sensitive species are present, the construction contractor shall install</p>	Advanced Water Purification Facility	Less than Significant
		Water Conveyance System	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4
		Groundwater Wells	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4
		WWRP Treatment Upgrade	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4
		Concentrate Discharge Facility	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4, BIO-6

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>noise barriers between the construction activity and the sensitive resource to reduce noise impacts on biological resources.</p> <p><b>BIO-3:</b> If nighttime construction is required, lighting shall be kept to the minimum necessary to safely conduct the work. All lighting shall be focused on the construction area and avoid spilling onto habitat areas.</p> <p><b>BIO-4:</b> If the nesting season cannot be avoided and construction or vegetation removal occurs between March 1 to September 15 (January 1 to July 31 for raptors), the project shall do the following to avoid and minimize impacts to nesting birds and raptors:</p> <ul style="list-style-type: none"> <li>During the avian breeding season, a qualified biologist shall conduct a preconstruction avian nesting survey no more than 7 days prior to vegetation disturbance or site clearing. If construction begins in the non-breeding season and proceeds continuously into the breeding season, no surveys are required. However, if there is a break of 7 days or more in cleanup activities during the breeding season, a new nesting bird survey shall be conducted before construction begins again.</li> <li>The preconstruction survey shall cover all reasonably potential nesting locations on and within 300 feet of the proposed removal areas, and areas that would be occupied by ground-nesting species such as killdeer. A 500-foot radius shall be surveyed in areas containing suitable habitat for nesting raptors, such as trees, utility poles, rock crevices, and cliffs.</li> <li>If an active nest is found during the preconstruction avian nesting survey, a qualified biologist shall implement a 300-foot minimum avoidance buffer for all passerine birds and 500-foot minimum avoidance buffer for all raptor species. The nest site area shall not be disturbed until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and</li> </ul>	AWPF Expansion	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4
		Ocean Desalination	Less than Significant with Mitigation BIO-1, BIO-2, BIO-3, BIO-4
		Advanced Water Purification Facility	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>the young will no longer be impacted by the project. Buffer areas may be increased if any endangered, threatened, CDFW fully protected, or CDFW species of special concern are identified during protocol or preconstruction surveys, based on consultation with USFWS or CDFW.</p> <ul style="list-style-type: none"> <li>If a nest is found in an area where ground disturbance is scheduled to occur, the project operator shall avoid the area either by delaying ground disturbance in the area until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, or by relocating the project component(s) to avoid the area.</li> </ul> <p><b>BIO-5:</b> The City shall prepare and implement a Pre-Construction Santa Clara River Estuary (SCRE) Monitoring Program that will confirm and update the existing baseline hydrological, chemical and biological conditions of the SCRE for a period of 3 years. The City shall coordinate preparation of the monitoring program with the RWQCB, USFWS, NMFS, and CDFW. The purpose of the program shall be to collect specific ecological monitoring data. This data will be used to inform the development of the Post-Construction Monitoring, Assessment, and Adaptive Management Plan, which shall identify action criteria and management measures that will guide and confirm that the implementation of Phase 1b reductions in discharges (to an average annual of 0 to 0.5 MGD in closed berm conditions) avoids and minimizes significant adverse environmental impacts.</p> <p><b>BIO-6:</b> The City shall prepare and implement a Post Construction Santa Clara River Estuary (SCRE) Monitoring, Assessment, and Adaptive Management Program (MAAMP) that will continue data collection in the SCRE and will evaluate and confirm post-discharge diversion SCRE habitat values and conditions for SCRE listed species. The SCRE MAAMP will consist of the following core elements at a minimum:</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>Water depth measurements:</p> <ul style="list-style-type: none"> <li>• Aquatic species surveys within the SCRE to document occurrence and abundance of tidewater goby and juvenile steelhead.</li> <li>• Bird and nesting surveys to document the occurrence and abundance of snowy plover and California least tern using or occupying, or foraging of nesting within the SCRE and its vicinity.</li> <li>• Acreage and qualitative evaluation of vegetation associations (habitat types) within the SCRE and its vicinity.</li> <li>• SCRE receiving water quality monitoring including regular measurements for temperature, salinity, dissolved oxygen, and nutrients collected vertically and horizontally to inform stratification and spatial patterns understanding.</li> <li>• Documentation of eutrophication episodes within the SCRE.</li> <li>• SCRE berm condition monitoring including berm heights and breaching events; and</li> <li>• Continuous VVRF discharge flow data, and instantaneous VVRF discharge water quality data.</li> </ul> <p>The monitoring effort will be initiated following implementation of Phase 1a when discharges have been reduced to a CDL of 1.9 MGD.</p> <p>The City shall submit annual monitoring reports to the CDFW, USFWS, and NMFS that compile the data collected for a period of five years. The City shall consult with CDFW, USFWS, and NMFS to evaluate the data and trends shown in the monitoring data. In the event that based on the information and analysis provided by the MAAP, NMFS, USFWS, and or CDFW notifies the RVQCB and the City in writing that reducing the average annual discharge flows below 1.9 MGD in closed berm conditions would result in an unauthorized "take" (as defined in the state or federal Endangered Species Act, as applicable) of one or more listed species contrary to the permits or authorizations those agencies have issued, then the actions specified in the MAAP shall be</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>implemented to further avoid and minimize adverse impacts to, and take of listed species within the SCRE resulting from Phase 1b reductions, until and unless and until the Regional Board and the wildlife agency with jurisdiction authorize lower discharge.</p> <p><b>BIO-7:</b> Prior to initiating any directional drilling activities, the City shall prepare a Drilling Fluid Mitigation and Response Plan that identifies measures to reduce risks to water quality from accidental release of drilling fluids into surface water. Measures include best practices to employ to minimize the risk of releases. The plan will identify spill containment equipment, monitoring and reporting roles and responsibilities, and implementation procedures sufficient to contain any release of drilling fluids.</p>		
<b>BIO 3.4-2:</b> The project could have a significant impact if they would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or USFWS.	<b>Implement Mitigation Measure BIO-7.</b>	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		WWRf Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant with Mitigation BIO-7
		Phase 2 Components	Less than Significant
		Advanced Water Purification Facility	Less than Significant with Mitigation BIO-5 and BIO-6
<b>BIO 3.4-3:</b> The project could have a significant impact if they would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	<b>Implement Mitigation Measures BIO-5 and BIO-6.</b>	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		WWRf Treatment Upgrade	No Impact
		Concentrate Discharge Facility	Less than Significant with Mitigation BIO-5
		Phase 2 Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
		Advanced Water Purification Facility	Less than Significant
<b>BIO 3.4-4:</b> The project could have a significant impact if they would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	None Required.	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrade	No Impact
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	Less than Significant
		Advanced Water Purification Facility	Less than Significant
<b>BIO 3.4-5:</b> The project could have a significant impact if they would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	None Required.	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrade	No Impact
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	Less than Significant
		All Components	Less than Significant
<b>BIO 3.4-6:</b> The project could have a significant impact if they would conflict with provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	None required.		
<b>Cultural Resources</b>		Advanced Water Purification Facility	Less than Significant with Mitigation <b>CUL1, CUL-2, CUL-3, CUL-4, CUL-5</b>
<b>CUL 3.5-1:</b> The proposed projects could result in a significant impact if they would cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5.	<b>CUL-1:</b> Prior to the start of any ground disturbing activity, a Qualified Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2008) shall be retained by the City to carry out all mitigation measures related to archaeological resources.  <b>CUL-2:</b> Cultural resources survey shall be conducted prior to any ground disturbing activities associated with unsurveyed portions of the project area. The portions of the area of the proposed projects not surveyed include the Harbor	Water Conveyance System	Less than Significant with Mitigation <b>CUL1, CUL-2, CUL-3, CUL-4, CUL-5</b>
		Groundwater Wells	Less than Significant with Mitigation <b>CUL1, CUL-2, CUL-3, CUL-4, CUL-5</b>
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation



Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>Boulevard, Transport Street and Portola Road AWPf sites, the parcels within which groundwater Well Sites 2 and 3 would be located, and the portions of the proposed water conveyance pipeline located on private lands. Any resources identified during the survey that would be impacted as a result of the proposed projects should be evaluated for listing in the NRHP and CRHR. Avoidance and preservation in place shall be the preferred manner of mitigating impacts to historical resources under CEQA.</p> <p><b>CUL-3:</b> Prior to any ground disturbing activities associated with the project, the Qualified Archaeologist should conduct cultural resources sensitivity training for all construction personnel. Construction personnel should be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City should ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.</p> <p><b>CUL-4:</b> Prior to the start of ground disturbing activities associated with the proposed projects, 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, 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, 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</p>		CUL1, CUL-2, CUL-3, CUL-4, CUL-5
		VWRF Treatment Upgrade	Less than Significant with Mitigation CUL1, CUL-2, CUL-3, CUL-4, CUL-5
		Concentrate Discharge Facility	Less than Significant with Mitigation CUL1, CUL-2, CUL-3, CUL-4, CUL-5
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant with Mitigation CUL1, CUL-2, CUL-3, CUL-4, CUL-5, CUL-6
		Advanced Water Purification Facility	Less than Significant with Mitigation CUL-1, CUL-2, CUL-3, CUL-4, CUL-5

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>be prepared as part of project implementation. 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.</p> <p><b>CUL-5:</b> In the event of the unanticipated discovery of archaeological materials during project implementation, 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.</p> <p>If it is determined that the discovered archaeological 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.</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p><b>CUL-6:</b> Prior to development of the new outfall and the Phase 2 Ocean Desalination ocean intake system, the City should retain a qualified archaeologist, defined as meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (U.S. Department of the Interior, 2008), to conduct a cultural resources assessment of the ocean intake system that includes: a records search at the South Central Coastal Information Center; a Sacred Lands File search at the California Native American Heritage Commission; a desktop geoarchaeological review of onshore and offshore components; a shipwrecks database review for offshore components; a paleontological resources records check conducted by the Los Angeles County Natural History Museum, a pedestrian field survey for onshore components; recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report documenting the methods and results of the study. All identified cultural resources should be assessed for the ocean intake system's potential to result in direct and/or indirect effects to those resources. Cultural resources that will be directly and/or indirectly affected and cannot be avoided should be evaluated for their potential significance prior to the City's approval of the ocean intake system plans and publication of subsequent CEQA documents. The qualified archaeologist should provide recommendations regarding archaeological and Native American monitoring, protection of avoided resources, and/or recommendations for additional work or treatment of significant resources (i.e., resources that qualify as historical resources or unique archaeological resources under CEQA or resources that qualify as historic properties pursuant to Section 106 of the NHPA) that will be affected by construction of the ocean intake system.</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
<b>CUL 3.5-2:</b> The proposed projects could result in a significant impact if they would cause a substantial adverse change in the significance of a unique archaeological resource pursuant to § 15064.5.	<b>Implement Mitigations Measure CUL-1 through CUL-6.</b>	Water Conveyance System	Less than Significant with Mitigation CUL-1, CUL-2, CUL-3, CUL-4, CUL-5
		Groundwater Wells	Less than Significant with Mitigation CUL-1, CUL-2, CUL-3, CUL-4, CUL-5
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation CUL-1, CUL-2, CUL-3, CUL-4, CUL-5
		WWRP Treatment Upgrade	Less than Significant with Mitigation CUL-1, CUL-3, CUL-5
		Concentrate Discharge Facility	Less than Significant with Mitigation CUL-1, CUL-2, CUL-3, CUL-4, CUL-5
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant with Mitigation CUL-1, CUL-2, CUL-3, CUL-4, CUL-5, CUL-6
		Advanced Water Purification Facility	Less than Significant with Mitigation CUL-7, CUL-8, CUL-9, CUL-10
<b>CUL 3.5-3:</b> The proposed project could result in a significant impact if they would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<b>CUL-7:</b> Prior to the start of project-related ground-disturbing activities, the City shall retain a qualified paleontologist meeting the Society for Vertebrate Paleontology's professional standards (2010) to carry out all mitigation measures related to paleontological resources.  <b>CUL-8:</b> Prior to the start of project-related ground-disturbing activities, the qualified paleontologist	Water Conveyance System	Less than Significant with Mitigation CUL-7, CUL-8, CUL-9, CUL-10
		Groundwater Wells	Less than Significant with Mitigation CUL-7, CUL-8, CUL-10

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>shall conduct a paleontological resources sensitivity training for all construction personnel working on the project. This may be conducted in conjunction with the archaeological resources training required by Mitigation Measure CUL-2. The training shall include an overview of potential paleontological resources that could be encountered during ground-disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources. The City shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.</p> <p><b>CUL-9:</b> The qualified paleontologist, or a paleontological monitor working under the direct supervision of the qualified professional paleontologist, shall spot check open and visible excavations and/or spoil piles originating from construction activities exceeding depths of 20 feet. The qualified paleontologist shall review engineering plans to determine where ground disturbing activities will exceed 20 feet deep, and will coordinate with construction staff to determine the scheduling of spot checks. In the event that sensitive Quaternary older alluvial deposits are observed during spot check monitoring, the qualified paleontologist may make recommendations to modify the spot check protocols. Likewise, if monitoring observations suggest no potential for paleontological materials, the paleontologist may recommend to reduce or to discontinue the spot checks. The paleontological monitor shall prepare daily logs. After construction has been completed, a report that details the results of the spot check monitoring will be prepared and submitted to the City.</p> <p><b>CUL-10:</b> In the event of the unanticipated discovery of paleontological resources during project implementation, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a</p>	Wildlife/Treatment Wetlands	Less than Significant with Mitigation CUL-7, CUL-8, CUL-9, CUL-10
		VWRF Treatment Upgrade	Less than Significant with Mitigation CUL-7, CUL-8, CUL-9, CUL-10
		Concentrate Discharge Facility	Less than Significant with Mitigation CUL-7, CUL-8, CUL-9, CUL-10
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant with Mitigation CUL-6, CUL-7, CUL-8, CUL-9, CUL-10
		Advanced Water Purification Facility	Less than Significant with Mitigation CUL-11

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>qualified paleontologist. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. Construction shall not resume until the qualified paleontologist has conferred with the City on the significance of the resource.</p> <p><b>Implement Mitigation Measure CUL-6.</b></p>		
<p><b>CUL 3.5-4:</b> The proposed projects could result in a significant impact if they would disturb any human remains, including those interred outside of formal cemeteries.</p>	<p><b>CUL-11:</b> If human skeletal remains are uncovered during project construction, all work within 100 feet of the find shall be immediately halted, and the Ventura County coroner shall be contacted to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC 5097.98 (as amended by AB 2641). The NAHC shall then identify a Most Likely Descendant (MLD) of the deceased Native American, who shall then help determine what course of action should be taken in the disposition of the remains.</p> <p>Per PRC 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.</p>	Water Conveyance System	Less than Significant with Mitigation CUL-11
		Groundwater Wells	Less than Significant with Mitigation CUL-11
		Wildlife/ Treatment Wetlands	Less than Significant with Mitigation CUL-11
		WWRF Treatment Upgrade	Less than Significant with Mitigation CUL-11
		Concentrate Discharge Facility	Less than Significant with Mitigation CUL-11
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant with Mitigation CUL-6, CUL-7, CUL-8, CUL-9, CUL-10, CUL-11
		All Components	No Impact

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	Implement Mitigation Measures CUL-6 through CUL-10.		
<p><b>CUL 3.5-5:</b> 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> <ul style="list-style-type: none"> <li>a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in § 5020.1(k), or</li> <li>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.</li> </ul>	None Required.		
<b>Geology, Soils, and Seismicity</b>		<b>Advanced Water Purification Facility</b>	<b>Less than Significant</b>
<p><b>GEO 3.6-1:</b> The proposed projects could result in a significant impact if they would expose people or structures to the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.</p>	None Required.	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	No Impact
		VWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	Less than Significant
		All Components	Less than Significant
<p><b>GEO 3.6-2:</b> The proposed projects could result in a significant impact if they would expose people or structures to the risk of loss, injury, or death involving strong seismic ground shaking.</p>	None Required.	Phase 1 Components	Less than Significant with Mitigation GEO-1
<p><b>GEO 3.6-3:</b> The proposed projects could result in a significant impact if they would expose people or structures to the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.</p>	<p><b>GEO-1:</b> A soils report and geotechnical investigation report shall be prepared by a California licensed geotechnical engineer for all facilities with potential to encounter shallow groundwater or expansive soils. These reports shall evaluate various geotechnical characteristics including existing liquefaction risk, expansive soils, and soil stability, and whether the operation of the proposed projects would exacerbate an existing risk of liquefaction or soil instability or</p>	All Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	create a new risk. The reports shall provide recommendations for facility design per these findings; these recommendations shall be incorporated into facility design.		
<b>GEO 3.6-4:</b> The proposed projects could result in a significant impact if they would expose people or structures to the risk of loss, injury, or death involving landslides.	None Required.	Advanced Water Purification Facility	Less than Significant
<b>GEO 3.6-5:</b> The proposed projects could result in a significant impact if they would result in substantial soil erosion or the loss of topsoil.	<b>GEO-2:</b> For construction sites less than 1 acre, the following types of BMPs shall be implemented during construction: (1) preservation of existing vegetation to the maximum extent practicable, (2) implementation of erosion control and sediment control best management practices, (3) implementation of waste management best management practices, and (4) good housekeeping. The California Stormwater Quality Association Best Management Practices Handbook shall be consulted for implementation instructions for the aforementioned BMPs. The contractor shall identify a construction monitor prior to construction. The construction monitor shall inspect the installation and ongoing maintenance of the BMPs for the duration of the construction activities.  <b>GEO-3:</b> During operation, all inactive (unmoved for 14 days) stockpiles shall be covered and contained within temporary perimeter sediment barriers, such as berms, dikes, fiber rolls, or sandbag barriers.	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant with Mitigation GEO-2
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation GEO-3
		WWRP Treatment Upgrade	Less than Significant with Mitigation GEO-2
		Concentrate Discharge Facility	Less than Significant with Mitigation GEO-2
		AWPF Expansion	Less than Significant
		Ocean Desalination	Less than Significant with Mitigation GEO-1, GEO-2
		All Components	Less than Significant
<b>GEO 3.6-6:</b> The proposed projects could result in a significant impact if they would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the projects, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	None Required.	All Components	Less than Significant with Mitigation GEO-1
<b>GEO 3.6-7:</b> The proposed projects could result in a significant impact if they would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Implement Mitigation Measure GEO-1.	All Components	No Impact



Environmental Impact	Mitigation Measures	Project Component	Significance Determination
<b>GEO 3.6-8:</b> The proposed projects could result in a significant impact if they would have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	None Required.		
<b>Greenhouse Gas Emissions</b>		All Components	Less than Significant
<b>GHG 3.7-1:</b> The proposed projects could have a significant impact if they would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	None Required.	All Components	Less than Significant
<b>GHG 3.7-2:</b> The proposed projects could have a significant impact if they would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	None Required.		
<b>Hazards and Hazardous Materials</b>		All Components	Less than Significant
<b>HAZ 3.8-1:</b> The proposed projects could result in a significant impact if they would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	None Required.	Advanced Water Purification Facility	Less than Significant
<b>HAZ 3.8-2:</b> The proposed projects could result in a significant impact if they would create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.	<b>HAZ-1:</b> The City of Ventura shall prepare an Anchoring Plan that applies to all ships, barges, and other ocean-going vessels and describes procedures for deploying, using, and recovering anchorages. The City shall submit this plan to the California Coastal Commission Executive Director for review and approval prior to initiation of offshore activities. The Anchoring Plan shall include, but not be limited to, the following elements: <ul style="list-style-type: none"> <li>• Training for the project manager for marine activities, vessel operators, field supervisors, and environmental monitors to ensure familiarity with the Anchoring Plan.</li> <li>• A brief overview of the project objectives.</li> <li>• Description of anchor set and anchor leg (wires, winches, and other support equipment).</li> <li>• Description of vessels to be anchored and support tugs to be used.</li> <li>• Description and delineation of safety zone and anchor zone, including identification and mapping all areas of kelp, seagrasses, and hard substrate found within the work area.</li> </ul>	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant with Mitigation HAZ-1, HAZ-2
		Phase 2 Components	Less than Significant
		All Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<ul style="list-style-type: none"> <li>• Identification of Contractor Vessels and Buoys, including daylight and nighttime marking schemes.</li> <li>• Anchoring procedures in compliance with Coast Guard Navigation Standards Manual.</li> <li>• Local notice to U.S. Coast Guard and mariners.</li> </ul> <p>All elements of the Anchoring Plan shall be in compliance with U.S. Coast Guard regulations.</p> <p><b>HAZ-2:</b> Prior to any offshore construction, the contractor shall prepare a Marine Safety Plan. The Marine Safety Plan would apply to all marine construction activities that would take place for the construction of the concentrate discharge pipes. The purpose would be to provide a precise set of procedures and protocols that shall be used by the marine contractors during the marine portions of the construction work, with a focus on personal, environmental, and vessel safety. The Marine Safety Plan shall include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> <li>• A brief overview of the project objectives.</li> <li>• Distribution of Marine Safety Plan, which shall include the U.S. Coast Guard, each vessel involved in the marine activities, all environmental monitors, and all support radio operators.</li> <li>• Training for the project manager for marine activities, vessel operators, field supervisors, and environmental monitors to ensure familiarity with the Marine Safety Plan.</li> <li>• Description and maps depicting the marine project location.</li> <li>• Description of marine operations protocols.</li> <li>• Description of critical operations and curtailment plan, including offshore fueling procedures and storm procedures.</li> <li>• Marine communications plan.</li> <li>• Marine transportation plan for barges, tugboats, crew boats, and other vessels.</li> <li>• Navigational marking and lighting plan.</li> </ul>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
<b>HAZ 3.8-3:</b> The proposed projects could result in a significant impact if they would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.	None Required.	Phase 1 Components	Less than Significant
<b>HAZ 3.8-4:</b> The proposed projects could result in a significant impact if they would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or the environment.	None Required.	Phase 2 Components	No Impact
		Phase 1 Components	Less than Significant
<b>HAZ 3.8-5:</b> The proposed projects could result in a significant impact if they are 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, the project and would result in a safety hazard for people residing or working in the project area. For a project within the vicinity of a private airstrip, the proposed projects could result in a significant impact if they would result in a safety hazard for people residing or working in the project area.	None Required.	Phase 2 Components	No Impact
		Phase 1 Components	Less than Significant with Mitigation TRAF-1
<b>HAZ 3.8-6:</b> The proposed projects could result in a significant impact if they would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Implement Mitigation Measure TRAF-1.	AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant with Mitigation TRAF-1
		All Components	No Impact
<b>HAZ 3.8-7:</b> The proposed projects could result in a significant impact if they would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	None Required.		
<b>Hydrology and Water Quality</b>		<b>Advanced Water Purification Facility</b>	<b>Less than Significant</b>
<b>HYDRO 3.9-1:</b> The proposed projects could have a significant impact if they would violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.	<b>HYDRO-1:</b> Prior to construction of the proposed projects, the City shall conduct groundwater modeling within the potentially affected portions of the Oxnard Plain Basin to estimate the radius of influence for injected water within the minimum retention time required to comply with Title 22. The City shall conduct a well survey within the radius of influence indicated by the results of the groundwater modeling to identify nearby active water supply wells that could be affected by the proposed ASR wells.	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant with Mitigation HYDRO-1
		Wildlife/Treatment Wetlands	Less than Significant
		WWRP Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>Based on the groundwater modeling or tracer test results, in compliance with Title 22, the City shall demonstrate that no existing drinking water well or agricultural well would be adversely affected by injection and extraction of highly treated water. The City shall notify all well owners that could be affected by the operation of the ASR program as determined by the groundwater modeling. As required by Title 22, the City shall conduct groundwater monitoring to ensure injected water remains underground for a minimum of 2 months before being extracted.</p> <p>If existing potable wells are found to be potentially adversely affected by the ASR operations through a reduction in water quality or through impeding access to groundwater, the City shall conduct one, or a combination, of the following actions:</p> <ul style="list-style-type: none"> <li>• Coordinate with the well owner to arrange for an interim or long term replacement water supply.</li> <li>• Repair or deepen the existing adversely affected well.</li> <li>• Improve well efficiency of existing extraction wells.</li> <li>• Construct a new well.</li> </ul>	Advanced Water Purification Facility	No Impact
HYDRO 3.9-2: The proposed projects could have a significant impact if they would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	Implement Mitigation Measure HYDRO-1.	Water Conveyance System	No Impact
		Groundwater Wells	Less than Significant with Mitigation HYDRO-1
		Wildlife/Treatment Wetlands	Less than Significant
		WWRf Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	Less than Significant
		Advanced Water Purification Facility	Less than Significant
HYDRO 3.9-3: The proposed projects could have a significant impact if they would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or	None Required.	Water Conveyance System	No Impact
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
off-site, or increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Also, the proposed projects could have a significant impact if they would 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.		VWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	No Impact
		AWPF Expansion	Less than Significant
		Ocean Desalination	No Impact
		Advanced Water Purification Facility	Less than Significant
<b>HYDRO 3.9-4:</b> The proposed projects could result in a significant impact if they would expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	None Required.	Water Conveyance System	No Impact
		Groundwater Wells	No Impact
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	No Impact
		Phase 2 Components	Less than Significant
		Advanced Water Purification Facility	Less than Significant
<b>HYDRO 3.9-5:</b> The proposed projects could result in a significant impact if they would expose people or structures to a significant risk of loss, injury or death inundation by seiche, tsunami, or mudflow.	None Required.	Water Conveyance System	No Impact
		Groundwater Wells	No Impact
		Wildlife/Treatment Wetlands	Less than Significant
		VWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant
		Phase 2 Components	No Impact
Land Use and Planning		Treatment Wetland	Less than Significant with Mitigation LU-1
	<b>LU 3.10-1:</b> The proposed projects could result in a significant impact if they would physically divide an established community.	<b>LU-1:</b> Prior to the grading the new treatment wetlands property, the City shall coordinate with Turning Point Foundation to identify an appropriate area for the relocation or reconfiguration of the RiverHaven community. The new area shall provide enough area to accommodate a maximum of 25 individuals accommodated with temporary campground, bathrooms, showers, laundry facilities and a community building which can accommodate recreational vehicles and tents. The new area shall also be in a location where it would be	Advanced Water Purification Facility

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	feasible to obtain any necessary permits and entitlements.		
<b>LU 3.10-2:</b> The proposed projects could result in a significant impact if they would 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) adopted for the purpose of avoiding or mitigating an environmental effect.	<b>Implement Mitigation Measures AES-1 through AES-3, AG-1, CUL-1 through CUL-6, and LU-1.</b>	Water Conveyance System	Less than Significant with Mitigation CUL-1 through CUL-5
		Groundwater Wells	Less than Significant with Mitigation CUL-1 through CUL-5
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation CUL-1 through CUL-5 and LU-1
		WWRF Treatment Upgrades	No Impact
		Concentrate Discharge Facility	Less than Significant with Mitigation CUL-1 through CUL-6
		Phase 2 Components	Less than Significant with Mitigation CUL-6
		All Components	No Impact
<b>LU 3.10-3:</b> The proposed projects could result in a significant impact if they would conflict with any applicable HCP or NCCP.	None Required.		
<b>Marine Biology</b>		Phase 1 Components	Less than Significant with Mitigation HAZ-1, MARINE-1, MARINE-2
<b>MARINE 3.11-1:</b> The projects could have a significant impact, either directly or through habitat modifications, if they would cause direct disturbance, removal, filling, hydrological interruption, or discharge, on any species, natural community, or habitat, including candidate, sensitive, or special-status species identified in local or regional plans, policies, regulations or conservation plans (including protected wetlands or waters, critical habitat, EFH) or as identified by the CDFW, USFWS, or NMFS.	<b>MARINE-1:</b> The City of Ventura shall prepare a Marine Oil Spill Response Plan that would apply to all powered vessels used in support of the concentrate discharge construction activities. The purpose would be to provide a precise set of procedures and protocols that would be utilized in the event of an offshore fuel, oil, or hazardous materials spill resulting from construction activities (e.g., marine fuel and oil). The Marine Oil Spill Response Plan shall include but not be limited to the following elements:	Phase 2 Components	Less than Significant with Mitigation HAZ-1, MARINE-1, MARINE-2, MARINE-3
		Phase 1 Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<ul style="list-style-type: none"> <li>• A brief overview of the project objectives.</li> <li>• Definition of major and minor spills.</li> <li>• Description of spill sources.</li> <li>• Description of spill response team and equipment.</li> <li>• Agreements with Spill Response Organizations.</li> <li>• Notification requirements, including names and phone numbers of agencies to be notified, along with an information checklist of the incident.</li> <li>• Description of marine spill scenarios and response procedures.</li> </ul> <p>All elements of the Oil Spill Response Plan shall be in compliance with U.S. Coast Guard regulations, and the City shall implement the Oil Spill Response Plan through the required NPDES General Permit for Vessel Incidental Discharges discussed in Section 3.9.2.</p> <p><b>MARINE-2:</b> 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:</p> <ul style="list-style-type: none"> <li>• The type of piling and piling size to be used.</li> <li>• The method of pile installation to be used.</li> <li>• Noise levels for the type of piling to be used and the method of pile driving (vibratory or impact).</li> <li>• Calculation of potential underwater noise levels that could be generated during pile driving using methodologies outlined in Caltrans 2015 and NOAA 2016b.</li> <li>• A schedule of when pile-driving would occur.</li> </ul> <p>If the results of the calculations provided in the detailed Construction Plan for pile-driving indicate that underwater noise levels are &lt; 183 dB for fish at a distance of ≤ 10 meters and 120 dB for marine mammals for a distance ≤ 500 meters, then no further measures are required to mitigate</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>underwater noise. If calculated noise levels are &gt; 183 dB at <math>\leq 10</math> meters or 120 dB at a distance of <math>\leq 500</math> meters, then 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. The sound-monitoring results shall be made available to NMFS.</p> <p>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:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• A 1,600-foot (500-meter) safety zone shall be established and maintained around the sound source for the protection of marine mammals and sea turtles in the event that sound levels are unknown or cannot be adequately predicted.</li> <li>• Work activities shall be halted when a marine mammal or sea turtle enters the 1,600-foot (500-meter) safety zone and shall cease until the mammal has been gone from the area for a minimum of 15 minutes.</li> <li>• A "soft start" technique shall be used in all impact hammer sourced pile driving, giving marine mammals an opportunity to vacate the area.</li> <li>• 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</li> </ul>		



Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>during the pile-driving phases of construction.</p> <p>Other BMPs will be implemented as necessary, such as bubble curtains or an air barrier, to reduce underwater noise levels to NMFS established acute and chronic levels within a distance of 500 meters (1,600 feet), if feasible.</p> <p>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, the 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.</p> <p><b>MARINE-3:</b> Entrainment of fish and invertebrate larvae resulting from outfall discharge turbulence, regardless of magnitude, will result in some loss of marine ecosystem productivity, species diversity, and trophic level energy transfer. As part of, and in support of, the Water Code Section 13142.5(b) determination process with the RWQCB, the City will work with the RWQCB to calculate APF estimates for the Phase 2 project discharge if it includes ocean desalination. This loss will be compensated for by either direct or indirect habitat restoration consistent with California Ocean Plan Chapter III.M.2.e.(3) or by providing monetary payments to an appropriate State-approved fee-based mitigation program consistent with California Ocean Plan Chapter III.M.2.e.(4), or a combination of the two. If elected by the project, habitat restoration will occur at a location of sufficient marine acreage or alternative coastal lagoon/estuary acreage, and in a manner acceptable to the RWQCB as part of the Project's permitting process. Final determination of the appropriate mitigation shall be determined by the RWQCB with consideration for: (1) existing level of wetland function at the site prior to mitigation; (2) resulting level of wetland function expected at the mitigation site after the project is fully successful; (3) length of time before the mitigation is expected to be fully successful; (4) risk that the mitigation project may not</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	succeed; and (5) differences in the location of the lost wetland and the mitigation wetland that affect the services and values they have the capacity and opportunity to generate, consistent with the OPA. If the RWQCB determines that an appropriate fee-based mitigation program has been established by a public agency, however, and if that payment of a fee to the mitigation program will result in the creation and ongoing implementation of a mitigation project that meets the requirements of California Ocean Plan Chapter III.M.2.e.(3), the City shall pay a fee to the mitigation program in lieu of completing a mitigation project as an alternative. <b>Implement Mitigation Measure HAZ-1.</b>		
<b>MARINE 3.11-2:</b> The projects could have a significant impact if they would threaten to eliminate a marine plant or animal wildlife community or cause a fish or marine wildlife population to drop below self-sustaining levels.	None Required.	Phase 2 Components	Less than Significant
		All Components	Less than Significant
<b>MARINE 3.11-3:</b> The projects could have a significant impact if they would interfere substantially with the movement of any native resident or migratory fish or marine wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native marine wildlife nursery sites.	None Required.	Phase 1 Components	Less than Significant with Mitigation MARINE-4
<b>MARINE 3.11-4:</b> The projects could have a significant impact if they would introduce or spread an invasive non-native species	<b>MARINE-4:</b> All project barges shall have underwater surfaces cleaned before entering Southern California waters and immediately prior to transiting to the project offshore construction area. Additionally, and regardless of vessel size, ballast water for all project vessels must be managed consistent with California State Lands Commission (CSLC) ballast management regulations, and Biofouling Removal and Hull Husbandry Reporting Forms shall be submitted to CSLC staff.	Phase 2 Components	Less than Significant with Mitigation MARINE-4
<b>Mineral Resources</b>		All Components	Less than Significant
<b>MIN 3.12-1:</b> The proposed projects could have a significant impact if they would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state,	None Required.	Advanced Water Purification Facility	Less than Significant
<b>MIN 3.12-2:</b> The proposed projects could have a significant impact if they would result in the loss of availability of a locally important mineral	None Required.	Water Conveyance System	Less than Significant
		Groundwater Wells	No Impact

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan		Wildlife/Treatment Wetlands	No Impact
		WWRf Treatment Upgrade	No Impact
		Concentrate Discharge Facility	No Impact
		Phase 2 Components	Less than Significant
Noise		Advanced Water Purification Facility	Less than Significant with Mitigation NOISE-1, NOISE-2
<b>NOISE 3.13-1:</b> The proposed projects could result in a significant impact if they would expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<b>NOISE-1:</b> Prior to construction, the City of Ventura shall ensure that the contractor specifications stipulate that: <ul style="list-style-type: none"> <li>All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other state-required noise attenuation devices.</li> <li>When feasible, construction haul routes shall avoid noise-sensitive uses (e.g., residences, convalescent homes).</li> <li>During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise-sensitive receptors.</li> <li>The project shall provide noise blanket/temporary noise barriers between the active areas and residential buildings</li> </ul> <b>NOISE-2:</b> Throughout project construction and operation, the City of Ventura shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints as soon as possible. <ul style="list-style-type: none"> <li>The City shall establish and disseminate a 24/7 hotline telephone number for use by the public to report any undesirable project noise conditions. If the telephone number is not staffed 24 hours per day, the City shall include an automatic answering feature with date and time stamp recording to answer calls when the phone is unattended.</li> <li>The City shall designate a Noise Disturbance Coordinator during construction and permanently once the facility is operational.</li> </ul>	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	Less than Significant
		WWRf Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Significant and Unavoidable NOISE-1, NOISE-2, NOISE-3, NOISE-4
		Phase 2 Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>The Noise Disturbance Coordinator shall assist in resolving noise complaints to minimize impacts while maintaining the objectives of the construction and operation of the facility. The Noise Disturbance Coordinator shall report all noise complaints to the City program manager.</p> <ul style="list-style-type: none"> <li>For construction noise complaints received outside of the construction hours and days allowed (Monday through Friday, between the hours of 7:00 a.m. and 8:00 p.m.), the Noise Disturbance Coordinator shall take immediate steps to determine whether project construction is causing the noise and, if so, to reduce the noise level of that activity or take other appropriate action to remedy the complaint as quickly as possible.</li> <li>For construction activities near local residences, the Noise Disturbance Coordinator shall have the authority to require the installation of a temporary noise barrier to reduce noise impacts to the closest sensitive receptors. The noise barriers shall be tall enough to effectively block sight-lines of the construction to the closest residences. The contractor shall install noise barriers as directed by the Noise Disturbance Coordinator to minimize construction noise and resolve noise complaints.</li> <li>Deliveries to the site normally shall not occur before 7:00 a.m. or after 10:00 p.m. on weekdays or between 9:00 a.m. and 6:00 p.m. on Saturdays, and are not allowed on Sundays. Oversized loads and other heavy-duty vehicles would primarily get to and from the site using main traffic conduits. If for reasons of critical operational needs these hours must be violated, the City shall notify adjacent residences of the unusual circumstance at least 2 days in advance.</li> </ul> <p><b>NOISE-3:</b> Residents of properties shall be offered noise mitigation measures (e.g., hearing protection, sound proofing, white noise machines, etc.) acceptable to the residents or relocation for the duration of nearby HDD drilling for new outfall</p>		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>construction, which would generate construction noise levels at their property in excess of 45 dBA, <math>L_{eq}</math> during nighttime hours, for the duration of time that 24-hour activity occurs. Based on the analyses presented in this EIR, this shall apply to residences located within the first two rows of homes to the north and/or south and within approximately 200 feet of the outfall drilling activity (i.e. homes along Greenock Lane and Nathan Lane for Option A and homes along Norwich Lane, New Bedford Court, Martha's Vineyard Court, and Sagamore Lane for Option B near the staging area).</p> <p><b>NOISE-4:</b> The project shall provide noise attenuation housings rated for up to a 10 dBA reduction for generator sets operating near sensitive receptors during new outfall HDD drilling operations.</p>		
<b>NOISE 3.13-2:</b> The proposed projects could result in a significant impact if they would expose persons to or generate excessive groundborne vibration or groundborne noise levels.	<b>NOISE-5:</b> The operation of construction equipment that generates high levels of vibration, such as large bulldozers and loaded trucks, shall be prohibited within 45 feet of existing residential structures. Instead, small construction equipment such as small rubber-tired bulldozers, small rubber-tired excavator, etc., not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations.	Advanced Water Purification Facility	Less than Significant with Mitigation NOISE-5
		Water Conveyance System	Less than Significant with Mitigation NOISE-5
		Groundwater Wells	Less than Significant with Mitigation NOISE-5
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation NOISE-5
		VWRF Treatment Upgrade	Less than Significant with Mitigation NOISE-5
		Concentrate Discharge Facility	Less than Significant with Mitigation NOISE-5
		AWPF Expansion	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
		Ocean Desalination	Less than Significant with Mitigation NOISE-5
		All Components	Less than Significant
<b>NOISE 3.13-3:</b> The proposed projects could result in a significant impact if they would create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	None Required.	All Components	Less than Significant
<b>NOISE 3.13-4:</b> The proposed projects could result in a significant impact if they would create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	None Required.	All Components	No Impact
<b>NOISE 3.13-5:</b> The proposed project could result in a significant impact if it would be 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, and would expose people residing or working in the project area to excessive noise levels. The proposed project could result in a significant impact if it would be located within the vicinity of a private airstrip, and would expose people residing or working in the project area to excessive noise levels.	None Required.		
<b>Population, Housing, and Environmental Justice</b>			
<b>POP 3.14-1:</b> The proposed projects could result in a significant impact if they would induce substantial population growth in an area, either directly or indirectly.	None Required.	All Components	Less than Significant
<b>POP 3.14-2:</b> The proposed projects could result in a significant impact if they would displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	Implement Mitigation Measure LU-1.	Treatment Wetland	Less than Significant with Mitigation LU-1
<b>POP 3.14-3:</b> The proposed projects could result in a significant impact if they would displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	None Required.	All Components	Less than Significant
<b>EJ 3.14-4:</b> The proposed projects could result in a significant impact if they would affect the health or environment of minority or low income populations disproportionately.	None Required.		
<b>Public Services</b>		All Components	Less than Significant
<b>PS 3.15-1:</b> The proposed projects could have a significant impact if they would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of	None Required.	All Components	Less than Significant

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire or police protection.			
<b>PS 3.15-2:</b> The proposed projects could have a significant impact if they would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools.	None Required.	All Components	Less than Significant
<b>PS 3.15-3:</b> The proposed projects could have a significant impact if they would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks or other public facilities.	None Required.		
<b>Recreation</b>		All Components	Less than Significant
<b>REC 3.16-1:</b> The proposed projects could have a significant impact if they would have a substantial adverse effect on or increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	None Required.	All Components	Less than Significant
<b>REC 3.16-2:</b> The proposed projects could have a significant impact if they would have a substantial adverse effect on recreational facilities, which could require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	None Required.		
<b>Transportation and Traffic</b>		Advanced Water Purification Facility	Less than Significant with Mitigation TRAF-1
<b>TRAF 3.17-1:</b> The proposed projects could result in a significant impact if they would conflict with an applicable plan, ordinances or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit	<b>TRAF-1:</b> 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	Water Conveyance System	Less than Significant with Mitigation TRAF-1
		Groundwater Wells	Less than Significant with Mitigation TRAF-1
		Wildlife/Treatment Wetlands	Less than Significant with Mitigation

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	<p>satisfaction of the City's Public Works Director and Fire and Police Chiefs. 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.</p> <p>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. 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.</p> <p>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.</p> <p>The City shall also notify local emergency responders of any planned partial or full lane closures or blocked access to roadways or</p>		TRAF-1
		VWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	Less than Significant with Mitigation TRAF-1
		AWPF Expansion	Less than Significant
		Ocean Desalination	Less than Significant with Mitigation TRAF-1
		All Components	Less than Significant



Environmental Impact	Mitigation Measures	Project Component	Significance Determination
	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.		
<b>TRAF 3.17-2:</b> The proposed projects could result in a significant impact if they would 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.	None Required.	All Components	Less than Significant
<b>TRAF 3.17-3:</b> The proposed projects could result in a significant impact if they would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	None Required.	Phase 1 Components	No Impact
<b>TRAF 3.17-4:</b> The proposed projects could result in a significant impact if they would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	None Required.	Phase 2 Components	Less than Significant
		All Components	Less than Significant with Mitigation TRAF-1
<b>TRAF 3.17-5:</b> The proposed projects could have a significant impact if they would result in inadequate emergency access.	Implement Mitigation Measure TRAF-1.	All Components	Less than Significant with Mitigation TRAF-1
<b>TRAF 3.17-6:</b> The proposed projects could result in a significant impact if they would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities	Implement Mitigation Measure TRAF-1.		
<b>Tribal Cultural Resources</b>		All Components	No Impact
<b>CUL 3.18-1:</b> 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: a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in § 5020.1(k), or	None Required.		

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
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			
<b>Utilities, Service Systems, and Energy</b>		Advanced Water Purification Facility	Less than Significant
<b>UTIL 3.19-1:</b> The proposed projects could result in a significant impact if they would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	None Required.	Water Conveyance System	No Impact
		Groundwater Wells	No Impact
		Wildlife/Treatment Wetlands	No Impact
		WWRF Treatment Upgrade	Less than Significant
		Concentrate Discharge Facility	No Impact
		Phase 2 Components	No Impact
		Phase 1 Components	Less than Significant
<b>UTIL 3.19-2:</b> The proposed projects could result in a significant impact if they would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None Required.	Phase 2 Components	No Impact
		Advanced Water Purification Facility	Less than Significant
<b>UTIL 3.19-3:</b> The proposed projects could result in a significant impact if they would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None Required.	Water Conveyance System	Less than Significant
		Groundwater Wells	Less than Significant
		Wildlife/Treatment Wetlands	No Impact
		WWRF Treatment Upgrade	No Impact
		Concentrate Discharge Facility	No Impact
		AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant
		All Components	Less than Significant
<b>UTIL 3.19-4:</b> The proposed projects could result in a significant impact if they would not have sufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements were needed.	None Required.	Advanced Water Purification Facility	Less than Significant
<b>UTIL 3.19-5:</b> The proposed projects could have a significant impact if they would result in a determination by the wastewater treatment provider that serves the projects that they do not have adequate	None Required.	Water Conveyance System	No Impact
		Groundwater Wells	No Impact

Environmental Impact	Mitigation Measures	Project Component	Significance Determination
capacity to serve the projects' projected demand in addition to the provider's existing commitments		Wildlife/Treatment Wetlands	No Impact
		VWRF Treatment Upgrade	No Impact
		Concentrate Discharge Facility	No Impact
		Phase 2 Components	No Impact
		Phase 1 Components	Less than Significant
UTIL 3.19-6: The proposed projects could result in a significant impact if they would not be serviced by a landfill with sufficient permitted capacity to accommodate the projects' solid waste disposal needs.	None Required.	AWPF Expansion	No Impact
		Ocean Desalination	Less than Significant
		All Components	No Impact
UTIL 3.19-7: The proposed projects could result in a significant impact if they would not comply with federal, state, and local statutes and regulations related to solid waste.	None Required.	All Components	Less than Significant
UTIL 3.19-8: The proposed projects could result in a significant impact if they would conflict with adopted energy conservation plans.	None Required.		

