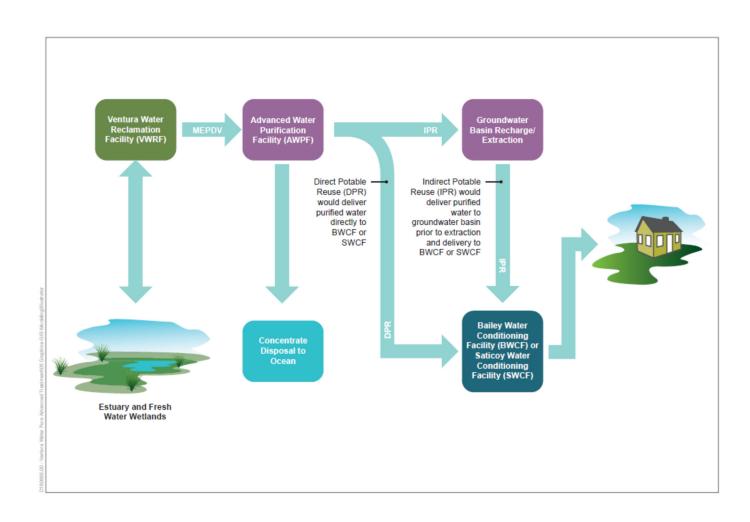


National Environmental Policy Act Finding of No Significant Impact

VenturaWaterPure Program
City of San Buenaventura, Ventura County, California



Mission Statements

The Department of the Interior (DOI) conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.



National Environmental Policy Act (NEPA) Finding of No Significant Impact

No. 19-SCAO-006-FONSI

VenturaWaterPure Ventura County, California

The Bureau of Reclamation is providing financial assistance to the City of Buenaventura (Ventura) for VenturaWaterPure, a potable reuse project in Ventura County, California. The project will divert tertiary treated wastewater currently discharged to the Santa Clara River Estuary, treat it at an advanced water purification facility, and deliver the purified water for groundwater recharge or direct potable reuse.

Based on our review of an Environmental Impact Report for the *Ventura Water Supply Projects*, California State Clearinghouse no. 2017111004, we have determined that the financial assistance does not constitute a major federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969. Accordingly, preparation of an environmental impact statement is not required.

Recommended:		Date:
	Doug McPherson, Environmental Protection Specialist	
Reviewed By:		Date:
,	Brett Mooney, Regional Title XVI Coordinator	
Approved:		Date:
	Jack E. Simes, Jr., Area Manager	
	Southern California Area Office	

BACKGROUND

Pursuant to the Reclamation Wastewater and Groundwater Study and Facilities Act (Title XVI of Public Law 102-575), the Bureau of Reclamation approved a feasibility study for the "Expanding Recycled Water Delivery Project" on May 28, 2014. Under section 4009(c) of the 2016 Water Infrastructure Improvements for the Nation (WIIN) Act, the project became eligible for funding under the Title XVI program.

Grant agreement no. R20AP00008 provided Title XVI funds for planning, design, and pre-construction of the Expanding Recycled Water Delivery Project (VenturaWaterPure). Ventura applied for construction funds under Notice of Funding Opportunity No. R21AS00429. VenturaWaterPure was recommended for funding. Congress was informed of the recommendation and the funds were subsequently authorized.

The project may also be financed by the Environmental Protection Agency (EPA) under the Water Infrastructure Finance and Innovation Act (WIFIA) and by the California State Water Resources Control Board under the Clean Water State Revolving Fund (CWSRF).¹

PURPOSE AND NEED

VenturaWaterPure is intended to better protect the ecology of the Santa Clara River Estuary and to develop additional water supply to meet water demands for planned future growth and enhance water supply reliability. The City currently depends entirely on local surface and groundwater supplies which are becoming increasingly impacted by drought conditions and use restrictions.

The Ventura Water Reclamation Facility is operated under National Pollutant Discharge Elimination System (NPDES) permit no.CA0053651, issued by the Los Angeles Regional Water Quality Control Board in order no. R4-2020-0024. The order requires a phased approach to a reduction in discharge to the Santa Clara River Estuary as required by a federal Consent Decree² to correct any possible violations of California's Enclosed Bays and Estuaries Policy.

The Enclosed Bays and Estuaries Policy requires dischargers to phase out flows of treated wastewater to bays and estuaries, unless those discharges "enhance" beneficial uses of the receiving bay or estuary, such that the beneficial uses of the receiving water are more fully realized with the discharge than would be the case in the absence of the discharge.

The Consent Decree expresses the City's commitment to pursue environmentally protective, sustainable, and integrated water supply and wastewater discharge practices, including infrastructure to reclaim and divert an ecologically appropriate volume of tertiary-treated flows currently discharged to the estuary.

The objectives of the VenturaWaterPure project are to:

- Protect, maintain, and improve ecological resources and related beneficial uses of the Santa Clara River Estuary and its watershed.
- Augment local water supply in an environmentally responsible and cost-efficient manner.
- Provide a drought- and disaster-resilient water supply.
- Improve municipal supply groundwater quality within the service area.
- Maintain compliance with the Ventura Water Reclamation Facility (WRF) discharge permit.
- Replace the tertiary treatment process at the Ventura WRF and make the necessary treatment improvements needed to increase nutrient removal.

 $^{^{1}}$ The CWSRF program is partially funded by a capitalization grant from the EPA. Issuance of CWSRF funds is considered equivalent to a federal action.

² Tertiary Treated Flows Consent Decree and Stipulated Dismissal with the Wishtoyo Foundation, Ventura Coastkeeper, and Heal the Bay, filed with the U.S. Central California District Court February 3, 2012. Case number CV 10-02072-GHK(PJWX).

AUTHORITY

Notice of Funding Opportunity No. R21AS00429 was issued under Title XVI of Public Law 102-575 as amended by Title II, Subtitle J of the WIIN Act. Funding for VenturaWaterPure was subsequently authorized by Division A Section 123(c) of Public Law 117-43, Extended Government Funding and Delivering Emergency Assistance Act, on September 30, 2021.

PROJECT DESCRIPTION

Approximately 4.7 million gallons per day (mgd) of tertiary-treated water is currently discharged to the Santa Clara River Estuary from the Ventura Water Reclamation Facility. The VenturaWaterPure project will install infrastructure to divert and purify most or all of this water and convey it for potable reuse.

The project will develop an Advanced Water Purification Facility and an indirect or direct potable reuse system. Product water from the Advanced Water Purification Facility will be conveyed to new groundwater injection wells for aquifer recharge and indirect potable reuse. Waste concentrate from the advanced water purification process, and tertiary treated water, will be discharged to the Pacific Ocean through a new ocean outfall.

The project will be constructed in two phases. Phase 1a will divert tertiary treated flow from the Ventura Water Reclamation Facility to the new Advanced Water Purification Facility by 2025, leaving a continued discharge level (CDL) of 1.9 mgd to the Santa Clara River Estuary. Phase 1b will add treatment capacity at the Advanced Water Purification Facility, maintaining a CDL of 0 to 0.5 mgd to the estuary by 2030.³

Project components include:

<u>Advanced Water Purification Facility</u>: The Advanced Water Purification Facility will be constructed on a 10-acre undeveloped parcel (APN 138-005-009) on the southeast corner of the intersection of Harbor Boulevard and Olivas Park Drive (the Harbor site alternative).

<u>Water Conveyance System</u>: New pipelines within public rights-of-way will convey source water and product water throughout the new system. A new pump station at the Advanced Water Purification Facility will deliver the purified water to new groundwater injection wells for indirect potable reuse, or to the existing Bailey or Saticoy water conditioning facility for direct potable reuse.

Aquifer Storage Facilities (Groundwater Injection Wells): The undertaking includes up to six injection wells within the Oxnard Plain Groundwater Basin. Each well will have capacity to inject 1,250 to 2,750 gallons per minute. The new injection wells will be drilled to an estimated depth of 1,500 feet, screened from about 400 to 1,500 feet below ground surface.

<u>Ventura Wastewater Reclamation Facility Upgrades:</u> A new Membrane Bioreactor system will replace the existing secondary and tertiary components at the Ventura Wastewater Reclamation Facility to enhance nutrient removal in the tertiary-treated effluent. This modification will provide consistent and controllable nutrient removal. Treatment upgrades may include the addition of aeration blowers, primary treatment improvements, filter replacements and other system upgrades. New pump stations will deliver tertiary treated water to the Advanced Water Purification Facility and waste concentrate to the ocean outfall.

Concentrate Discharge Facility: The new ocean outfall will be located north of Ventura Harbor, installed by directional drilling from Marina Park and emerging on the ocean floor 4,500 feet offshore. Once emerged, an extension of the outfall will be attached and placed along the ocean floor an additional 2,083 feet until the sea depth reaches 53 feet. A 208-foot linear diffuser will be installed at the end of the outfall with discharge portals for efficient dilution. The ocean outfall will have a 14.8 mgd discharge capacity. A new pipeline from the Advanced Water Purification Facility will convey waste concentrate to the ocean

³ The CDL is based on average annual discharge during closed-mouth, dry-weather conditions and would not be achieved during breakdown situations or public health and safety events.

outfall by an alignment along Harbor Boulevard to Schooner Drive to Anchors Way. The pipeline will cross Ventura Harbor by horizontal directional drilling under the Arundell Barranca channel to Marina Park.

ADOPTION OF EXISTING ENVIRONMENTAL DOCUMENT

NEPA requires review of a proposed federal action to determine its impact on the human environment. Council on Environmental Quality (CEQ) regulations direct Federal agencies to cooperate with State and local agencies to reduce duplication between NEPA and State and local requirements (40 CFR 1506.2). Department of Interior regulations for implementing NEPA encourage tiering of environmental documents and provide for adoption of existing environmental documents if, upon evaluation by a responsible official, it is found to comply with relevant provisions of the CEQ regulations.

The City of Ventura evaluated VenturaWaterPure under the California Environmental Quality Act (CEQA) in the Environmental Impact Report for the Ventura Water Supply Project, SCH No. 2017111004. The Ventura City Council certified the Environmental Impact Report and approved Resolution No. 2019-053, adopting findings, a statement of over-riding considerations, and a mitigation monitoring and reporting program on October 14, 2019. A Notice of Determination was filed October 21, 2019. A CEQA addendum was prepared in September 2022 to document modifications to the project, and a Notice of Determination was filed on September 29, 2022.

Bureau of Reclamation staff reviewed the Environmental Impact Report and addendum and concluded that the reasonably foreseeable effects of the action are adequately identified and disclosed. We adopt the Environmental Impact Report and addendum in accordance with regulations for implementing NEPA promulgated by CEQ at 40 CFR 1506.3 and by the Department of the Interior at 43 CFR 46.320(a).

SUMMARY OF FINDINGS

Diverting most or all of the existing discharge will reduce open water and freshwater wetland habitat in the Santa Clara River Estuary but is expected to enhance habitat values, providing water quality benefits, reduced nutrient loads, and a more natural hydrologic regime with fewer unseasonal berm breaches. The purified water will have a lower mineral content than existing groundwater in the Oxnard Plain aquifer, providing water quality benefits and a reliable, drought-resistant, local water supply source.

The CEQA evaluation concluded that installation of the new ocean outfall will result in significant temporary construction noise impacts even after mitigation measures are implemented. All other identified impacts were determined to be less-than-significant. The Ventura City Council found that the benefits of the project outweigh the significant temporary construction noise impact.

OTHER FEDERAL CONSIDERATIONS

Clean Water Act

The Ventura Water Reclamation Facility is operated under National Pollutant Discharge Elimination System (NPDES) permit no.CA0053651, issued by the Los Angeles Regional Water Quality Control Board in order no. R4-2020-0024. The order requires a phased approach to the proposed reduction in discharge to the Santa Clara River Estuary, consistent with recommendations from the National Marine Fisheries Service, US Fish and Wildlife Service, and California Department of Fish and Wildlife.

The NPDES permit will be modified to authorize discharge to the Pacific Ocean by the new ocean outfall. At completion, the project will produce approximately 1.2 mgd of waste residuals (Reverse Osmosis concentrate) and may discharge up to 14.8 mgd of tertiary treated water. The discharge will comply with California Ocean Plan water quality objectives and will not degrade water quality relative to baseline conditions. A permit from the Army Corps of Engineers under Section 404 of the Clean Water Act will be required to install the new ocean outfall, as well as a 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board.

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The project will comply with the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (NPDES No. CAS000002) and with the General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES No. CAS000001). The City developed and currently implements a Storm Water Pollution Prevention Plan for the existing Ventura Water Reclamation Facility to comply with General NPDES Permit No. CAS000001.

Endangered Species Act

The Santa Clara River Estuary is designated critical habitat for the southern California Distinct Population Segment of steelhead trout (*Oncorhynchus mykiss*) and for tidewater goby (*Eucyclogobius newberryi*). Both fish species are listed as endangered under the federal Endangered Species Act and are known to occur in the Santa Clara River Estuary.

The reduction or elimination of discharge to the estuary will reduce the acreage of spawning and rearing habitat for tidewater goby, rearing habitat for subadult steelhead, and foraging habitat for endangered California least tern (*Sternula antillarum browni*). The Santa Clara River Estuary also contains designated critical habitat for threatened western snowy plover (*Charadrius nivosus*). Both California least tern and western snowy plover nest on the berm, and reduction or elimination of discharge to the estuary will improve the stability of their nesting habitat.

Overall, the action is expected to be beneficial for steelhead, tidewater goby, nesting shorebirds, and for steelhead designated critical habitats and will not compromise the recovery of tidewater gobies. The reduced discharge in the estuary will shift habitat quality toward conditions that better mimic natural physical and biological features. The action is expected to improve water quality compared to baseline conditions, reduce habitat suitability for invasive species, and reduce unseasonable breaches of the lagoon associated with current discharge levels.

The Bureau of Reclamation consulted with National Marine Fisheries Service and US Fish and Wildlife Service on effects to steelhead and goby and their critical habitats (see AGENCY CONSULTATION AND COORDINATION). Bureau of Reclamation staff concluded that the action will not affect Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *Ianosissimus*), least Bell's vireo (*Vireo pusillus bellii*), yellow-billed cuckoo (*Coccyzus americanus*), or southwestern willow flycatcher (*Empidonax trailli extimus*). The action is not likely to adversely affect California least tern, critical habitat for southwestern willow flycatcher, western snowy plover (*Charadrius nivosus nivosus*), or critical habitat for snowy plover.

Clean Air Act

Ventura County is designated nonattainment for the 2015 8-hour ozone standard and attainment of all other National Ambient Air Quality Standards. Project construction will temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants and will exceed 25 pounds per day of nitrogen oxides (NOx), an ozone precursor. Regulatory thresholds at 40 CFR 93.153(b) will not be exceeded. No conformity determination is required.

National Historic Preservation Act

The undertaking will not affect any properties on or eligible for listing in the National Register of Historic Places. The purified water pipeline to the existing Saticoy and Bailey water conditioning plants will be cross a Southern Pacific railroad track that has not been formally evaluated for historic significance. The pipeline will be installed by boring beneath the rail line and will not affect the railroad property.

Migratory Bird Treaty Act

The project will not affect migratory birds with implementation of mitigation measures including bird surveys during the nesting season.

Wetlands

Project implementation will reduce discharges to the estuary, resulting in a reduction of wetted area in the Santa Clara River Estuary and habitat conversion within the lagoon. Portions of open water and wetland habitat types are expected to convert to riparian and riparian riverwash habitats. Conversion of open water and wetland habitats to riparian and riverbed habitats will be outweighed by improved quality of

Bureau of Reclamation VenturaWaterPure

remaining aquatic habitat, overall benefitting the ecology and sensitive species of the Santa Clara River Estuary.

Floodplains/Tsunami

No project components are located within the Federal Emergency Management Agency regional flood hazard areas delineated by the National Flood Insurance Program. A limited area around the estuary along the coastline is a Special Flood Hazard Area Zone A (within the 100-year flood zone) for coastal flood hazards. No project components are located within this zone. The existing ponds are within, and the Ventura Water Reclamation Facility is adjacent to, the tsunami hazard zone.

Farmland Protection Policy Act

No permanent impacts to prime or unique farmlands will occur. Pipelines will be installed within paved roadways. The Portola Road alternative for the Advanced Water Purification Facility and groundwater well Sites 2 or 3.are mapped Prime Farmland. These alternatives were not selected.

Rivers and Harbors Act

Construction of the new ocean outfall and of the portion of the concentrate conveyance pipeline beneath Ventura Harbor are subject to permit approvals by the Army Corps of Engineers under Section 10 of the Rivers and Harbors Act of 1899.

Magnuson-Stevens Act

The Santa Clara River Estuary is designated a Habitat Area of Particular Concern. The new ocean outfall will be installed within Essential Fish Habitat for Groundfish, Coastal Pelagic Species, and Highly Migratory Species. Bureau of Reclamation staff concluded that the action will not result in adverse effects to the Essential Fish Habitat or to the Habitat Area of Particular Concern.

Marine Mammal Protection Act

Outfall construction includes vessel anchoring, dredging, riprap reconfiguration. Prior to the initiation of any offshore pile driving activities for the project, the City of Ventura will prepare a Construction Plan and a sound attenuation reduction and monitoring plan. Bureau of Reclamation staff concluded that adopted monitoring and avoidance measures are adequate to avoid effects to marine mammals.

Wild and Scenic Rivers Act

No Wild and Scenic Rivers or waterways on the National Rivers Inventory are involved. The Santa Clara River is the largest river system in southern California that remains in a relatively natural state and is a high-quality natural resource for much of its length. Sespe Creek and a portion of Piru Creek are Wild and Scenic tributaries to the Santa Clara River located 25 miles upstream in the Monte Arido Highlands.

Coastal Zone Management Act

The project is within the California Coastal Zone. The Advanced Water Purification Facility site is currently zoned "open space" and an amendment to the Local Coastal Plan is needed. Ventura has applied for a Coastal Development Permit from the California State Coastal Commission. Approval of the State coastal permit constitutes a consistency certification under the federal Coastal Zone Management Act.

Coastal Barrier Resources Act

The federal expenditure will not encourage development or modification of coastal barriers. The project is not within any units of the Coastal Barrier Resources System. The Coastal Barrier Resources Act applies on the Atlantic, Gulf, and Great Lakes coasts. No system units are located along the Pacific coast.

Safe Drinking Water Act

The Advanced Water Purification Facility will produce potable quality water with lower mineral content compared to existing conditions in the Oxnard Plain groundwater basin. The potable reuse will be regulated under the same state and federal standards as all other drinking water sources.

Sole Source Aquifers

The Oxnard Plain groundwater basin is not an EPA-designated sole source aquifer.

Socioeconomic Resources

The project will not have significant social or economic effects and will not induce population growth.

Environmental Justice

No impacts relevant to Environmental Justice were identified. Disproportionately high and adverse human health or environmental effects are not anticipated.

Indian Trust Assets

No Indian trust assets have been identified in the project area.

Noise Control Act of 1972

Federal policy is to promote an environment free from noise that jeopardizes health or welfare. Primary responsibility for control of noise rests with State and local governments. There are no federal noise standards that directly regulate environmental noise related to construction or operation of the project.

Construction of the new ocean outfall will exceed the local nighttime ambient noise standard of 45 dBA. Horizontal Directional Drilling from the coast and pullback of the pipe from shore to the diffuser location on the ocean floor will require 24 hour per day operations within the parking area north of the marina for several weeks, with noise levels up to 85 dBA at 25 feet. The closest sensitive receptors to the ocean outfall construction are 25 feet away at single-family residences along Greenock Lane.

Construction of all other project components will conform to local noise standards.

AGENCY CONSULTATION AND COORDINATION

The City of Ventura studied and designed VenturaWaterPure over many years, driven by the NPDES permit renewal process. US Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife, and other stakeholders were engaged and provided recommendations.

Los Angeles Regional Water Quality Control Board

The Los Angeles Regional Water Quality Control Board approved NPDES permit no..CA0053651 on February 2, 2020. The Pre-Construction Monitoring Plan and post-construction Monitoring Assessment and Adaptive Management Plan was approved on July 18, 2021. The City provides quarterly updates on estuary monitoring and annual monitoring reports to the agencies and other stakeholders. The Transition Plan for the Ventura Water Reclamation Facility was approved on November 8, 2021. Ventura will submit a Report of Waste Discharge for NPDES permit renewal that includes VenturaWaterPure diversions and ocean discharge. Ventura has applied for a Clean Water Act Section 401 Water Quality Certification to install the new ocean outfall and the concentrate conveyance pipeline beneath Ventura Harbor.

National Marine Fisheries Service

The Bureau of Reclamation initiated formal consultation with the National Marine Fisheries Service under the Endangered Species Act on December 29, 2021. A Biological Opinion was issued by the National Marine Fisheries Service on June 14, 2022 (ref: WCRO-2021-03490), finding that the action is not likely to jeopardize the continued existence of southern California steelhead or destroy or adversely modify designated critical habitat for the species. Incidental take during monitoring is authorized.

National Marine Fisheries Service also agreed that the installation of the proposed ocean outfall would not adversely affect Essential Fish Habitat designated under the Magnuson-Stevens Act but concluded that the proposed waste concentrate discharge through the new outfall may result in adverse effects to Essential Fish Habitat. National Marine Fisheries Service recognized that the Bureau of Reclamation does not have regulatory authority over the discharge and acknowledged that compliance with the NPDES permit (when amended to include the ocean discharge) should help minimize the effects to essential fish habitat. No additional conservation recommendations were provided.

Fish and Wildlife Service

The Bureau of Reclamation initiated consultation with the Fish and Wildlife Service under the Endangered Species Act on February 28, 2022, A Biological Opinion was issued by the Fish and Wildlife Service on August 3, 2022 (ref: 08EVEN00-2022-0006643-S7-001), finding that the action will not jeopardize survival and recover of tidewater goby or result in destruction or adverse modification of goby critical habitat. The Fish and Wildlife Service concurred that the action is not likely to adversely affect California least tern, western snowy plover, plover critical habitat, or critical habitat for southwestern willow flycatcher.

California State Water Resources Control Board

Ventura has applied to the State Water Resources Control Board for a wastewater change petition pursuant to California Water Code Section 1211 for diversion of existing discharges into the Santa Clara River Estuary. Ventura. Ventura will submit a Title 22 Engineering Report for approval by the Division of Drinking Water. The City has applied for Clean Water State Revolving Funds.

California State Historic Preservation Officer (SHPO)

The Bureau of Reclamation submitted a finding of "*No Historic Properties Affected*" to the California SHPO on September 2, 2022. The SHPO requested clarification on October 2, 2022. Additional information was provided on October 26, 2022, and on January 23, 2023.

On February 1, 2023, the SHPO strongly recommended that the Bureau of Reclamation reconsider modifying our finding to "no adverse effects to historic properties" and recommended that we require a written monitoring protocol and Unanticipated/Inadvertent Discovery Plan (UDP/IDP) or Cultural Resource Management Plan (CRMP). The SHPO did not formally object to our finding of "no historic properties affected." Southern California Area Office environmental staff consider the consultation complete.

Army Corps of Engineers

The Corps of Engineers held a pre-application meeting on February 10, 2022, with staff from the California Coastal Commission, California State Lands Commission, Los Angeles Regional Water Quality Control Board, US Fish and Wildlife Service, National Marine Fisheries Service, Bureau of Reclamation, and California Department of Fish and Wildlife. City of Ventura staff, consultants, and representatives of the settlement parties (Heal The Bay and Wishtoyo Foundation). Ventura has since applied for a Clean Water Act Section 404 permit and a Rivers and Harbors Act Section 10 permit to install the new ocean outfall and the concentrate conveyance pipeline beneath Ventura Harbor.

California Coastal Commission

Ventura applied for a Coastal Development Permit from the California Coastal Commission. Approval of the coastal permit constitutes consistency certification for the federal Coastal Zone Management Act.

California State Lands Commission

Ventura has applied for a long-term lease with the State Lands Commission to install the new ocean outfall on submerged public trust lands in the Pacific Ocean and within Ventura Harbor.

Department of Agriculture, Natural Resources Conservation Service (NRCS)

No farmlands will be converted. Consultation with the NRCS District Conservationist is not required.

Tribal Consultation

Ventura consulted with tribal representatives of the Barbareño/Ventureño Band of Mission Indians, in compliance with California AB 52 requirements.

ENVIRONMENTAL COMMITMENTS

The mitigation monitoring and reporting program adopted by the Ventura City Council are attached. The CEQA mitigations are self-imposed by Ventura and are considered ameliorative design elements per Department of the Interior NEPA regulations at 43 CFR 46.130(b). No additional environmental commitments are required.

Bureau of Reclamation VenturaWaterPure

REFERENCES

Draft Environmental Impact Report for the Ventura Water Supply Projects, California State Clearinghouse No. SCH No. 2017111004, ES Associates, Camarillo, California, March 2019

Final Environmental Impact Report for the Ventura Water Supply Projects, California State Clearinghouse No. SCH No. 2017111004, ES Associates, Camarillo, California, September 2019; including City of Ventura Resolution, Findings of Fact and Mitigation Monitoring and Reporting Program

Addendum to the Final Environmental Impact Report for the Ventura Water Supply Projects, California State Clearinghouse No. SCH No. 2017111004, ES Associates, Camarillo, California, September 2022

ATTACHMENTS

CEQA Mitigation Monitoring and Reporting Program

ATTACHMENT C

Mitigation Monitoring and Reporting Program

In accordance with Section 15091(d) and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines, which require a public agency to adopt a program for reporting on or monitoring required changes or conditions of approval to substantially lessen significant environmental effects, the Mitigation Monitoring and Reporting Program (MMRP) is hereby adopted for this project.

This MMRP summarizes the mitigation commitments identified in the Ventura Water Supply Projects Final Environmental Impact Report (EIR) (State Clearinghouse No. 2017111004). Mitigation measures are presented in the same order as they occur in the Final EIR. The columns in the MMRP table provide the following information:

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less-than-significant level.
- **Project Components:** The project component requiring the mitigation measure to reduce potentially significant impacts.
- **Monitoring Schedule (Timing):** The general schedule for conducting each monitoring task, either prior to construction, during construction, and/or during operation.
- Implementing Party: The agency or private entity responsible for ensuring implementation of the mitigation measure. However, until the mitigation measures are completed, the City of Ventura, as the CEQA Lead Agency, remains responsible for ensuring implementation of the mitigation measures occurs in accordance with the program (CEQA Guidelines, Section 15097(a)).
- **Verification of Compliance:** The signature of the implementing party that must verify that the mitigation measure has been implemented as required and the date it was implemented and completed.

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MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY FOR THE VENTURA WATER SUPPLY PROJECTS

						fication of mpliance
Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
Aesthetics						
AES 3.1-3: 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.	AES-1: 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.	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands Concentrate Discharge Facility Ocean Desalination Facility 	Prior to Construction	 Include Mitigation Measure AES-1 in the Construction Contract Specifications. City shall approve plan. Construction Contractor shall implement plan City shall monitor compliance with plan during construction 		
	AES-2: 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 Groundwater Wells	Developed Prior to Construction, Implemented During Construction	 Include Mitigation Measure AES-2 in the Construction Contract Specifications. City shall review final designs Construction Contractor –shall implement design City shall inspect designs to ensure compliance 		
AES 3.1-4: 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.	AES-3: 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 Groundwater Wells Conveyance Pipeline	Plans Confirmed Prior to Construction Implemented During Construction and Operation	 Include Mitigation Measure AES-3 in the Construction Contract Specifications City shall inspect designs to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
Agricultural Resources						
AG 3.2-1: 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.	AG-1: 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 of the designated or alocal, regional, or statewide organization or agency whose 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.	Advanced Water Purification Facility Water Conveyance System Groundwater Wells	Prior to Construction on any state-designated Prime Farmland, Farmland of Local Importance, and/or open space	If site is chosen that would reduce farmland or install inconsistent land use, City shall identify replacement lands and implement agricultural easement		
AG 3.2-2: The proposed projects could have a significant impact if they would conflict with existing zoning for agricultural use, or a Williamson Act contract.	Implement Mitigation Measure AG-1.	Advanced Water Purification Facility Water Conveyance System	Prior to Construction	City shall implement measure		
AG 3.2-5: 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-	Implement Mitigation Measure AG-1.	Advanced Water Purification Facility	Prior to Construction	 City shall implement measure 		

			Verification of Compliance	
t Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
d Water Purification conveyance System cater Wells freatment Wetlands reatment Upgrades ate Discharge resalination Facility	During Construction	 Include Mitigation Measure AQ-1 in the Construction Contract Specifications Construction Contractor shall implement measures City shall inspect to ensure compliance 		

Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
agricultural use or conversion of forest land to non-forest use.						
Air Quality						
AQ 3.3-2: 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.	AQ-1: 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: • The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. • 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. • Fugitive dust produced during grading excavation and construction activities shall be controlled by the following activities: a) All trucks shall be required to cover their loads as required by California Vehicles Code Section 23114. b) 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	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure AQ-1 in the Construction Contract Specifications Construction Contractor shall implement measures City shall inspect to ensure compliance 		

as often as necessary and reclaimed

Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	water shall be used whenever possible.					
¢	Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil 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.					
	Signs limiting traffic to 15 miles per hour or less shall be posted on-site.					
	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.					
	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.					
	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.					

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	 AQ-2: 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: All construction equipment shall meet or exceed Environmental Protection Agency Tier 3 certification requirements. The contractor shall be required to document the use of Tier 3 equipment or better. HDD drilling motors will comply with Tier 3 standards or greater and have particulate filters installed or the contractor shall provide justification to the City that the equipment is not available. The City shall establish a barrier around the HDD drilling site to minimize site lines, air emissions, and noise from the drilling activities. For pipeline installation work within 300 feet of sensitive receptors such as schools and health care facilities, the City shall coordinate with the school or health care facility to schedule construction activities during periods that minimize disruption to receptors when feasible. Minimize equipment idling time. Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications. Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time. 	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure AQ-2 in the Construction Contract Specifications Construction Contractor shall implement measures City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	Use alternatively fueled construction equipment, such as compressed natural `gas (CNG), liquefied natural gas (LNG), or electric, if feasible.					
Biological Resources						
BIO 3.4-1: The projects could have a significant impact if they would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or USFWS.	BIO-1: 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.	Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction During Construction.	Include Mitigation Measure BIO-1 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance		
	BIO-2: 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 noise barriers between the construction activity and the sensitive resource to reduce noise impacts on biological resources.	Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands WWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction During Construction	 Include Mitigation Measure BIO-2 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
	BIO-3: 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.	Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge	During Construction	 Include Mitigation Measure BIO-3 in the Construction Contract Specifications Construction Contractor shall implement measure 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
		Facility Ocean Desalination Facility		City shall inspect to ensure compliance		
	BIO-4: 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: • 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. • 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. • 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 the young will no longer be	Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction During Construction	 Include Mitigation Measure BIO-4 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	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.	·				
	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.					
	BIO-5: 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.	Phase 1a Components	Prior to Construction of Phase 1a;	City shall prepare and implement BIO-5		
	BIO-6: 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	Phase 1b Components	Following construction of Phase 1a and Prior to Construction of Phase 1b	 City shall prepare and implement BIO-6 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	diversion SCRE habitat values and conditions for SCRE listed species. The SCRE MAAMP will consist of the following core elements at a minimum:					
	Water depth measurements;					
	 Aquatic species surveys within the SCRE to document occurrence and abundance of tidewater goby and juvenile steelhead; 					
	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;					
	 Acreage and qualitative evaluation of vegetation associations (habitat types) within the SCRE and its vicinity; 					
	 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; 					
	Documentation of eutrophication episodes within the SCRE;					
	SCRE berm condition monitoring including berm heights and breaching events; and					
	Continuous VWRF discharge flow data, and instantaneous VWRF discharge water quality data.					
	The monitoring effort will be initiated following implementation of Phase 1a when discharges have been reduced to a CDL of 1.9 MGD. The City shall submit annual monitoring reports to the CDFW, USFWS, and NMFS that compile the data collected for a period of 5 years.					
	The City shall consult with CDFW, USFWS, and NMFS to evaluate the data and trends shown in the monitoring data. In the event					

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	that based on the information and analysis provided by the MAAMP, NMFS,USFWS, and or CDFW notifies the RWQCB 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 MAAMP shall be 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.	Water Construence States	Plan: Prior to	Include Mitigation Management		
	BIO-7: 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.	Water Conveyance System Concentrate Discharge Facility Ocean Desalination Facility	Plan: Prior to Construction Implementation: During Construction	 Include Mitigation Measure BIO-7 in the Construction Contract Specifications City shall approve plan Construction Contractor shall implement plan City shall inspect to ensure compliance 		
	BIO-8: Prior to constructing treatment wetlands as a part of Phase 1b, the City shall survey the site for the presence of sensitive habitats or sensitive species. If sensitive habitats are identified that would be affected by the construction of the new treatment wetlands, the City shall compensate for such impacts by establishing riparian habitat -site through development of riparian habitat within the new treatment wetlands design, or offsite	Wildlife/Treatment Wetlands (Phase 1b)	Prior to construction of Phase 1b	 City shall conduct surveys in areas affected by designs City shall coordinate with regulatory agencies as needed to and comply with necessary permits 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	in the SCRE at a minimum ratio of 1:1. In addition, the City shall consult with USFWS and CDFW to ensure that appropriate mitigation and/or compensation is established to replace lost habitat value. The consultation shall satisfy federal and state Endangered Species Act consultation requirements, and shall implement the proposed mitigation ratio of at least 1:1, or such higher ratio as may be required by USFWS and CDFW.					
	Onsite mitigation within the treatment wetlands would be accomplished by establishment of riparian habitat at the edges of the treatment cells or within designed islands. If additional riparian acreage is required beyond that which can be incorporated into the treatment wetlands design, then riparian habitat may be established offsite within the SCRE, since the modeling of discharge reductions predicts a substantial increase in riparian habitat within the SCRE as a result of hydrological changes associated with discharge reductions proposed for Phase 1a and Phase 1b.					
	To achieve mitigation credit for new riparian habitat established pursuant to BIO-8, whether onsite or offsite, the City shall document the increase in riparian habitat at the mitigation site(s) as compared to existing conditions over a period of five years. The City would establish that the new riparian habitat is suitable for least Bell's vireo occupation based on standard metrics regarding the acreage of canopy cover, complexity of sub-canopy vegetation					
	structure, and opportunity for new vegetation recruitment. The City may document the new riparian habitat acreage and ecological values created by mitigation performed within the Natural Treatment Wetlands pursuant to a 5-year Habitat Management and Monitoring Plan, and may document new riparian habitat acreage and ecological values created within					

Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	the SCRE as part of the Monitoring, Assessment, and Adaptive Management Plan (MAAMP) to be implemented as Mitigation Measure BIO-6. In the event that sufficient riparian habitat to mitigate for all losses is not created onsite and/or within the SCRE, the City shall provide additional mitigation necessary to attain the ratio of at least 1:1 through the purchase of mitigation bank credits and/or the creation of additional riparian habitat, as determined through consultation with USFWS and CDFW.					
	BIO-9: If the Harbor Site is selected as the location for the AWPF, the City shall comply with all requirements of the California Coastal Act, including compensation for any environmentally sensitive habitat area (ESHA) that has been documented on the Harbor Boulevard site since the enactment of the Coastal Act (1977). Compensation shall include replacement of ESHA at a minimum ratio of 1:1 locally within the coastal zone, or as required by the CCC. The replacement site may be the City-owned property to the south of the Harbor Site or another nearby site.	Advance Water Purification Facility	Prior to Construction	City shall comply with permit requirements		
BIO 3.4-2: The proposed projects 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.	Implement BIO-7	Concentrate Discharge Facility	Plan: Prior to Construction Implementation: During Construction	City shall implement measures		
BIO 3.4-3: The proposed projects could have a significant impact if they would have a substantial	Implement BIO-5, BIO-6 and BIO-7	AWPF Concentrate Discharge Facility	Plan: Prior to Construction	City shall implement measures		

Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
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.			Implementation: During Construction			
Cultural Resources	,					
CUL 3.5-1: 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 Section 15064.5.	CUL-1: 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.	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility 	Prior to Construction	 Include Mitigation Measure CUL-1 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
	CUL-2: 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 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.	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction During Construction	 Include Mitigation Measure CUL-2 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	CUL-3: 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.	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility 	Prior to Construction	 Include Mitigation Measure CUL-3 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
	CUL-4: Prior to the start of ground-disturbing activities associated with the proposed projects, including development, preparation and implementation of project related geophysical surveys and other offshore data collection and construction activities, an archaeological monitor working under the supervision of the Qualified Archaeologist and a Native American monitor associated with the Barbareño/Ventureño Band of Mission Indians, or other locally affiliated tribe, shall monitor all project-related ground-disturbing activities within previously undeveloped project parcels, offshore areas, all jack-and-bore receiving pits, and all pot-holing activities within existing road rights-of-way. Previously undeveloped parcels requiring monitoring include the Harbor Boulevard, Transport Street, offshore areas, and Portola Road AWPF sites, as well as the new treatment wetlands parcel, and groundwater Well Sites 1, 2, and 3. For the pipeline alignments to be installed within existing road rights-of-way, a monitoring plan shall be prepared by the Qualified Archaeologist outlining the locations and timing of monitoring based on level of disturbance identified during pot-hole monitoring, as well as any geotechnical report to be prepared as part of project	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure CUL-4 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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	implementation. Prior to implementing offshore geophysical surveys, the City shall provide the survey methods and plans to the Barbareño/Ventureño Band of Mission Indians for their information as part of the consultation.					
	Based on observations of subsurface soil stratigraphy or other factors during initial ground-disturbing activities across the project area, and in consultation with the City and Native American monitor, the Qualified Archaeologist may reduce or discontinue monitoring as warranted if the Qualified Archaeologist determines that the possibility of encountering archaeological deposits is low in a given area or during a given activity. Archaeological monitors shall maintain daily logs documenting their observations. Monitoring activities shall be documented in a Monitoring Report to be prepared by the Qualified Archaeologist at the completion of construction and shall be provided to the City and filed with the SCCIC within 6 months of construction completion.					
	CUL-5: In the event of the unanticipated discovery of archaeological materials during implementation activities associated with the proposed projects, including offshore data collection and construction activities, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. In the event that cultural resources are discovered on state lands, including discoveries made during any offshore activities, the California State Lands Commission shall also be notified. Construction shall not resume until the qualified archaeologist and, for offshore activities, the California State Lands Commission, has conferred with the City on the significance of the resource.	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility 	Prior to Construction; During Construction	 Include Mitigation Measure CUL-5 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	If it is determined that the discovered archaeological or cultural resource constitutes a significant resource, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with City and Barbareño/Ventureño Band of Mission Indians, or other locally affiliated tribe, that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource.					
	CUL-6: 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	Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction	 Include Mitigation Measure CUL-6 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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	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.					
CUL 3.5-2: 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 Section 15064.5.	Implement Mitigations Measure CUL-1 through CUL-6.	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility 	Prior to Construction; During Construction	City shall implement measures		
CUL 3.5-3: 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.	CUL-7: 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.	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge 	Prior to Construction	 Include Mitigation Measure CUL-7 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components Facility	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	CUL-8: Prior to the start of project-related ground-disturbing activities, the qualified paleontologist 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	Ocean Desalination Facility Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction During Construction	Include Mitigation Measure CUL-8 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance		
	Implement Mitigation Measure CUL-6. CUL-9: 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	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure CUL-9 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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	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.					
	CUL-10: 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 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.	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure CUL-10 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
CUL 3.5-4: The proposed projects could result in a significant impact if they would disturb any human remains, including those interred outside of formal cemeteries.	Implement Mitigation Measures CUL-6 through CUL-10 CUL-11: 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	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility 	During Construction	 Include Mitigation Measure CUL-11 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	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.					
	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.					
GEO 3.6-3: 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.	GEO-1: 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 create a new risk. The reports shall provide recommendations for facility design per these findings; these recommendations shall be incorporated into facility design.	All Components	Prior to Construction	 City shall contract with a qualified geotechnical engineer to prepare report City shall approve the report City shall include recommendations of report into project designs City shall review designs to ensure compliance 		
GEO 3.6-5: The proposed projects could result in a significant impact if they would result in substantial soil erosion or the loss of topsoil.	GEO-2: 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	Groundwater Wells VWRF Treatment Upgrades Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure GEO-2 in the Construction Contract Specifications Construction Contractor shall implement measure 		

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	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.			City shall inspect to ensure compliance		
	GEO-3: 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.	Wildlife/Treatment Wetlands	Operations	City shall implement measure City shall inspect to ensure compliance		
GEO 3.6-7: 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	Prior to Operation; During Operation	City shall implement measure		
HAZ 3.8-2: 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.	HAZ-1: 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: Training for the project manager for marine activities, vessel operators, field supervisors, and environmental monitors	Concentrate Discharge Facility	Prior to Construction	 Include Mitigation Measure HAZ-1 in the Construction Contract Specifications City shall approve the plan Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	to ensure familiarity with the Anchoring Plan. A brief overview of the project objectives. Description of anchor set and anchor leg (wires, winches, and other support equipment). Description of vessels to be anchored and support tugs to be used. 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. Identification of Contractor Vessels and Buoys, including daylight and nighttime marking schemes. Anchoring procedures in compliance with Coast Guard Navigation Standards Manual. Local notice to U.S. Coast Guard and mariners. All elements of the Anchoring Plan shall be in compliance with U.S. Coast Guard regulations.					
	HAZ-2: 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: • A brief overview of the project objectives.	Concentrate Discharge Facility	Prior to Construction	 Include Mitigation Measure HAZ-2 in the Construction Contract Specifications City shall approve the plan Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	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.					
	Training for the project manager for marine activities, vessel operators, field supervisors, and environmental monitors to ensure familiarity with the Marine Safety Plan.					
	Description and maps depicting the marine project location.					
	Description of marine operations protocols.					
	Description of critical operations and curtailment plan, including offshore fueling procedures and storm procedures.					
	Marine communications plan.					
	Marine transportation plan for barges, tugboats, crew boats, and other vessels.					
	Navigational marking and lighting plan.					
HAZ 3.8-6: 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.	All Components	Prior to Construction	City shall implement the measure		
Hydrology and Water Qual	ity	-				
HYDRO 3.9-1: The proposed projects could have a significant impact if they would violate water quality standards or waste discharge requirements or	HYDRO-1: 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	Groundwater Wells	Prior to Construction	City shall contract with professional engineer to conduct groundwater modeling City shall approve the groundwater modeling report		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
otherwise substantially degrade water quality.	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.			City shall include the recommendations of the report into the design of the project		
	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.					
	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:					
	Coordinate with the well owner to arrange for an interim or long term replacement water supply. Page is an decement the existing adversely.					
	 Repair or deepen the existing adversely affected well. Improve well efficiency of existing extraction wells. 					
	Construct a new well.					
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	Implement Mitigation Measure HYDRO-1.	Groundwater Wells	Prior to Construction	City shall implement the measure		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
net deficit in aquifer volume or a lowering of the local groundwater table level.	,					
Land Use Planning						
LU 3.10-1: The proposed projects could result in a significant impact if they would physically divide an established community.	LU-1: Prior to 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 feasible to obtain any necessary permits and entitlements.	Treatment Wetland	Prior to Construction	City shall determine if final designs affect Riverhaven community City shall implement the measure if necessary		
LU 3.10-2: 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.	Implement Mitigation Measures AES-1 through AES-3, AG-1, CUL-1 through CUL-6, and LU-1.	Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction	City shall implement the measures		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title	
Marine Biology			,				
MARINE 3.11-1: 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.	Implement Mitigation Measure HAZ-1. MARINE-1: 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: A brief overview of the project objectives. Definition of major and minor spills. Description of spill sources. Description of spill Response team and equipment. Agreements with Spill Response Organizations. Notification requirements, including names and phone numbers of agencies to be notified, along with an information checklist of the incident. Description of marine spill scenarios and response procedures. 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.	Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction	 Include Mitigation Measure MARINE-1 in the Construction Contract Specifications City shall approve the plan Construction Contractor shall implement measure City shall inspect to ensure compliance 			

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

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

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

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

- Concentrate Discharge Facility
- · Ocean Desalination Facility

Include Mitigation Measure
 MARINE-2 in the Construction
 Contract Specifications

Prior to Construction

- City shall approve the plan
- Construction Contractor shall implement measure
- City shall inspect to ensure compliance

- Pile -driving shall be conducted only between June and November to avoid gray whale migration, unless NMFS in their Section 7 consultation with the USACE determines that the potential effect to marine mammals is less than significant.
- At least 1,600-foot (500-meter) safety zone (or as otherwise required by NMFS) shall be established and visually monitoring around the sound source for the protection of marine mammals and sea turtles in the event that construction sound levels are predicted to be harmful to marine mammals:
 - A NMFS-approved biological monitor will conduct daily surveys before and during impact hammer pile driving to inspect the work zone and adjacent waters for marine mammals. The monitor will be present as specified by NMFS Fisheries during the pile-driving phases of construction.
 - Work activities shall be halted when the biological monitor observes that a marine mammal or sea turtle enters the established safety zone and shall cease until the mammal has been gone from the area for a minimum of 15 minutes.
 - A "soft start" technique shall be used in all impact hammer sourced pile driving, giving marine mammals an opportunity to vacate the area.

Other BMPs will be implemented if the biological monitor determines they are necessary, such as bubble curtains or an air barrier, to reduce underwater noise levels to the performance standards applicable pursuant to Table 311-5A, or at those more

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stringent thresholds established by NMFS for acute and chronic levels 10 meters and 500 meters, or such other more stringent distances as may be established by NMFS.				
Alternatively, to meet these noise criteria, the City of Ventura may consult with NMFS directly and submit evidence to the	·			
satisfaction of the Environmental Review Officer. In such case, City of Ventura shall comply with NMFS recommendations and/or				
requirements to meet the noise criteria. The BMPs listed above provide examples of measures that are normally used to reduce				
noise impacts to below the noise criteria.				
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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	MARINE-3: Entrainment of fish and	Concentrate Discharge	Prior to Construction	- City of Ventura		
	invertebrate larvae resulting from outfall	Facility				
	discharge turbulence, regardless of	 Ocean Desalination Facility 			1	
	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		1	į.		
	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 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]	

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	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.					
MARINE 3.11-4: The projects could have a significant impact if they would introduce or spread an invasive non-native species.	MARINE-4: 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.	Concentrate Discharge Facility Ocean Desalination Facility	During Construction	 Include Mitigation Measure MARINE-4 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
Noise						
NOISE 3.13-1: 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.	NOISE-1: Prior to construction, the City of Ventura shall ensure that the contractor specifications stipulate that: All construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers and other state-required noise attenuation devices. When feasible, construction haul routes shall avoid noise-sensitive uses (e.g., residences, convalescent homes). During construction, stationary construction equipment shall be placed such that emitted noise is directed away from the nearest noise-sensitive receptors.	Advanced Water Purification Facility Conveyance Pipeline Concentrate Discharge Facility Ocean Desalination Facility	Prior to Construction	 Include Mitigation Measure NOISE-1 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	The project shall provide noise blanket/temporary noise barriers between the active areas and residential buildings					
	NOISE-2: 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. 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. The City shall designate a Noise Disturbance Coordinator during construction and permanently once the facility is operational. 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. 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. For construction activities near local	Advanced Water Purification Facility Conveyance Pipeline Concentrate Discharge Facility Ocean Desalination Facility	During Construction During Operation	 Include Mitigation Measure NOISE-2 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
	residences, the Noise Disturbance Coordinator shall have the authority to					

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	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.					
	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.					
	NOISE-3: 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 construction, which would generate construction noise levels at their property in excess of 45 dBA, Leq during nightime 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).	Concentrate Discharge Facility Ocean Desalination Facility	Prior to and during Construction	 Include Mitigation Measure NOISE-3 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	NOISE-4: 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.	Concentrate Discharge Facility Ocean Desalination Facility	Prior to and During Construction	 Include Mitigation Measure NOISE-4 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
NOISE 3.13-2: The proposed projects could result in a significant impact if they would expose persons to or generate excessive groundborne vibration or groundborne noise levels.	NOISE-5: 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 rubbertired bulldozers, small rubber-tired excavator, etc., not exceeding 150 horsepower shall be used within this area during demolition, grading, and excavation operations.	All Components	During Construction	 Include Mitigation Measure NOISE-5 in the Construction Contract Specifications Construction Contractor shall implement measure City shall inspect to ensure compliance 		
Population, Housing, and	Environmental Justice					
POP 3.14-2: 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	Prior to Construction	City shall implement measure		
Transportation and Traffic						
TRAF 3.17-1: 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	TRAF-1: Prior to the start of construction facilities that would occur within a roadway right-of-way, the City of Ventura shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations, and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow	 Advanced Water Purification Facility Water Conveyance System Groundwater Wells Wildlife/Treatment Wetlands Concentrate Discharge Facility Ocean Desalination Facility 	Prior to Construction; During Construction	 Include Mitigation Measure TRAF-1 in the Construction Contract Specifications City shall approve the plan Construction Contractor shall implement measure City shall inspect to ensure compliance 		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
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.	for adequate access and circulation to the satisfaction of the City's Public Works Director and Fire and Police Chiefs. The Traffic Control Plan shall be provided to the County Transportation Department for review prior to commencement of construction. When construction activities disrupt travel on major collectors or arterials, electronic signs shall be used to provide the public, on all transportation modes, with current construction information and the availability of alternate travel routes.					
	The Traffic Control Plan shall be prepared in accordance with the City of Ventura's traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties and that emergency access will not be restricted. Additionally, the Traffic Control Plan shall also include a scheduling plan showing the hours of operation to minimize congestion during the peak hours and special events. Haul routes will be identified based on County-approved truck routes. The scheduling plan will ensure that congestion and traffic delay are not substantially increased as a result of the construction activities. Further, the Traffic Control Plan will include detours or alternative routes for bicyclists using on-street bicycle lanes as well as for pedestrians using adjacent sidewalks.					
	In addition, the City shall provide written notice at least 2 weeks prior to the start of construction to owners/occupants along streets to be affected during construction. During construction, the City will maintain continuous vehicular and pedestrian access to any affected residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time. Access will be reestablished at the end of the workday. If a					

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
	driveway needs to be closed or interfered with as described above, the City shall notify the owner or occupant of the closure of the driveway at least 5 working days prior to the closure. The Traffic Control Plan shall include provisions to ensure that the construction of the proposed projects do not interfere unnecessarily with the work of other agencies such as mail delivery, school buses, and municipal waste services. The Traffic Control Plan shall identify that damage to the condition of the roadways due to the use of construction related vehicles including soil haul trucks be repaired pursuant to County Transportation Department standards.					
	The City shall also notify local emergency responders of any planned partial or full lane closures or blocked access to roadways or driveways required for construction of the proposed project facilities. Emergency responders include fire departments, police departments, and ambulances that have jurisdiction within the proposed project area. Written notification and disclosure of lane closure location must be provided at least 30 days prior to the planned closure to allow for emergency response providers adequate time to prepare for lane closures.					
TRAF 3.17-5: The proposed projects could have a significant impact if they would result in inadequate emergency access.	Implement Mitigation Measure TRAF-1.	All Components	Prior to Construction; During Construction	 Oversight: City of Ventura Implementation: City of Ventura Construction Contractor 		
TRAF 3.17-6: The proposed projects could result in a significant impact if they would conflict with adopted policies, plans, or programs regarding public	Implement Mitigation Measure TRAF-1	All Components	Prior to Construction; During Construction	City shall implement measure		

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.						
Tribal Cultural Resources						
CUL 3.18-1: The proposed projects could result in a significant impact if they	Implement Mitigation Measures CUL 4 and CUL-5	All Components	Prior to Construction	City shall implement measure		
would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for	Implement Mitigation Measure CUL 6	Concentrate Discharge Facility Ocean Desalination Facility				
a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Section 5020.1(k), or						
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.	•					
In applying the criteria set forth in subdivision						

(c) of Section 5024.1,

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Environmental Impact	Mitigation Measure	Project Components	Timing	Implementing Party Responsibilities	Date	Signature Name Title
the lead agency shall consider the significance of the resource to a California Native American tribe.						

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