Freeman Diversion Sediment Management

Initial Study – Mitigated Negative Declaration

prepared by

United Water Conservation District
1701 North Lombard Street
Oxnard, California 93030
Contact: Evan Lashly, Environmental Scientist

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

August 2021

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Initial Study

1. Project Title

Freeman Diversion Sediment Management

2. Lead Agency Name and Address

United Water Conservation District
1701 North Lombard Street, Suite 200
Oxnard, California 93030

3. Contact Person and Phone Number

Evan Lashly, Environmental Scientist
United Water Conservation District
805-525-4431

4. Project Location

The project site is located at and immediately upstream of the Freeman Diversion Facility (hereafter referred to as "Facility") in the Santa Clara River channel in unincorporated Ventura County. United Water Conservation District (hereafter referred to as "United"), owns or possesses an access and maintenance easement for the portions of the Santa Clara River channel where project activities would occur. Figure 1 provides an overview of the regional project location, and Figure 2 delineates the extent of the study area, discussed further below. The study area is approximately 2.3 miles east of the unincorporated community of Saticoy, approximately one mile south of State Route (SR) 126 and two miles east of SR 118, in Ventura County, California. The study area is centered at approximately 34.300244°, -119.107275° (WGS84) within the United States Geological Survey (USGS) *Santa Paula*, *California* 7.5-minute quadrangle. The Public Land Survey System depicts the study area within Township 3 North, Range 21 West, and Section 32, Mount Diablo Meridian.

5. Project Sponsor's Name and Address

United Water Conservation District
1701 North Lombard Street, Suite 200
Oxnard, California 93030

6. General Plan Designation

The General Plan land use designation for the project site and the immediate vicinity is Open Space. This designation is applied to any parcel or area of land or water which is essentially unimproved and devoted to an open-space use.

Figure 1 Regional Project Location

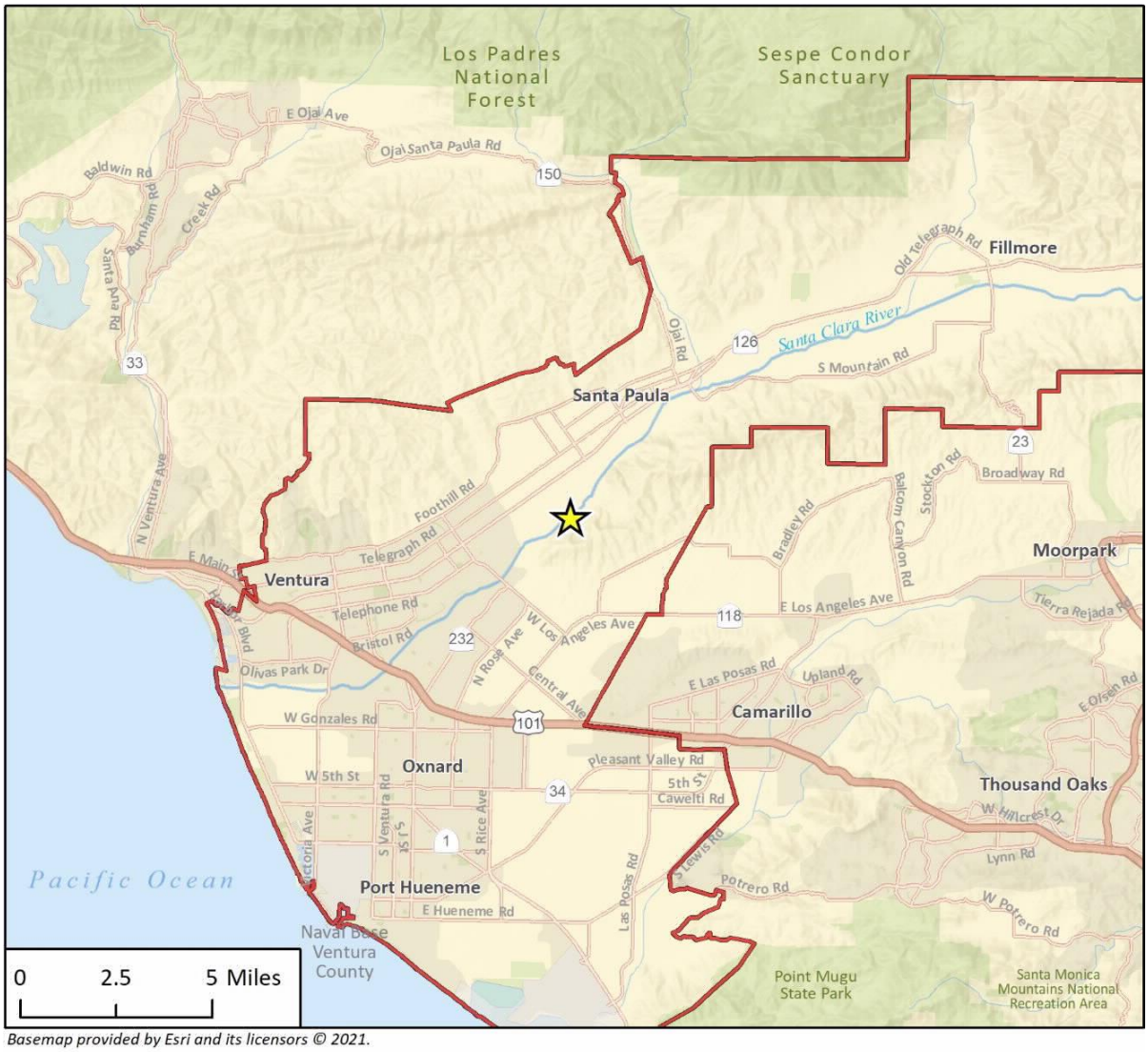

Figure 2 Project Study Area

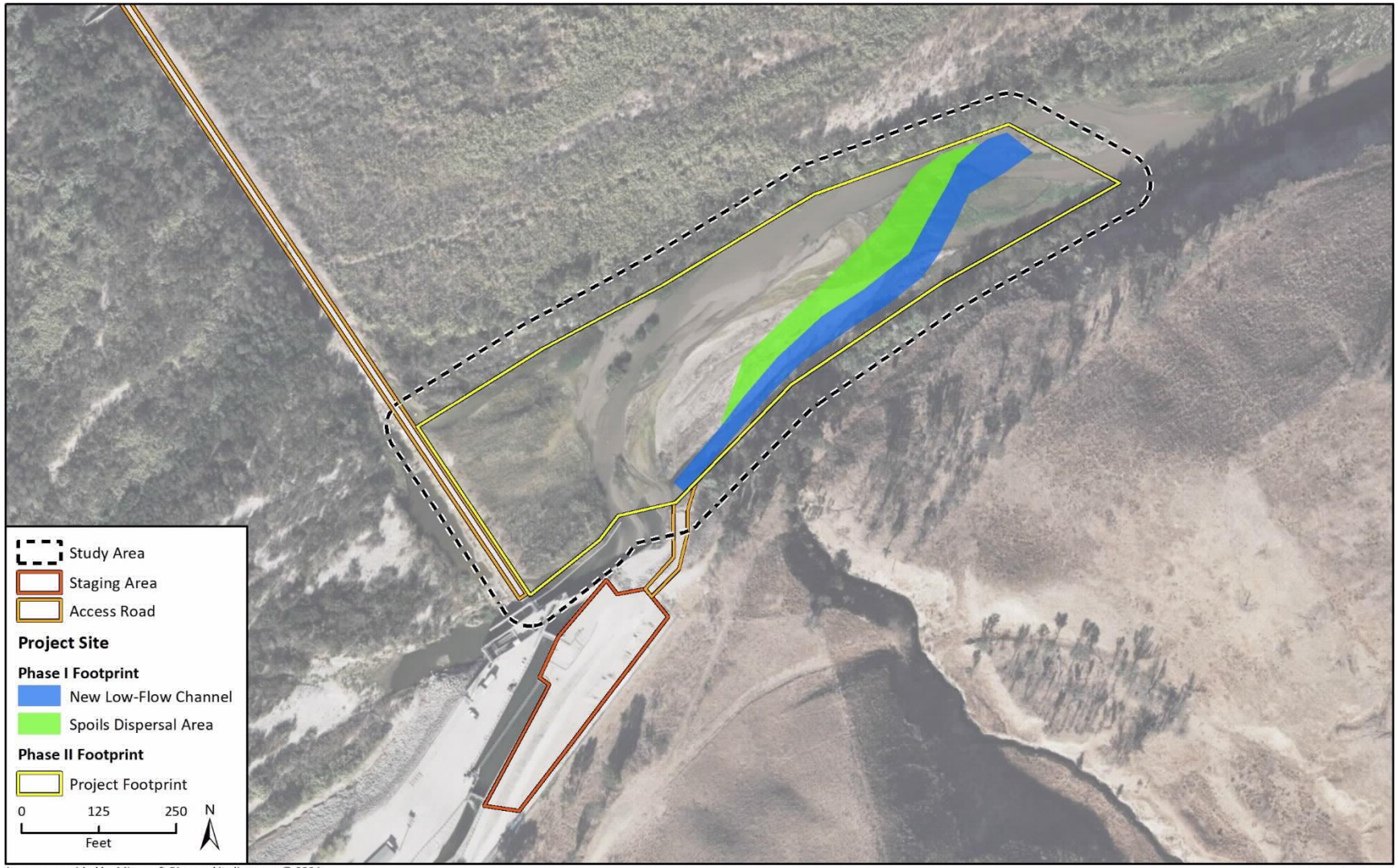

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Fig 2 Study Area (Landscape)

7. Zoning

The project site is zoned as Open Space (OS) with minimum lot size of 160 acres, and a Mineral Resources Protection (MRP) overlay (OS-160 ac/MRP). These zones are defined in the Ventura County Ordinance Code, Division 8, Chapter 1 (Ventura County RMA 2021).

8. Introduction

United is preparing to conduct sediment management and associated activities, also referred to as "project activities", at the Freeman Diversion Facility near the unincorporated community of Saticoy in Ventura County. The regional project location is shown on Figure 1, and the proposed project study area is shown on Figure 2. The study area delineates all areas where project-related sediment management activities would occur, referred to as the "project footprint", as well as a buffer area around the project footprint, and the limits of the staging area and access road that would be used to support project activities. The project study area is inclusive of all portions of the Santa Clara River channel where sediment management activities would be conducted under both Phase 1 and Phase 2 of the project, which are detailed in the *Description of Project* section below.

The proposed project is subject to review and approval under the California Environmental Quality Act (CEQA). An Initial Study and Mitigated Negative Declaration (IS-MND) is the appropriate level of CEQA documentation for the project because potential project impacts would be less than significant or mitigable to a less than significant level. This IS-MND is informed by a Biological Resources Assessment (BRA) that was prepared for Phase 1 of the proposed project and is included as Appendix B to this IS-MND. Although the BRA investigation is specific to Phase 1, and will therefore need to be expanded to inform regulatory permitting for Phase 2 of the project, it contains sufficient information to inform the identification and characterization of potential impacts associated with both Phase 1 and Phase 2 of the proposed project. Therefore, the BRA Report is incorporated by reference and referred to as applicable throughout the environmental impact analysis provided herein for CEQA compliance. The BRA documents existing conditions and provides an evaluation of the potential for impacts from the proposed project to affect special status species, sensitive vegetation communities, jurisdictional waters, wildlife movement through the study area, locally protected resources, and potential for conflicts with conservation plans. The information provided in the IS-MND will be used to inform the processing of regulatory approvals for the project, discussed below under "Other Public Agencies Whose Approval is Required".

United is a special district established in accordance with California Water Code Section 74000 et seq. that is authorized to, among other things, acquire water rights, build facilities to store and recharge water, and construct wells and pipelines for water deliveries. Because United is a local agency that provides water and constructs and maintains water delivery infrastructure, some of its activities are exempt from plans, policies, and regulations administered by local municipalities, as summarized below:

- California Government Code Sections 53091(d) and 53091(e) apply to the location and construction of various pieces of utility infrastructure, including facilities for the production, storage, and transmission of water. Section 53091(d) exempts qualifying facilities constructed by a local agency from county and city building ordinances. Section 53091(e) exempts qualifying facilities constructed by a local agency from county and city zoning ordinances. Therefore,

activities evaluated in this IS-MND that involve the conveyance of water would be exempt from county and city building and zoning ordinances.

- California Government Code Section 65402 requires a finding regarding the general plan conformance of any public project that involves the acquisition or disposal of real property, or the authorization or construction of a building or structure. Even when a project is not permitted or is conditionally permitted under local land use law, a local agency like United (i.e., an agency responsible for the local performance of governmental or proprietary functions within limited boundaries) ultimately has the authority to render general plan and zoning requirements inapplicable. Consistent with Section 65402(c), if a local planning agency were to conclude that a building or structure evaluated in this IS-MND was not in conformity with an applicable general plan, United may nonetheless overrule the finding.

Given these regulatory limitations, not all elements of the project evaluated in this IS-MND would be subject to local plans, policies, and regulations. Therefore, as a matter of law, this IS-MND need not consider all such plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United does reference, describe, and address in this IS-MND those local land use plans, policies, and regulations that may otherwise be relevant to the proposed project.

9. Background and Purpose

United is a California Special District, originally formed as the Santa Clara Water Conservation District in 1927, then transitioned to its current role by voter approval in 1950. United's mission is to manage, protect, conserve, and enhance the water resources of the Santa Clara River, its tributaries, and associated aquifers. United's boundaries encompass nearly 213,000 acres of central and southern Ventura County, including the Ventura County portion of the Santa Clara River Valley and the Oxnard Plain. Within this area, United operates and maintains a number of water facilities and associated water delivery infrastructure. These facilities directly and indirectly provide potable water to municipal customers and irrigation supplies in the Oxnard area, sometimes in lieu of coastal groundwater extractions. United's facilities are vital to groundwater recharge, combating seawater intrusion, and other issues resulting from groundwater overdraft across the Oxnard Plain, as well as providing water supply for municipal, industrial, and agricultural uses in Ventura County.

With its mild climate and rich soils, Ventura County, and in particular the Oxnard Coastal Plain, is regarded as having some of the most productive farmland in the world. Ventura County is also an "exurb" of Los Angeles, and its cities have experienced significant population growth during the 20th century. As in most of California, the quantity and timing of direct precipitation is insufficient to meet local agricultural and municipal needs. Therefore, storage of excess water during wet periods is key to meeting demand during dry periods. Fortunately, extensive aquifer systems (an upper aquifer system, or UAS, and lower aquifer system, or LAS) underlie the Oxnard Coastal Plain, providing this storage capacity. Estimated groundwater withdrawals from the Oxnard sub-basin of the Santa Clara River basin (referred to informally as the "Oxnard basin") and the Pleasant Valley basin, which underlie the Oxnard Coastal Plain, increased substantially through the early to mid-20th century to meet growing demand for water, and have averaged 92,000 acre-feet/year since 2000. These aquifers have historically been (and continue to be) the sole or primary source of water for many municipal and agricultural users on the Oxnard Coastal Plain.

Groundwater level declines and seawater intrusion along the coast have long been a concern in the region. In response, since 1928 United Water Conservation District (United) and its predecessor (Santa Clara Water Conservation District) have diverted a portion of the flow in the Santa Clara River along the northern Oxnard Coastal Plain to spreading (recharge) basins where the entrained water infiltrates through the surface to recharge underlying groundwater resources as well as to pipelines that deliver surface water directly to users in lieu of pumping in critical areas ("conjunctive-use"). Much of the water diverted from the Santa Clara River consists of storm flows occurring in the wet season of above-average rainfall years. The Facility is also used to divert imported water, via the State Water Project, purchased by United and conveyed down the river to mitigate chronic groundwater overdraft on the Oxnard Coastal Plain. The historic use of large volumes of surface water diverted from the Santa Clara River helped stabilize the water supply in southern Ventura County and allowed for development of the urban and agricultural economies that have thrived for decades now.

In response to concerns raised by the state regarding groundwater overdraft and seawater intrusion on the Oxnard Plain, United and Ventura County cooperated to develop the "208 areawide water quality management plan: 1979-1980" pursuant to Section 208 of the 1972 Federal Water Pollution Control Act, which was subsequently approved by the State of California. An integral aspect of the plan is the Seawater Intrusion Abatement Program (SIAP), a two-phase project to combat sea water intrusion: Phase I was the Pumping Trough Pipeline (PTP) and Phase II was the Freeman Diversion Improvement Project. The current Freeman Diversion structure, which includes fish passage facilities designed and constructed in collaboration with the CA Department of Fish and Game (now CA Department of Fish and Wildlife) and in accordance with their requirements of the time, was constructed on the mainstem of the Santa Clara River in 1991 following a lengthy design and consultation process that began in the early 1980's. The purpose of the Freeman Diversion is to improve United's ability to divert Santa Clara River water (especially higher flows following large storm events) for groundwater recharge to more effectively combat seawater intrusion, and to stabilize the elevation of the upstream river channel following decades of gravel mining by others in the mid-20th century. Prior to construction of Freeman Diversion, United diverted surface flows in the Santa Clara River to recharge basins at Saticoy by bulldozing temporary dikes in the river channel (referred to as the "Saticoy Diversion"). However, due to continuous downcutting of the river in response to past gravel mining practices, the Saticoy Diversion was becoming increasingly difficult to operate in a safe manner without causing environmental damage. A major benefit of the Freeman Diversion is that it prevents further channel incision and disruption of riparian habitats in areas upstream of the Facility.

Today, the amount of water that can physically be diverted is dictated first by the quantity of water available in the river at any given time and by the capacity of the diversion canals, but is also limited to that which can be legally diverted as identified by United's State Water Resources Control Board (SWRCB) License 10173, which was issued in 1973, and Permit 18908, which was issued in 1982 and amended in 1987 and 1992, incorporating bypass flow requirements for migration of steelhead trout. As previously noted, the SWRCB expressed serious concerns about groundwater overdraft and seawater intrusion on the Oxnard Plain in the late 1970s and supported United's pursuit of Permit 18908 as the Freeman Diversion was being designed and permitted. License 10173 and Permit 18908 both recognize United's significant investment in constructing Santa Felicia Dam and Lake Piru, and that a reliable downstream diversion structure was a critical component of successful water resource management throughout United's service area.

Streamflow in the Santa Clara River at the Freeman Diversion is highly variable and most directly influenced by rainfall events occurring in the watershed during the winter rainy season (December to March). Streamflow can increase by tens of thousands of cubic feet per second (cfs) in a day following a significant rainfall event. Under SWRCB Permit 18908, United can divert up to 375 cfs for distribution to groundwater spreading grounds and for direct consumptive use within its service area. The maximum annual diversion volume on a calendar year basis is 144,630 acre-feet. United cannot always divert what is allowed under its water right due to various limitations, including periods of low flow (primarily due to drought), the need to meet instream flow requirements, excessively high total suspended solid levels, and limited recharge capacity during high groundwater conditions (rarely occurs during extremely wet years). Under typical conditions, an average of approximately 60,000 acre-feet per year of surface flow is diverted from the Santa Clara River.

United's artificial recharge operations and conjunctive-use projects have been successful in slowing basin-wide groundwater level declines and seawater intrusion, but chronic overdraft conditions persist. CA Department of Water Resources continues to classify the Oxnard and Pleasant Valley basins as "high priority basins subject to critical overdraft," due to both the long-term problems with groundwater overdraft and seawater intrusion, and local groundwater supply being the sole source of water for many urban and agricultural water users. United operates both potable and irrigation-water delivery systems, but these systems were designed to optimize basin yields and are operated as enterprise funds that do not generate profits for United. United artificially recharges far more groundwater than it extracts in the Oxnard and Pleasant Valley basins. Therefore, the net effect of United's conjunctive-use projects and artificial recharge has been to improve the groundwater balance, which has maintained groundwater elevations in the Oxnard and adjacent basins at higher levels, on average, than would have occurred without these projects. Other beneficial effects of United's activities include, but are not limited to, improvement of groundwater quality in the Forebay area and in the Pleasant Valley basin, and mitigation of seawater intrusion in the Oxnard basin. United's recharge activities in the Oxnard Forebay are particularly effective in reducing nitrate concentrations at wells; many of the small mutual water companies in the Forebay area, including some that serve disadvantaged or low-income communities, are solely dependent on groundwater from area wells for water supply.

United is planning to expand its diversion and recharge capacity primarily to provide greater bypass flows for steelhead migration on the receding limb of the streamflow hydrograph, while still diverting sufficient water during higher flows to recharge the underlying aquifers. This expansion (to divert more water during peak flows) is also expected to help ensure that water supplies for the region remain reliable into the future in the face of climate change (due to models predicting fewer and more intense storms for the region). If unable to respond to future conditions, large reductions in groundwater use in the Oxnard and Pleasant Valley basins are a likely outcome, as described in the Fox Canyon Groundwater Management Agency's (FCGMA) groundwater sustainability plans (GSP) for the basins. The FCGMA's GSPs have determined that the combined sustainable yield for the Oxnard and Pleasant Valley basins is about two-thirds of current groundwater demand. Such reductions will have major negative impacts on agricultural and municipal supply unless countered by increased use of other water sources. Furthermore, United's operation of the Freeman Diversion historically accounts for approximately 70% of the sustainable yield of the Oxnard and Pleasant Valley basins. Although United is working with other stakeholders to develop plans to bring a broader portfolio of water sources to the region, no identified water supply alternatives are as cost effective and energy efficient as maximizing artificial recharge of flows diverted from the Santa Clara River.

The Facility consists of a roller compacted concrete grade control structure that spans approximately 1,200 feet across the river and stands approximately 25 feet tall (on the downstream side) and a series of gates, bays, canals, fish screens, and appurtenant structures that comprise the water diversion and fish passage facilities on the south bank. Flows through the Facility are diverted from the grade control structure into a system of canals, which in turn deliver the water to the spreading grounds or to pipelines for direct surface water deliveries.

The Facility has an existing Denil fish ladder and fish screen bay. A Denil fish ladder is a baffle fish way that uses rows of notched baffles with switch backs to facilitate fish moving upstream past the diversion. The notched baffles slow the velocity of the flow, allowing fish to swim through the middle of the baffles upstream. The Denil fish ladder is intended to allow passage of federally endangered southern California steelhead (*Oncorhynchus mykiss irideus*) (steelhead; *O. mykiss*) migrating upstream. There is also an associated fish screen bay, intended to allow passage of downstream migrating juvenile and adult steelhead and preclude their entry into United's diversion facilities (e.g., canals, pipelines).

United must maintain the Santa Clara River channel at the Facility so as to keep the thalweg of the river near the south bank and the fish passage and diversion structures. The streambed material of the Santa Clara River is highly mobile and storm events can result in substantial scour and/or deposition that directly affect the characteristics and location of surface flows both upstream and downstream of the Facility. The natural erosion and deposition of sediment can shift the thalweg of the river away from the Facility, which eliminates or interferes with United's ability to divert water or operate the fish passage structure. Furthermore, sediment build-up can obstruct and re-direct flows over the diversion structure (i.e., the crest of the dam), preventing accuracy in the flow measurements necessary for compliance with the Amended Judgment and Permanent Injunction issued in the case of *Wishtoyo et al. vs United Water Conservation District* [CV 16-3869-DOC (PLAx)] (Court Order).

Proper functioning of the Facility to divert water and provide fish passage is dependent upon the effective management of sediment that accumulates within the channel. The Santa Clara River watershed has extremely high sediment production rates, and sediment accumulation immediately upstream of and adjacent to the Facility adversely affects the Facility's connectivity with the Santa Clara River. If sediment accumulation is allowed to progress unchecked, it will threaten further discontinuity between the Facility and the river. Therefore, United has developed the proposed project and is seeking permits and authorizations to implement the proposed project, which will provide the necessary level of sediment management to facilitate and maintain functionality of the Facility to ensure reliable diversions and fish passage functions.

United is currently developing a Multiple Species Habitat Conservation Plan (MSHCP) to address steelhead, which was listed as a federally endangered species in 1997, as well as six other federally listed or non-listed species. The MSHCP is being prepared as part of United's application package to the National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW) for incidental take permits (ITPs) under Section 10(a)(1)(B) of the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). United is currently analyzing the MSHCP in an Environmental Impact Report (EIR) for CEQA compliance (State Clearinghouse [SCH] Number 2013111031). The MSHCP EIR is referenced as applicable throughout this IS-MND; however, the MSHCP is still under development and has not yet been finalized or certified.

In 2019, the U.S. Army Corps of Engineers (USACE; Clean Water Act [CWA] Section 404) issued a programmatic individual permit (SPL-2013-00171-EBR), which among other routine maintenance,

authorized United to implement sediment management activities within an area 1.4-acres upstream of the Facility. Due to unresponsiveness of the Los Angeles Regional Water Quality Control Board (RWQCB), the CWA Section 401 water quality certification was waived by the USACE. On December 13, 2019, United and CDFW executed an amendment to an existing Lake and Streambed Alteration Agreement (LSAA; No. 1600-2013-0223-R5) which authorized the implementation of a new, one-time, 0.7-acre pilot channel. Following the 2019 permit issuance, in December of that year United excavated a pilot channel in accordance with permit requirements to redirect flows towards the south bank of the river, consistent with the current design of Phase 1 described below. The 2019 pilot channel was partially successful in its objectives, resulting in an approximately 40 percent increase in flow capacity of the bypass channel compared to the prior year; however, additional management is necessary to facilitate proper function of the Facility. Therefore, Phase 1 is designed to leverage the work completed in 2019 to better achieve United's objectives.

The 2019 regulatory permits and agreements issued by the USACE and CDFW for the excavation of the pilot channel are still valid; however, it should be noted that the CDFW SAA amendment authorized United to implement the pilot channel activity one-time during the term of the agreement. In order to identify and characterize potential impacts of the proposed project as a whole, inclusive of both the Phase 1 and Phase 2 project activities, the environmental impact analysis provided herein considers potential impacts associated with conducting project activities across the entire 6-acre project site. This CEQA document will be used to inform applications for regulatory permits from the resource agencies (USACE, Los Angeles RWQCB, CDFW) responsible for issuing permits for the project's total 6-acre sediment management area, shown on Figure 2.

10. Description of Project

The proposed project would provide for the continued reliable operation and maintenance of the existing Facility by conducting sediment management and associated activities necessary to maintain the capacity and function of the Facility. The proposed project is specific to the upstream sediment management and associated activities that are necessary to the operation and maintenance of the Facility; the proposed project would not expand the existing purpose or function of the Facility. As discussed under "Background and Purpose" above, the proposed project would be implemented in two separate phases, referred to as Phase 1 and Phase 2, which collectively address an approximately six-acre sediment management area within the Santa Clara River channel.

An overview of the two project phases is below, followed by more detailed discussion of the activities that would occur under both project phases, including: access and staging; site preparation; in-channel sediment management; subsequent sediment management; and Avoidance and Minimization Measures (AMMs) that would be implemented as part of the project design.

Phase 1: Initial 1.3-acre Low-flow Channel

During the first year of the proposed project, an initial 1.3-acre low-flow channel would be established by excavating accumulated sediments to shift the river's existing thalweg to the southern bank of the river channel, extending approximately 900 feet upstream of the Facility. The 1.3-acre total includes all areas within the river channel that will be potentially affected by Phase 1 activities, including equipment travel, site ingress, and egress. The extent of the low-flow channel and the adjacent spoils dispersal area are shown on Figure 2. A detailed drawing of the proposed low-flow channel, including surveyed elevations and cross-sections, is also included in the BRA

provided as Appendix B to this IS-MND. The proposed low-flow channel will preserve some of the natural sinuosity of the channel while providing a new direct flow path toward the bypass channel of the Facility.

The new low-flow channel under Phase 1 would be approximately 40 feet wide and 825 feet long with a maximum depth of three feet and a grade of approximately 0.73 percent. This configuration is designed to provide a uniform grade from the elevation of the concrete floor of the bypass channel (155 feet above mean sea level [amsl]), to the elevation of the riverbed thalweg at the upstream end of the Phase 1 channel (164 feet amsl). Phase 1 would require excavation of approximately 4,700 cubic yards of material to form the new low-flow channel. The south side of the channel would be sloped as steeply as feasible towards the south bank of the river to allow for a safe and stable slope while positioning the channel as close as feasible to the river's south bank and avoiding disruptions to mature riparian vegetation. The north side of the new low-flow channel would be sloped more gradually toward the terrace of the river's north bank.

Material excavated to create the new low-flow channel would be redistributed within the Phase 1 sediment management area, which is indicated as the "soils dispersal area" on Figure 2. Material excavated to form the low-flow channel would be dispersed in the soils dispersal area and compacted to conditions consistent with the surrounding riverbed. The new low-flow channel is designed to accommodate flows of up to 1,300 cfs, which represent low to moderate flows, while flows greater than 1,300 cfs would overtop the channel and spread across the main channel of the river. During a two-year storm flow event, which would have flow of approximately 12,800 cfs, flows would spread out into the entire active river channel and would overtop the crest of the Facility.

Phase 1 is anticipated to be implemented over 13 days, as shown in Table 1 below.

Table 1 Schedule for Implementation of Phase 1

Timing	Task
1 day	Flag Phase 1 work area boundaries (following completion of pre-activity surveys)
1 day	Salvage and relocate species from the Phase 1 work area, if needed
10 days	Complete Phase 1 earthwork
1 day	Demobilize from Phase 1

The Phase 1 schedule above does not include time for dewatering activities, because United anticipates implementing Phase 1 during fall of 2021, and the 2020-2021 winter season has seen record-low precipitation for the Ventura County region. As of mid-July 2021, average daily flows at the Facility have dropped to zero cfs, and there is a reasonable expectation that conditions within the river channel adjacent to the Facility will remain completely dry during the 2021 summer season. As such, dewatering is not anticipated to be necessary for the implementation of Phase 1.

Phase 2: Subsequent 4.7-acre Expansion

After the first year of the proposed project and establishment of the new 1.3-acre low-flow channel under Phase 1, the proposed project's sediment management area would be expanded by 4.7 acres under Phase 2, to encompass the total sediment management area of up to six acres as shown on Figure 2. The timing of Phase 2 implementation will be determined by regulatory permit authorizations, weather conditions affecting the level of flows in the river, and the successful establishment of the initial low-flow channel under Phase 1. Once regulatory permits for Phase 2 are

in place, and given acceptable flow conditions in the river, the Phase 2 expansion activities will be scheduled as needed. In the interest of providing a conservative analysis for CEQA purposes, it is assumed that implementation of the Phase 2 expansion will also include maintenance of the initial Phase 1 channel. As such, Phase 2 would introduce project activities to a new 4.7-acre portion of the channel not previously affected by Phase 1, but it could also introduce subsequent project activities to the initial 1.3-acre Phase 1 channel, such that the Phase 2 disturbance area would be up to six acres.

Phase 2 sediment management activities will be similar to Phase 1 activities in nature and consist of low-flow channel excavation and recontouring intended to promote favorable interactions between flow and the Facility within the entire six-acre area. However, the specific location and characteristics of excavation and recontouring will be dependent upon the site conditions at the time of work. Individual grading plans will be developed as needed for any given sediment management event conducted during Phase 2. Phase 2 does not include the trucking of excavated sediments to an off-site disposal location, as all excavated sediments would be redeposited on-site within the portion of the river channel identified as the project footprint in Figure 2.

A schedule for implementation of Phase 2 will be developed based upon site-specific conditions at the time of project implementation, including with consideration to the success of Phase 1 implementation and the resulting degree of sediment management required to facilitate desired Facility operations. Subsequent sediment management events conducted during Phase 2 are anticipated to be required approximately every two to three years, but could be conducted annually if needed to address sediment accumulation and maintain Facility function.

Project Activities

The following sections describe project activities that are applicable to the entire 6-acre proposed project sediment management area, inclusive of both the 1.3-acre Phase 1 footprint and the 4.7-acre Phase 2 footprint.

Access and Staging

The project site would be accessed from the existing United maintenance roads including the riverbed access point on the south bank of the Santa Clara River and from the north bank across the diversion crest (possible access point during Phase 2), as shown on Figure 2. These access points are maintained clear of vegetation by United under an existing LSAA with CDFW (1600-2013-0223-R5). The southern bank access point is via an existing dirt ramp upstream of the Facility. This access point enters the river channel immediately upstream of the bypass channel and provides direct access to the project site. The existing developed portions of the Facility would be used as the staging area for the duration of the project.

No new access roads would be installed to accommodate project activities. The staging areas for sediment management activities are permanently disturbed in their present condition, and therefore no additional disturbance would result from using these areas for staging during sediment management activities.

In-Channel Sediment Management

Sediment management activities within the Santa Clara River channel adjacent to and upstream of the Facility are expected to be required approximately once every two years. United is seeking approvals to conduct these activities on an as-needed basis, up to once per year. Under both project

phases, sediment management activities would be conducted during the primary maintenance window from mid-September through December, after the end of the bird nesting season and prior to the onset of the steelhead migration season.

All project activities would be conducted within the active riverbed, in areas that are regularly subjected to a natural cycle of disturbance (i.e., scour and deposition). Sediment management activities would not be conducted in areas with mature riparian vegetation; however, some recently recruited (i.e., emergent, or early successional) vegetation may be trimmed or cleared, as discussed below under "Vegetation Removal". The activities planned to be conducted under Phase 1 and Phase 2 are described under respective headings above, and briefly summarized below.

- **Phase 1 - Initial Sediment Management Event.** The initial sediment management event would be conducted as Phase 1 of the proposed project, to implement a new excavated low-flow channel within the Phase 1 footprint area of 1.3 acres. Please see the description of Phase 1 provided under "Phase 1: Initial 1.3-acre Low-flow Channel".
- **Phase 2 - Subsequent Sediment Management Events.** Following the successful implementation of a new low-flow channel under Phase 1, subsequent sediment management events would be conducted as-needed, and are anticipated to occur approximately every two to three years, but could be conducted annually if needed. Phase 2 would expand the Phase 1 footprint up to an additional 4.7 acres, resulting in a total project footprint of up to six acres. Specific grading plans for subsequent sediment management events under Phase 2 would be submitted to the resource agencies for review and approval prior to being undertaken.

All sediment management activities included under the proposed project would be conducted using the same methods and equipment types and intensities; however, the larger size of the Phase 2 sediment management area would necessitate increased use of equipment to redistribute and recontour sediment spoils, as discussed below under "Sediment Spoils Management" and detailed in the issue area analyses provided below, as applicable.

Dewatering

As discussed above for Phase 1, dewatering activities are not anticipated to be necessary for the implementation of Phase 1 during 2021, due to record-low precipitation and current projections for a dry riverbed upstream of the Facility during August through December 2021. It is anticipated that dewatering activities will be necessary to accommodate Phase 2, and that in future years, depending upon weather conditions and flows present in the river, dewatering may be required prior to subsequent sediment management activities conducted under Phase 2, to be determined at the time of project implementation. Dewatering activities are described below and referenced throughout the impact analysis, as applicable to potential impacts of the proposed project.

Under normal operating conditions, United maintains an impound both within and immediately upstream of the Facility. This impound is a contiguous body of water that inundates the canal bay, bypass channel, and the adjacent Santa Clara River channel. The water surface elevation of this impound is controlled primarily by the canal gates; however, the water surface elevation can also be manipulated by the roller gate and to a lesser extent by the fish ladder exit gate. The extent of inundated area within the Santa Clara River channel is dependent upon the topographic and bathymetric characteristics of the channel at any given time and is subject to alteration by patterns of erosion and deposition due to river discharge. Due to these dynamic processes, site preparation for in-channel sediment management may require the impound to be dewatered.

United proposed to use a two-stage draw-down process, as described below.

- **Draw-down Stage A.** This first stage draw-down would dewater most low-gradient lateral habitat of the forebay. The first stage would target a draw-down rate of less than two inches per hour, through operation of United's headworks facilities. This stage would be conducted over the course of 1.5 to 2 days, depending upon the water level in the head bay at the time. The impound would be reduced to an area confined within the footprint of the bypass channel approach (i.e., confined by vertical concrete walls). Following completion of Stage A draw-down activities, the head bay and fish screen bays are not expected to drain completely, though water levels within the head bay and fish screen bay will be reduced to levels to accommodate species surveys, capture, and relocation as necessary prior to initiating the second stage of draw-down activities.
- **Draw-down Stage B.** The second stage draw-down would dewater the bypass channel. Water would be released under the roller gate and into the downstream pool. This draw-down would be conducted slowly over the course of approximately one hour, until the pool within the bypass approach channel is limited to an area immediately upstream of the roller gate. Once the pool is concentrated in the area immediately upstream of the roller gate, the rate of release under the roller gate would be increased to promote transport of aquatic species into the pool downstream. Surveyors would be present upstream and downstream of the roller gate at all phases of this stage.

If flowing water is present within the sediment management area following the completion of dewatering activities described above, flow rerouting activities may be conducted to sufficiently clear the work area of flows, thereby allowing sediment management activities to proceed. If flow rerouting is necessary, it would be conducted by establishing a temporary coffer dam within the channel, to temporarily obstruct water flowing into the work area. The temporary coffer dam would either be comprised of a manmade material that would be transported to the project site (e.g., inflatable bladder, sandbags, plywood, fence posts), or it would be comprised of native streambed material and structured as an earthen berm within the channel. As mentioned above, dewatering activities are not anticipated to be necessary for Phase 1, and are specific to Phase 2 of the project.

Under Phase 2 dewatering activities, the temporary coffer dam would either impound water upstream of the sediment management area, or it would divert flow around the active sediment management area within the project footprint. Impounded water would be pumped downstream or conveyed via gravity in a screened pipe through or around the sediment management area. Screened pump intakes and pipes would meet current guidelines for screening by NMFS and CDFW, as applicable. To allow equipment access and minimize the amount of physical manipulation of the riverbed, the temporary coffer dam would be located as close as possible to the active sediment management area and the Facility footprint. Upon completion of any Phase 2 sediment management activities requiring dewatering, the temporary coffer dam would be removed from the channel, the site would be recontoured to a condition promoting favorable flow patterns for the Facility (i.e., complementary to surrounding contours established during that particular sediment management event).

Sediment Spoils Management

As discussed above, both Phase 1 and Phase 2 would balance cut and fill on the project site, by redistributing excavated sediments across the respective sediment management areas, consisting of 1.3 acres under Phase 1 and an additional 4.7 acres under Phase 2, for a total sediment management area of six acres, as shown on Figure 2. Because the project would balance excavated materials on-site, it is not anticipated to require hauling excavated sediments off-site for disposal.

However, in an effort to provide a conservative analysis and avoid the need for subsequent environmental review, should currently unforeseen circumstances necessitate the off-site disposal of excavated sediments, also referred to as "sediment spoils", the analysis provided herein identifies and characterizes potential impacts associated with hauling excavated sediments off-site for disposal; this topic primarily affects Air Quality, Greenhouse Gases, and Transportation. If off-site spoils disposal is required, it is anticipated disposal would occur at United's nearby Dos Diegos property or at Toland Road Landfill, located at 3500 Toland Road in Santa Paula, approximately 14.5 miles from the Facility, owned and operated by the Ventura Regional Sanitation District (VRSD). Any disposal conducted at Toland Road Landfill would be done so in accordance with VRSD management procedures for the landfill.

Vegetation Removal

Neither protected trees nor mature vegetation communities (e.g., riparian woodland) are proposed for removal under the project. Vegetation trimming may be required along the access route to the project footprint (Figure 2) to allow access by heavy equipment. Any vegetation trimming would be minimal and would not result in the removal of mature trees significant to the riparian forest community.

The early successional community present in the study area shown on Figure 2 is dominated by young arroyo willow (*Salix lasiolepis*) and mulefat (*Baccharis salicifolia*) recruits within the encroaching sand and gravel bar upstream of and adjacent to the Facility. Early successional vegetation may require trimming or clearing around the project footprint, as applicable. The area where this community occurs is subject to frequent disturbance from flooding, such that early successional species would continue to recruit following project activities, and the functions and services provided by the habitat would remain largely intact.

Avoidance and Minimization Measures

United has developed project-specific Avoidance and Minimization Measures (AMMs) for the proposed project activities, as presented below. These AMMs are included in the proposed project design and would be implemented as part of the proposed project. As such, AMMs do not constitute mitigation measures, which are identified in respective environmental issue areas in the impact analysis below, where necessary to minimize or avoid potential impacts. These AMMs also do not constitute regulatory requirements, although they would assist in proposed project compliance with regulatory permits; applicable regulatory permits are discussed in detail in the respective issue area sections in the impact analysis below.

AMM-1 Best Management Practices

Best management practices (BMPs) are measures included in the project description that are implemented as part of the project and are designed to avoid and minimize effects of sediment management activities on sensitive natural resources. These measures are generally considered standard practice for industry-specific and for general development projects and are intended to provide a framework for good work practice aimed at environmental sensitivity. Best management practices often include standard and general recommended avoidance or minimization measures outlined by an organization or agency, for example, the California Stormwater Quality Association (CASQA) or the CDFW. General site maintenance BMPs, which would be implemented during the sediment management activities, are presented below in Table 2.

Table 2 AMM-1 Best Management Practices

AMM-1A General BMPs	▪ Clearly mark work boundaries using stakes or other high visibility marking (e.g., flagging), prior to staging or other project activities involving ground or vegetation disturbance. No work would occur outside of marked work areas unless first approved by United Environmental Services staff. ▪ At the end of project activities, remove all temporary flagging, fencing, barriers, project related structures, and associated materials (including BMPs) ▪ Conduct project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes; remove all visible soil/mud, plant materials, and animal remnants from all vehicles, tools, boots, and equipment. ▪ Clean up trash and other project debris daily; use fully covered trash receptacles with secure lids to contain all trash. Receptacles would be removed from the site and emptied at least weekly. ▪ Locate staging/storage and refueling/maintenance of equipment and materials outside of habitat areas. All staged equipment would have drip pans or similar containment placed underneath when not in use. ▪ No substances that could be hazardous to aquatic life would be allowed to contaminate the soil and/or enter or be placed where it may be washed by rainfall or runoff into jurisdictional waters. ▪ Prohibit pumping or use of water from the river for dust control or any other use by the project. ▪ Prohibit removal of or damage to native vegetation with a diameter at breast height (DBH) of more than 3 inches without approval.
AMM-1B Erosion Control	▪ Prohibit use of chemical dust suppression agents within 100 feet of wetlands or water bodies. ▪ Implement wind erosion control at the project site. ▪ After 14 days of inactivity, a stockpile is non-active. All stockpiles are required to be protected as non-active stockpiles immediately if they are not scheduled to be used within 14 days. ▪ Cover all stockpiles and protect with a temporary linear sediment barrier prior to the onset of precipitation. ▪ Locate fiber rolls on level contours spaced as follows: ▫ Slope inclination of 4:1 (Horizontal:Vertical) or flatter: Fiber rolls should be placed at a maximum interval of 20 feet. ▫ Slope inclination between 4:1 and 2:1 (Horizontal:Vertical): Fiber Rolls should be placed at a maximum interval of 15 feet (a closer spacing is more effective). ▫ Slope inclination 2:1 (Horizontal:Vertical) or greater: Fiber Rolls should be placed at a maximum interval of 10 feet (a closer spacing is more effective).
AMM-1C Sanitary/Septic Waste Management	▪ Locate temporary sanitary facilities away from drainage facilities, watercourses, and from traffic circulation. If site conditions allow, place portable facilities a minimum of 50 feet from drainage conveyances and traffic areas. When subjected to high winds or risk of high winds, temporary sanitary facilities would be secured to prevent overturning.
AMM-1D Waste Management and Materials Pollution Control	▪ Maintain all vehicles and equipment in good working condition, free from leaks, and operating within normal parameters. ▪ Immediately clean up any vehicle or equipment fluid spills to ensure the work area is maintained clean and free of spills and contamination. ▪ Limit the area where heavy equipment would operate to the minimum footprint necessary and contain the area within straw waddles or similar material to prevent runoff from the project site. If access to areas outside of the delineated footprint is required, it must be approved by a responsible United administrator. ▪ Maintain the project site and study area free of trash. All trash would be deposited in closed-lid receptacles and would be removed from the site weekly. ▪ If maintenance must occur on site, use designated areas, located away from drainage courses. Dedicated maintenance areas would be protected from stormwater run-on and run-off and should be located at least 50 feet from downstream drainage facilities and watercourses. ▪ All fueling trucks and fueling areas are required to have spill kits and/or use other spill protection devices. ▪ No pets or firearms would be permitted on the project site or other United-owned lands.

AMM-2 Schedule/Timing of Work

During Phase 1, no work would occur if flowing water is present in the river channel within the study area. As of early August 2021, the Phase 1 project activity area is dry and free of flowing or standing water. Given current and projected drought, United expects the Phase 1 project activities area will remain dry until 2021-22 winter season storms arrive in the region (i.e., providing for dry conditions during the implementation of Phase 1 between September 15 and December 31, the preferred maintenance window). In subsequent years to the initial implementation of Phase 1, it is anticipated that dewatering activities will be necessary to accommodate Phase 2 sediment management activities, depending upon rainfall and runoff for the respective year. If necessary to facilitate implementation of Phase 2 sediment management activities, United would dewater the project site prior to conducting Phase 2 activities to ensure that activities occur in a dry river channel. Additional scheduling/timing of work conditions include the following.

- In the unlikely event that flowing water becomes present within the study area after dewatering activities for Phase 2, United would cease work and consult with the permitting agencies prior to proceeding with project activities.
- If a rain event of a tenth of an inch or greater is forecasted by the National Weather Service within 72 hours of planned activities, all project activities must stop, and all equipment must be removed from the bed, bank, and channel of the Santa Clara River.
- Non-active areas would be stabilized as soon as practical after the cessation of soil disturbing activities or one day prior to the onset of precipitation.
- The time of day for work activities would be limited to daylight hours.

AMM-3 Worker Environmental Awareness Training

To ensure all AMMs are followed, it is essential personnel understand the scope of project activities, the general biology of special status species with potential to occur on the project site, and the individual responsibilities of project personnel. The most effective approach to addressing personnel awareness is through a worker environmental awareness training (WEAT) program. To ensure all personnel associated with the project are fully familiar with the project activities, the special status species with potential to occur in the project area, and the required AMMs, all personnel would attend a WEAT before conducting work on the project. The WEAT would provide details pertaining to project activities and correct procedures to follow during work activities to avoid or minimize potential impacts to special status species. Other information provided in the WEAT would include identification of special status species with potential to occur in the project area, correct notification procedures, and action to take in the event these species are encountered, as well as definitions of take.

The WEAT program would involve several components to ensure all project personnel are properly trained:

- Before initiation of project activities, all United Environmental Services staff working on the project and any contract biologists hired for biological monitoring would be provided the WEAT material and would be thoroughly trained on the information and in how to teach the information.
- Before the start of any project activities, United Environmental Services staff would provide the WEAT to project personnel working on the site. Project personnel would attend the WEAT at a training facility designated by United.

- After the initial WEAT, any workers new to the project can be provided the WEAT by United Environmental Services staff in a tail-gate format at the project site.
- WEAT handouts would be available at the project site when work is being performed to be handed out to workers during on-site trainings.
- A record of all trained personnel would be kept by United Environmental Services staff.

The WEAT would contain the following information:

- A list of phone numbers for United's Environmental Services staff and relevant agency contacts. This information would also be kept on site during work activities.
- A list of all AMMs for the project along with information on the project activity or special status species to which it relates.
- Instruction on identification of special status species and where and when special status species are most likely to be found.
- Instructions on correct techniques and procedures for working within the Santa Clara River channel and adjacent riparian vegetation community.
- Instructions regarding the individual responsibilities under the Clean Water Act, the project Stormwater Pollution Prevention Plan (SWPPP), site specific BMPs, and the location of Material Safety Data Sheets for the project.
- Instruction regarding the importance of maintaining a clean project site, including ensuring all food scraps, wrappers, food containers, cans, bottles, and other trash from the project are deposited in closed trash containers.
- Instructions to notify the foreman and regional spill response coordinator in case of a hazardous materials spill or leak from equipment, or upon the discovery of soil or groundwater contamination.
- Instruction on proper notification procedures in the event of take of special status species. The on-site foreman would be notified immediately followed directly by notification to the United environmental personnel. Within 12 hours of the incidence of take, notification would be provided to relevant agencies. Written documentation of the incidence would be provided to agencies within 48 hours.
- Instruction that noncompliance with any laws, rules, regulations, or AMMs could result in a worker(s) being barred from participating in any remaining project activities associated with the proposed project.

AMM-4 Pre-activity Surveys

Prior to conducting any sediment management activities, current project site conditions would be determined to establish the appropriate course of action and AMMs to be implemented based on time of year and presence/absence of special status species. Pre-activity surveys would be conducted prior to the start of any ground- or vegetation-disturbing activities to determine site conditions and potential presence of special status species. The dry condition of the river channel would be established during the pre-activity surveys. Specific AMMs to be implemented would be determined upon completion of the pre-activity surveys.

- **Reptiles.** Prior to conducting any project activities (under Phase 1 and/or Phase 2) within or adjacent to suitable habitat, United Environmental Services staff or qualified biologists familiar with western pond turtle, two-striped gartersnake, and other special status reptile species,

would conduct pre-activity surveys for special status reptiles with potential to occur in the study area. The survey would include the entire study area. Two surveys would be conducted: one within the week before and one within 48 hours of implementation of project activities. If any special status reptile species are found, AMM-6 – *Species Capture and Relocation Protocol* would be implemented, if necessary. Any individuals that can be avoided and left free of harm would be left undisturbed.

- **Birds.** The project would be completed outside the nesting bird season with project activities limited to the period between September 15 and December 31 (AMM-2, *Schedule/Timing of Work*). United expects no nesting bird activity would be occurring during project implementation. Nevertheless, to ensure no late-season nesting activity is occurring, and to detect any existing inactive nests, United Environmental Services staff or qualified avian biologists familiar with least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, and other special status birds, would conduct a pre-activity survey for birds and nests with potential to occur in the study area. The survey would cover an area not less than the study area, which provides at minimum a 25-foot buffer from the project footprint. The survey would be completed no less than 14 days prior to the start of project activities. Any active or inactive nests detected would be avoided according to AMM-5, *Nesting Birds*.
- **Fish.** Prior to initiation of Phase 2 sediment management activities that require dewatering, United Environmental Services staff or qualified biologists will conduct pre-activity surveys for special status aquatic species that could occur in the project area or be impacted by the project. If any special status species are present, AMM-1, *Best Management Practices*, will provide avoidance or minimization of impacts to special status species, and AMM-4 will be implemented as necessary. United environmental staff will determine if instream flow conditions (i.e., flow, depth, stream continuity) and aquatic habitat are potentially suitable for native fish species. Surveys of wetted areas will occur prior to any ground/vegetation disturbance or project activities that require dewatering, water diversion, work in flowing water, or work within 100 feet of flowing water in or adjacent to the Santa Clara River. The survey methodology will be appropriate for the aquatic conditions (e.g., water depth, water quality) present at the time and may include bankside or wading visual inspection, snorkeling, or use of underwater video equipment.
- **Relocation Sites.** If pre-activity surveys identify native or special status species that may require relocation from the project site, suitable relocation sites will be identified during implementation of this AMM. Relocation sites will be identified in coordination with NMFS and CDFW; the specifics of identifying and prioritizing suitable relocation sites is discussed in AMM-6 *Species Capture and Relocation Protocol*.

AMM-5 Nesting Birds

United proposes to conduct project activities between September 15 and December 31, outside of the nesting bird season. To ensure that no late-season nesting birds are present during project activities United would conduct nesting bird surveys prior to project implementation. If active or inactive nests are detected, the following measures would be implemented:

- Any nests encountered would be identified to nearest taxonomic level feasible, activity status would be determined, and the nest location would be mapped with a Geographic Information System (GIS) unit and marked in the field. Field marks would include high visibility flagging located so as to not disturb the nest.

- If an active nest is found, United Environmental Services staff would establish a minimum no-work buffer around the nest according to species:
  - Active bird nests, other than raptor, would be avoided by a minimum of 50 feet. Flagging would be used on the ground or vegetation to establish the buffer around the nest. Any work occurring near the buffer would require an avian biological monitor to determine if the nesting bird is distressed by the activities.
  - Active raptor nests would be avoided by a minimum of 300 feet. Flagging would be used on the ground or vegetation to establish a buffer around the nest. Any work occurring near the buffer would require an avian biological monitor to determine if the nesting bird is distressed by the activities.
- Buffers of special status bird nests would include temporary fencing and signage for the duration of the project.
- If nesting birds display signs of distress due to project activities, all activities would stop and United with consult with agencies as needed prior to continuing work.
- If an inactive nest is found, United Environmental Services staff would maintain a suitable vegetation buffer around the nest to the maximum extent practicable. Inactive nests would be maintained intact and undisturbed.
- Breeding habitat and nest site buffers would be marked with fencing and/or flagged in all directions and would be left in place for the duration of the project. Breeding habitat and nests would not be disturbed or removed for the duration of the project.
- Buffer distances may be adjusted up or down in distance from the nest by a United Environmental Services staff person in consultation with CDFW and USFWS. Buffer distances may be increased if a subject bird is displaying any signs of stress due to project activities. Buffer distances may be decreased if needed to adequately conduct project activities and if the subject bird is not displaying any signs of stress due to project activity.
- Upon project completion, all habitat and nest buffer fencing and flagging and all nest marking flagging would be removed.

AMM-6 Species Capture and Relocation Protocol

Capture and Relocation Protocol (CRP) requirements will be implemented to minimize impacts to special status species to the maximum extent practicable, and will only be implemented as a last resort in the event that impacts to special status species cannot be avoided while undertaking project activities. No special status bird species will be relocated, because bird species have a higher susceptibility to stress, and they are difficult to safely capture and transport. The CRP was developed using the best available approach, based on current professional literature, resource agency guidance, and expert experience in the appropriate capture, handling, and relocation of fish and reptile species. During capture and relocation activities, it is anticipated that native non-special status species may be incidentally encountered and subsequently require relocation to suitable habitats away from the project site. Relocation sites for native non-special status species may be within the immediate area, if it is determined they are unlikely to return to the project site during covered activities.

The CRP includes protocols to safely capture and relocate special status species including *O. mykiss*, lamprey, arroyo chub, and western pond turtle. Prior to the start of any project activity that would potentially require the capture and relocation of special status species, United Environmental Services staff or designated qualified biologist(s) will conduct surveys of the project site for the

presence of special status species could be impacted by project activities (AMM-4). If not already identified, the surveys will also identify suitable relocation sites based on physical essential habitat characteristics and species presence at relocation sites. Additional surveys to identify suitable off-site relocation sites will be conducted as necessary. Relocation sites will be located within the Santa Clara River watershed and contain habitat conditions suitable for the species in question (i.e., relocation sites may be different for *O. mykiss* and western pond turtle). Conditions (e.g., water temperature, dissolved oxygen, general aquatic habitat conditions) at potential relocation sites will be documented and reported to NMFS and CDFW and species-specific sites will be prioritized in coordination with NMFS and CDFW.

Only United Environmental Services staff or qualified biologist(s) assigned by United Environmental Services staff will conduct the CTP. All capture and relocation activities will be documented on hard-copy datasheets and in an electronic database.

Project Activities Requiring Capture and Relocation. Species capture and relocation is not anticipated to be required during Phase 1, because no dewatering or flow rerouting is anticipated to be necessary. During dewatering and flow rerouting for Phase 2, species capture and relocation will only be conducted as a last resort, to minimize or avoid impact to special status species that may incidentally become stranded as flow recedes in the dewatered channel. The CRP will identify BMPs focused on excluding aquatic special status species from work areas, such as the use of blocknets and flow re-routing to avoid harmful effects to stranded species. When necessary, capture of aquatic special status species will be conducted using seines, dipnets, turtle traps, or other methods specified by the relevant resource agencies.

Aquatic Species Handling and Transport. All aquatic species that are captured for relocation in accordance with the CRP will be identified and enumerated, and all observations will be recorded on hard-copy datasheets and entered into an electronic database. United has developed a species identification photo book to assist in species identification and implementation of the CRP will be conducted under the supervision of individuals with experience identifying fish and reptile species. The following best practices will be implemented as part of the CRP:

- All equipment will be cleaned/decontaminated using the most current methodologies to avoid spreading diseases and invasive species.
- Transport containers used during relocation between sites will be aerated, insulated, and at least 100 quarts in size. Water temperature at the capture site and in the transport container will be measured prior to handling fish and monitored during transport. Five-gallon buckets may be used to transfer species from the point of capture to the 100-quart transport containers.
- Whenever possible, fish will not be transported at temperatures above 20°C, and transport activities will be performed in the morning to minimize thermal stress.
- The number of other native species placed in containers will depend on the life stages collected, and caution will be taken to not over-crowd containers.
- No more than 10 *O. mykiss* or lamprey juveniles will be placed in an individual 100-quart transport container.
- Fish handling, transfer between containers, and transport time will be minimized to the extent possible. Fish transport time is expected to be no more than one to two hours.
- Handling and transport of *O. mykiss* will be conducted in coordination with NMFS and CDFW. Specifically, each individual fish's life-stage (e.g., degree of smoltification) will be assessed and considered alongside environmental conditions within the watershed and at potential relocation sites to determine the appropriate relocation site.

- Any western pond turtles will be transported in containers with approximately one inch of water to maintain a moist environment during transport.
- Turtles necessary to be captured and relocated will be assessed and the following information will be documented: carapace length, width, and height; sex; general condition and appearance.

For all special status aquatic species that are captured and relocated in accordance with this AMM, temperature acclimation from the transport containers to the relocation site(s) will be provided by periodically transferring water from the selected relocation site(s) into the transport containers. The time steps listed below in Table 3 will be followed to provide appropriate acclimation and minimize stress to the respective species.

Table 3 Stepped Acclimation Temperatures and Times for AMM-6

Temperature Differential (degrees Centigrade	Acclimation Time (minutes)
0-2	10
3-5	20
6-7	30

Non-native, invasive aquatic species will be euthanized or removed using standard practices. These species include, but may not be limited to: largemouth bass (*Micropterus salmoides*), green sunfish (*Lepomis cyanellus*), bluegill (*Lepomis macrochirus*), brown bullhead (*Ameiurus nebulosus*), black bullhead (*Ameiurus melas*), fathead minnow (*Pimephales promelas*), Mississippi (inland) silverside (*Menidia audens*), threadfin shad (*Dorosoma petenense*), common carp (*Cyprinus carpio*), goldfish (*Carassius auratus*) crappie (*Pomoxis* sp.), mosquitofish (*Gambusia affinis*), shimofuri goby (*Tridentiger bifasciatus*), African clawed frog (*Xenopus laevis*), American bullfrog (*Lithobates catesbeianus*), and red-eared slider (*Trachemys scripta elegans*).

AMM-7 Noise Abatement Protocol

United's noise abatement protocol was developed based on published scientific research and expert experience concerning the effects of noise on wildlife. The goal of the protocol is to serve as an avoidance or minimization approach to reduce the impact of noise from project activities on special status species to the extent practicable.

The noise abatement protocol consists of strategies for minimizing the effects of noise on reptiles and nesting riparian birds, as well as the effects of underwater noise on special status fish species. The project would occur outside of the nesting season and no nesting is expected to occur during project implementation. The river channel is expected to be dry during project implementation and no underwater noise is expected. In the absence of nesting birds and water, noise abatement protocols associated with these potential impacts would not apply.

To mitigate noise effects to special status species, avoidance and minimization measures would be in place for each type of project activity. Limiting work to seasonal periods or times of day is the most effective approach to avoid potential effects to wildlife, including as related to migration and breeding. Installing hardscape structures (earthen berm or sound wall) to abate persistent or continuous sound sources is also effective. Considering the complex nature of the project activities, careful planning should integrate the temporal and spatial distribution of those activities relative to the specific special status species. Each project activity with the potential to generate noise levels above those shown in Table 4 in AMM-7 below should be evaluated relative to the noise abatement

measures listed below. The mitigation strategies listed below would be assessed during the planning phase for appropriate integration into activities conducted by United personnel and contractors.

SUMMARY OF NOISE LIMIT THRESHOLDS AND BREEDING SEASONS FOR SPECIAL STATUS SPECIES

Table 4, below, identifies the recommended noise limit thresholds and applicable breeding or migration seasons for special status fish, reptile, and bird species relevant to the project site. Following this table are lists of general mitigation strategies as well as resource-specific mitigation strategies to minimize potential impacts to special status species due to noise during breeding or migration seasons.

Table 4 AMM-7 Noise Limit Thresholds and Breeding Seasons for Special Status Species

Special Status Species	Noise Limit Threshold (dB) (Recommended)	Breeding Season/Migration Season
Fish		
Pacific lamprey	180 dBA re 1µPa for > 2 hours	January through May (migrant)
Southern California steelhead	180 dBA re 1µPa for > 2 hours	January through May (migrant)
Reptiles		
Western pond turtle	95 dBA for periods up to 2 hours	May to August
Birds		
Least Bell's vireo	60 dBA at nest	April to September
Southwestern willow flycatcher	60 dBA at nest	Mid-May to September
Yellow-billed cuckoo	60 dBA at nest	Mid-May to September

The general mitigation strategies and resource-specific mitigation strategies identified under respective headings below would be implemented under AMM-7 to minimize impacts associated with potential noise disruptions to breeding or migration seasons for special status species.

GENERAL MITIGATION STRATEGIES

- Outfit equipment with engineering and administrative controls (mufflers, shielding, etc.)
- Establish project design and project layout cognizant of noise criteria and buffers
- Sequence operations to avoid sensitive migratory or nesting periods
- Create temporal and spatial operational constraints
- Include noise information/training into environmental education provided to workers and contractors
- Integrate noise mitigation at the source including both stationary and mobile equipment
- Select equipment for appropriate noise level recommendations
- Implement inspection and maintenance programs
- Utilize natural shielding
- Establish temporary shielding
- Build permanent shielding
- Implement noise mitigation at receptor sites
- Use masking
- Relocate special status species

RESOURCE-SPECIFIC MITIGATION STRATEGIES TO BE CONSIDERED

- Conduct activities outside of nesting bird season
- Perform pre-project surveys to document presence/absence of special status species and develop buffers around active nests or other resources
- Conduct noise monitoring to document sound sources and establish boundaries around nests so noise levels do not exceed to 60 dBA
- Implement additional measures if a nest is located within the area of the 60-dBA boundary, including the use of a sound walls or sound reducing curtains to reduce noise levels around project activities, or stop the offending construction activity until juveniles have fledged
- Install fencing around work areas adjacent to the river to exclude wildlife (turtles) from project areas prior to hibernation periods

AMM-8 Biological Monitoring

United Environmental Services staff, or contracted biologists, would be approved as qualified biologists and biological monitors prior to conducting biological monitoring of project activities. Qualified biologists assigned to biological monitoring would meet a minimum qualification prior to being assigned to monitoring tasks. At a minimum, qualified monitors would be able to demonstrate applied experience with special status species, including ability to identify the species, experience with the species' biological life history and behavior, experience with detection of the species in its natural habitat, and experience coordinating with project personnel in avoidance of impacts to special status species. Experience with handling of special status species is not required for biological monitors; however, if such experience is lacking, the biological monitor would not handle special status species. Handling of special status species for any reason would only be performed by qualified biologists with demonstrated relevant experience.

United Environmental Services staff, or a contracted approved biological monitor, would be present to monitor during all project activities occurring within or adjacent to sensitive or suitable habitat for special status species, or as directed under any other AMMs. This includes monitoring a 500-foot buffer surrounding the active project site. The monitor's responsibilities include observing and documenting project activities, and providing recommendations designed to (a) limit potential impacts to special status species, (b) ensure compliance with any applicable permits, and (c) document any incidence of take, if any occurs. The monitor would retain stop-work authority for instances when a special status species is observed to be at risk for direct harm or harassment due to the project activities. If a task does not have the potential to result in effects to special status species, United would be able to assign any otherwise trained personnel to conduct the given activity.

AMM-9 Invasive Species Management

During implementation of project activities, BMPs would be in place to avoid and minimize the introduction and spread of invasive species. These BMPs include ensuring all vehicles, equipment, tools, and sediment and erosion control activities are free of invasive plant and animal species. Invasive species management protocols (e.g., CDFW 2016) would be implemented for all activities that occur within the Santa Clara River channel and riverine habitat.

The following BMPs would be implemented during all covered activities:

- BMPs for invasive species management would be implemented when biological surveys are required (e.g., pre-activity surveys) in aquatic habitats suitable for covered species.
- All equipment would be washed off-site, at a location approved by United, before entering the project site, to ensure equipment is free of mud, algae, snails, or other debris.
- All equipment would be inspected on site (i.e., Freeman Diversion), before leaving the site, to ensure equipment is free of mud or other debris that could contain invasive species.
- All soils, seed mix (e.g., for habitat restoration), or other material would be certified free of invasive species before being imported or exported to or from the project site.

Invasive species would also be actively removed on an opportunistic basis during project activities and during monitoring events. During project activities, invasive plant species (e.g., giant reed, tamarisk [*Tamarix* spp.]) would be removed and disposed of off-site in approved green waste facilities. Additionally, within the project footprint, invasive plant species would be actively removed and/or treated with herbicide (by a licensed applicator and in accordance with the label and all relevant regulations) during the period following the proposed earthwork and the subsequent spring growing season, to prevent establishment of invasive species within the disturbance footprint.

Invasive wildlife species (e.g., common carp, American bullfrog) would be removed on an opportunistic basis during monitoring or surveys. Invasive wildlife would also be collected and removed during project activities when handled. When invasive wildlife species are captured, they would be collected, humanly dispatched, and disposed of off-site.

11. Surrounding Land Uses and Setting

Land uses to the north and west of the project site include the undeveloped channel of the Santa Clara River. Undeveloped hillsides are adjacent to the east, and active agricultural fields are adjacent to the south, as well as across the Santa Clara River to the west. The unincorporated community of Saticoy is located to the southwest of the Facility, on the west side of the Santa Clara River.

12. Other Public Agencies Whose Approval is Required

United operates the Facility to meet water resource management objectives, as discussed above under “Project Background”. The sediment management activities assessed herein are required to operate and maintain the existing facility, including but not limited to the associated fish passage structure. The proposed sediment management activities would include ground-disturbing activities in and around the Santa Clara River, and would therefore require a number of regulatory approvals, as summarized in Table 5.

Table 5 Required Approvals

Resource Agency	Permit	Notes
CDFW	LSAA Standard Agreement	Phase 1 and Phase 2 of the proposed project requires CDFW approval via issuance of a new LSAA, at the discretion of CDFW. In 2019 CDFW issued an LSAA for activities (pilot channel) similar to Phase 1 of the proposed project. The 2019 activities are incorporated into Phase 1 of the proposed project.
RWQCB	CWA Section 401 Water Quality Certification	Required due to the project's need for federal approval under Section 404 of the CWA; see below. Compliance is also anticipated to include development and implementation of a project specific SWPPP.
USACE	CWA Section 404 Individual Permit	It is anticipated the USACE will require an Individual Permit; however, if coverage may be provided under the existing RGP69, the conditions identified therein will be applied to the proposed project. Permitted activities are anticipated to be limited to the active channel bottom and areas of previous disturbance from construction of the Facility.
USFWS and NMFS	ESA Section 7 ITP	Phase 1 of the proposed project will not result in potential effects to listed species and does not require ESA Section 7 consultation. Regarding Phase 2, the USACE will initiate formal ESA Section 7 consultation with the USFWS and NMFS as follows: ▪ USFWS for effects to vireo and flycatcher ▪ NMFS for effects to steelhead

CDFW = California Department of Fish and Wildlife; CWA = Clean Water Act; ESA = Endangered Species Act; ITP = Incidental Take Permit; LSAA = Lake and Streambed Alteration Agreement; NMFS = National Marine Fisheries Service; RGP69 = Regional General Permit No. 069 issued by the USACE to United for operation and maintenance of the Facility (not including sediment management activities); RWQCB = Regional Water Quality Control Board; SWPPP = Stormwater Pollution Prevention Plan; USACE = United States Army Corps of Engineers; USFWS = United States Fish and Wildlife Service

Project approval by the California Coastal Commission is not necessary because the proposed project is located outside the coastal zone, and would not affect coastal zone resources. Additionally, the project would not adversely affect Essential Fish Habitat, such that formal consultation under Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) is not required. Furthermore, the Facility is not listed on the current National Register of Historic Places (NRHP), and due to the sediment management area being limited to the active channel bottom and areas of previous disturbance, there is little likelihood for previously unknown cultural resources to be present within the project site, such that consultation under Section 106 of the National Historic Preservation Act is not required.

13. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

As of the date that this IS-MND is being submitted for public review, no California Native American tribes have requested consultation with United pursuant to PRC Section 21080.3.1. Therefore, there is no trigger for tribal consultation pursuant to PRC 21080.3.1 for the proposed project.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
■	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	■	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	■	☐

This section provides a description of existing visual conditions—that is, the physical features that make up the visible landscape—in and around the project site, and presents an assessment of changes to those conditions that would occur with implementation of the proposed project. The effects of the proposed project on the visual environment are generally defined in terms of the project's physical characteristics and potential visibility, the extent to which the project would change the perceived visual character and quality of the environment, and the expected level of sensitivity the viewing public may have where the project would alter existing views.

Regulatory Setting

No federal or State plans, policies, regulations, or laws related to aesthetics, light, and glare are applicable to the proposed project.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For aesthetics, these include the Ventura County General Plan, as summarized below.

- Ventura County General Plan, Section 1.7, *Scenic Resources*, identifies Policy 1.7.2-1, which states that discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.

Environmental Setting

The project site is located at the existing Facility on the Santa Clara River, near the unincorporated community of Saticoy. Figure 3 provides photographs of the current visual character of the project site and surrounding area. Overall, the Santa Clara River watershed is characterized by a coastal Mediterranean-type ecosystem dominated by vegetation communities typically associated with these conditions, including dune habitat, chaparral, woodland and forest habitats, and annual grassland. Agriculture is a predominant element of the visual character in the Santa Clara River Valley, including row crops, orchards, berry farms, and nurseries.

Natural and artificial light reflect off various surfaces and can create localized occurrences of daytime and nighttime glare. Limited buildings and structures made with glass, metal, and polished exterior roofing materials are present in the residential areas of Saticoy, located downstream of the project site. There are no significant sources of light or glare at the Facility. The surrounding project area, including the Santa Clara River and adjacent agricultural land, and the desilting basin and recharge basins, are essentially without artificial reflective materials. There are no reported occurrences of excessive daytime or nighttime light or glare in the project vicinity.

Two of the largest viewer groups in the project area are residents in nearby urban areas and motorists on local roadways. Views from residences in the unincorporated community of Saticoy typically would be limited to the immediate surroundings, and few if any areas affected by project activities would be visible. Similarly, although motorists provide a large number of potential viewers, the nearest major roadway to the project site is Los Angeles Avenue/SR 118, which crosses the Santa Clara River on an existing bridge more than a mile downstream of the Facility. In addition, the sensitivity of this viewer group to local scenic conditions is limited by the fact that a driver's focus is predominantly on the road and surrounding vehicles, and the vehicle is in motion, limiting opportunities for extended views of particular resources.

Figure 3 Photographs of the Freeman Diversion Facility

Photograph 1. View of the Freeman Diversion Facility looking downstream (photograph taken by United Water Conservation District in 2019).

Photograph 2. View of the Freeman Diversion Facility looking upstream (photograph taken by United Water Conservation District in 2019).

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

A scenic vista is typically considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. The Ventura County General Plan identifies a range of Scenic Resources Areas in the county, including the viewsheds of Lake Casitas, Matilija Lake, Lake Piru, and Lake Sherwood. The nearest viewshed to the project site is associated with Lake Piru, and does not extend beyond Santa Felicia Dam, which is located more than 25 miles upstream of the project site. Project activities are not proposed in sensitive viewsheds, so views would not be affected. No impact would occur.

NO IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No roadways designated by the State as scenic highways are located in the project site, and there are no roadways eligible for either state or county designation as scenic highways located in the immediate vicinity of the project site. The Santa Clara River downstream of the project site at the Facility could experience changes in flow conditions, but these would not be noticeable to motorists traveling in these areas. In no location in the project site would trees, rock outcroppings, historic buildings, or other scenic resources be damaged. No impact would occur.

NO IMPACT

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed sediment management activities would occur in the project's defined sediment management areas, which are within the Santa Clara River channel in a nonurbanized area, where the general public do not have direct views of the work areas. The current visual character of the project site and surrounding area is portrayed in the photographs provided as Figure 3. The project site may be visible by members of the general public who gain access to the project site for activities such as birding; however, access must be approved by United, and requests for access have historically been rare. Viewers who most commonly have an opportunity to see the Facility are individuals on nearby agricultural lands, who are not considered sensitive viewer groups with expectations for high-quality visual conditions. Recreationists hiking or otherwise accessing the Santa Clara River could also have views of the Facility; however, much of the river is surrounded by private land, and there is limited access with relatively few individuals using the river corridor in the project area.

The presence of workers and equipment during sediment management activities would represent a short-term change in the appearance of the Facility. However, sediment management activities would be conducted in areas that are not open to the public and are generally not visible to the general public, such that modifications to the visual characteristics of the facility due to the presence of workers and equipment would not degrade public views. After the completion of sediment management activities, which are anticipated to occur up to once per year, or as needed

in response to large storm events, the visual condition of the project site would be consistent with the existing visual condition. Therefore, the project would not result in a substantial degradation in visual character or quality, and potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The proposed sediment management activities would occur in the project's defined sediment management areas, which are within the Santa Clara River channel in a nonurbanized area, where the general public do not have direct views of the work areas. Implementation of the proposed project would require the use of equipment and machinery that may cause some reflection in the direct sunlight; however, such effects would be temporary and highly localized to the project's active work areas. The project would not introduce lighting or permanent reflective materials where they do not already exist. In addition, sediment management activities in the riverbed would be obscured from public views by distance and by vegetation growing adjacent to and in the riverbed.

United would implement BMPs as part of the proposed project design, in accordance with the AMMs provided in the Project Description. In accordance with AMM-2, *Schedule/Timing of Work*, project activities would be limited to daylight hours. As such, nighttime activities requiring lighting are not anticipated to be necessary; however, if nighttime work must occur, AMM-2 also specifies that lighting will be shielded and directed downward on the immediate work area to avoid or minimize light trespass on adjacent lands. Therefore, the proposed project would not result in new sources of substantial light or glare that would adversely affect day or nighttime views, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

This section evaluates the potential impacts on agricultural resources from implementation of United's proposed sediment management activities. Existing agricultural resource characteristics are described, as well as the relationship between the proposed project and existing plans and policies.

Regulatory Setting

Federal

The Farmland Protection and Policy Act (FPPA), 7 U.S. Code 4201, was enacted in 1981 to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The program encourages alternative actions, if appropriate, that could lessen the adverse effects on farmland and ensure that federal programs are operated in a manner that, to the extent practicable, will be compatible with state and local government and private programs

that protect farmland. The FPPA applies only to federal assistance and actions that would convert Important Farmland to nonagricultural uses. It does not authorize the federal government to regulate the use of private or nonfederal land or in any way affect the private property rights of owners of private land. Compliance is to be coordinated with the U.S. Natural Resources Conservation Service (NRCS).

State

The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to form contracts with private landowners to promote the continued use of the relevant land in agricultural or related open space use. In return, landowners receive property tax assessments that are based on farming and open space uses instead of full market value. Local governments receive an annual subvention (subsidy) of foregone property tax revenues from the State via the Open Space Subvention Act of 1971 (California Department of Conservation [DOC] 2019). The Williamson Act empowers local governments to establish "agricultural preserves" consisting of lands devoted to agricultural uses and other compatible uses. When such preserves are established, the locality may offer owners of agricultural land that is included in the preserves the opportunity to enter into annually renewable contracts that restrict the land to agricultural use for at least 10 years (i.e., the contract continues to run for 10 years following the first date upon which the contract is not renewed). In return, landowners receive substantially reduced property tax assessments in return for enrollment under a Williamson Act contract.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For agriculture and forestry resources, this includes the Ventura County General Plan (County of Ventura 2020), as summarized below.

Ventura County General Plan, Section 8, *Agriculture Element*, identifies the following policies that may be considered relevant to the proposed project:

- Policy AG-1.1, Agricultural Land Protection and Preservation. The County shall continue to protect and preserve agricultural land by directing growth away from productive agricultural lands into cities, unincorporated urban areas, or existing communities and by supporting the acquisition or voluntary dedication of agriculture conservation easements.
- Policy AG-2.1, Discretionary Development Adjacent to Agriculturally Designated Lands. The County shall ensure that discretionary development adjacent to Agriculturally designated lands does not conflict with agricultural use of those lands.
- Policy AG-2.4, Hillside Erosion Control Ordinance. The County shall regulate hillside agricultural grading through the Hillside Erosion Control Ordinance and its oversight by the Public Works Agency.

Environmental Setting

The agricultural industry in Ventura County plays an important role in the regional and county economy and is responsible for providing approximately 43,000 jobs, such as jobs in the crop production, processing, shipping, and related industries and service sectors (Farm Bureau Ventura County [FBVC] 2018). Because of its temperate climate, a variety of crops are grown year-round in Ventura County. Of the county's 1.2 million acres, approximately 26 percent of the county is in agricultural production (FBVC 2018). Agricultural lands are a primary land use across the Oxnard Plain, which the Santa Clara River traverses. There are active agricultural fields in the project area, particularly downstream from the Facility; however, there are no agricultural lands within or adjacent to the proposed sediment management areas included under Phase 1 or Phase 2 of the proposed project. United provides water supply for agricultural uses across the Oxnard Coastal Plain and maintains groundwater infiltration ponds at the Facility, which facilitate the replenishment of groundwater supplies underlying the Oxnard Plain.

Impact Analysis

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The proposed project involves the implementation of sediment management activities which are part of United's continued operation and maintenance of the Facility and associated groundwater recharge basins. Sediment management activities would occur both upstream and downstream of the Facility within the Santa Clara River. Project activities would not be located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and thus would not directly require designated Farmland to be converted to nonagricultural use. Therefore, no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur.

NO IMPACT

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

The proposed project's sediment management areas are located within the Santa Clara River channel, which is not subject to a Williamson Act contract. Implementation of the proposed project would not affect existing zoning or Williamson Act contracts. Local agricultural operations on lands upstream and downstream of the project site would remain unaffected by the proposed project activities. Therefore, no impact associated with conflicts with agricultural zoning or Williamson Act contracts would occur as a result of the project.

NO IMPACT

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site is within the Santa Clara River channel, which is not characterized by or designated as forest or timber production lands. The project would not directly or indirectly affect forest land or timberland. No impact would occur.

NO IMPACT

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

As discussed for significance thresholds (a) through (d) above, the proposed project would have no impact on agricultural land uses or forest lands. The project's sediment management activities would be limited to the defined sediment management areas for Phase 1 and Phase 2, which are located within the Santa Clara River channel, and would not have potential to convert Farmland to non-agricultural uses or forest land to non-forest uses. Therefore, no impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	■

Regulatory Setting

Federal

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic compounds (ROC),[1] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

[1] CARB defines VOC and ROC similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROC and VOC are considered comparable in terms of mass emissions, and the term ROC is used in this IS-MND.

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

State

The State CAA also requires the Ventura County Air Pollution Control District (VCAPCD) to prepare a plan for air quality improvement for pollutants for which Ventura County is in non-compliance. The VCAPCD's 2016 Air Quality Management Plan (AQMP) is an update of the previous 2007 AQMP. The 2016 AQMP, adopted on February 14, 2017, incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2007 AQMP, including the approval of the federal eight-hour ozone standard of 0.070 parts per million (ppm) that was finalized in 2015. The 2016 AQMP builds upon the approaches taken in the 2007 AQMP and includes attainment and reasonable further progress demonstrations of the federal eight-hour ozone standard (VCAPCD 2017). The statutory deadline for Ventura County to attain the eight-hour ozone NAAQS is July 20, 2021. The 2016 AQMP determines that, with implementation of the proposed control strategies, Ventura County was expected to reach attainment of the eight-hour ozone NAAQS and CAAQS by July 20, 2020; however, the determination of whether attainment has been achieved will not be made until collection and evaluation of monitoring data from the 2020 ozone season has been completed (VCAPCD 2017). Nevertheless, ozone concentrations in Ventura County exceeded the eight-hour ozone NAAQS on only seven days in 2019, which is the lowest recorded number of exceedances since the eight-hour ozone NAAQS was lowered to 0.070 ppm in 2015 (VCAPCD 2020).

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For air quality, this includes the *Ventura County Air Quality Assessment Guidelines* (VCAPCD 2003).

The analysis presented in this section is based upon guidance found in the *Ventura County Air Quality Assessment Guidelines* (Guidelines), adopted by the VCAPCD in 2003. The Guidelines recommend specific air emission criteria and threshold levels for determining whether a project may have a significant adverse impact on air quality in Ventura County. In accordance with the Guidelines, a project may result in a significant impact if operational emissions exceed 25 pounds per day of ROC or 25 pounds per day of NO_X. The 25 pounds per day thresholds for ROC and NO_X are not intended to be applied to construction emissions because such emissions are temporary. Nevertheless, the VCAPCD's Guidelines state that construction-related emissions should be

mitigated if estimates of ROC or NO_X emissions from heavy-duty construction equipment exceed 25 pounds per day for either ROC or NO_X.

The VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD indicates that a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold applies to the generation of fugitive dust during construction grading and excavation activities. The VCAPCD Guidelines recommend application of fugitive dust mitigation measures for all dust-generating activities. Such measures include minimizing the project disturbance area, watering the site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less.

The VCAPCD has not established quantitative thresholds for CO for either construction or operation. However, the VCAPCD states a CO hotspot screening analysis should be conducted for any project with indirect CO emissions greater than the applicable ozone project significance thresholds (i.e., 25 pounds per day) that may significantly impact roadway intersections currently operating at, or that are expected to operate at, Level of Service (LOS) E or F. A CO hotspot screening analysis should also be conducted for any project-impacted roadway intersection at which a CO hotspot might occur (VCACPD 2003). If project emissions do not meet these criteria, then the project would have a less than significant impact related to CO hotspots. However, if project emissions exceed these criteria and the screening analysis demonstrates there may be a CO hotspot, the VCAPCD recommends use of the CALINE4 model to determine whether the project would create or contribute to an existing CO hotspot.

The VCAPCD has not established a significance threshold for impacts related to Valley Fever. However, the VCAPCD recommends consideration of the following factors that may indicate a project's potential to result in impacts related to Valley Fever:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils
- Virgin, undisturbed, non-urban areas
- Windy areas
- Archaeological resources probable or known to exist in the area (e.g., Native American midden sites)
- Special events (fairs, concerts) and motorized activities (motocross track, All-Terrain Vehicle activities) on unvegetated soil (non-grass)
- Non-native population (i.e., out-of-area construction workers)

The VCAPCD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during project activities in Ventura County. Relevant rules and regulations to the project include:

- **Rule 50 (Opacity).** This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the project.

- **Rule 51 (Nuisance).** This rule prohibits any person from discharging air contaminants or any other material from a source that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or repose to any considerable number of persons or the public.
- **Rule 55 (Fugitive Dust).** This rule requires fugitive dust generators, including construction and demolition projects, to implement control measures limiting the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities.[2]
- **Rule 55.1 (Paved Roads and Public Unpaved Roads).** This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road.
- **Rule 55.2 (Street Sweeping Equipment).** This rule requires the use of PM_{10} efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55.

Environmental Setting

The project site is located is located in the South Central Coast Air Basin (SCCAB), which is under the jurisdiction of the San Luis Obispo Air Pollution Control District (SLOAPCD), Santa Barbara County Air Pollution Control District (SBCAPCD), and the VCAPCD. The project site is located specifically in Ventura County, which is under the VCAPCD's jurisdiction. As the local air quality management agency, the VCAPCD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the Ventura County portion of the SCCAB is classified as being in "attainment" or "nonattainment." In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 6, are already occurring in that area as part of the environmental baseline condition. Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. Ventura County is designated a nonattainment area for the ozone NAAQS and CAAQS and the PM_{10} CAAQS (CARB 2020).

Table 6 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).

Source: USEPA 2018

[2] The emission estimates of particulate matter PM_{10} and $PM_{2.5}$ shown in Table 7 for the proposed project reflect application of water to exposed soils twice daily to reduce dust emissions during grading activities, which would be required for compliance with Rule 55.

The air quality in the SCCAB is influenced by a wide range of emission sources, such as dense population centers, heavy vehicular traffic, industry, and weather. In addition, San Joaquin Valley Fever (Valley Fever), an infectious disease caused by the fungus *Coccidioides immitis*, is a disease of concern in the SCCAB. This disease is related to air pollution because infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by natural processes, such as wind or earthquakes, or by human-induced ground-disturbing activities, such as construction, farming, or other activities (VCAPCD 2003). In 2019, the total number of cases of Valley Fever reported in California was 9,004, with 364 cases reported in Ventura County (California Department of Public Health [CDPH] 2020).

Impact Analysis

Air pollutant emissions generated by project activities were estimated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. CalEEMod uses project-specific information to model a project's construction and operational emissions. The CalEEMod analysis conducted for the proposed project reflects the implementation of the project as described under *Description of Project*. Emissions modeled for project activities include emissions generated by heavy-duty equipment used on site and emissions generated by vehicle trips associated with project activities, such as worker and vendor trips. CalEEMod estimates emissions by multiplying the amount of time equipment is in operation by emission factors. Project activities were analyzed based on the schedule and equipment list provided by United staff.

This analysis assumes that Phase 1 and 2 of the proposed project would be implemented using similar phasing of activities and equipment. Project activities would include dewatering, site preparation, construction of diversions (if necessary), earthwork, and demobilization. As detailed in the Project Description, the proposed project activities do not include off-site disposal of sediment spoils from excavation, because all of the sediment spoils are proposed to be redistributed across the project's combined 6-acre footprint, with grading and compaction applied to recontour the channel and provide the proposed elevations. However, this analysis calculated the emissions that would be associated with off-site disposal of spoils from a portion of the proposed excavation activities, to characterize the impacts that could occur should off-site disposal become necessary due to future circumstances, such as regulatory limits to the amount of sediment that can be redistributed within the channel. This included crafting assumptions about the type and number of truck trips required to transport up to 2,010 cubic yards of sediment spoils to an off-site landfill, assumed to be the Toland Road Landfill in Santa Paula, for disposal or reuse. Further, although a potential future need for off-site sediment disposal could occur under either Phase 1 or Phase 2 of the project, this analysis conservatively assumed that all off-side disposal would occur during Phase 1, thereby characterizing the worst-case-scenario air quality emissions from project activities, and the associated impact significance determination.

In addition, the air quality emissions calculations conducted for this analysis assumed the following:

- No heavy-duty equipment would be used during dewatering
- All heavy-duty equipment used for the project would be diesel-powered, but the equipment would be equipped with cleaner engines that would be rated either USEPA Tier 3 or 4
- Project equipment and activities would comply with all applicable regulatory standards, including VCAPCD Rules 55, 55.1, 55.2

- Phase 1 activities would occur over up to 17 days, including the transport of up to 2,010 cubic yards of sediment spoils for off-site disposal (adding four days to the 13-day schedule shown in Table 1)
- Phase 2 activities would occur over up to 16 days, including the excavation of up to 8,000 cubic yards of sediment, with the volume of cut and fill material balanced on site, such that no export of spoils for off-site disposal would occur
- Phase 1 activities are already permitted and would occur as early as 2021
- Phase 2 activities would not occur sooner than the second year of project implementation
- Phase 2 activities would occur at a maximum of once per year for the foreseeable future as part of the sediment management plan for the Facility
- Phase 2 activities and equipment would be the same for all future years

For the purposes this analysis, the emissions calculations assumed that Phase 1 and Phase 2 project activities would occur consecutively in the same year, with Phase 2 activities starting immediately upon completion of Phase 1 activities. This is a conservative worst-case scenario that includes sediment management activities across the combined 6-acre sediment management area in the same year, inclusive of 1.3 acres under Phase 1, and an additional 4.7 acres under Phase 2.

As discussed in Section 2, *Description of Project*, no expansion of other existing activities would occur under the proposed project. Other aspects of operation and maintenance of the Facility have been previously reviewed and processed for the purposes of CEQA, and are covered under existing regulatory permits; therefore, emissions are not estimated for these activities.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A significant air quality impact could occur if a project is not consistent with the applicable AQMP or if the project would represent a substantial hindrance to implementing the policies or obtaining the goals of that plan. According to the Guidelines, a project may be inconsistent with the applicable air quality plan if it would cause the existing population to exceed forecasts contained in the most recently adopted AQMP. The VCAPCD adopted the *2016 Ventura County AQMP* to demonstrate a strategy for, and reasonable progress toward, attainment of the eight-hour ozone NAAQS (VCAPCD 2017). The project does not include the construction of residences, and it would not increase the number of employees needed for operation and maintenance of the Facility. Therefore, the project would neither increase the existing population nor exceed the regional population growth forecasted in the *2016 Ventura County AQMP*, which underlies the AQMP's air pollutant emissions forecasts. As a result, the project would not conflict with or obstruct implementation of the AQMP, and no impact would occur.

NO IMPACT

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Ventura County is designated nonattainment for the NAAQS for ozone and the CAAQS for ozone and PM_{10}. Project activities would periodically generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy-duty equipment and project vehicles. Table 7 summarizes the estimated maximum daily emissions of pollutants during proposed project activities.

Table 7 Estimated Maximum Daily Emissions during Project Activities (lbs/day)

Project Year	ROC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1	1	17	19	<1	7	4
Phase 2	1	18	22	<1	6	4
Maximum Emissions	**1**	**18**	**19**	**<1**	**7**	**4**

lbs/day = pounds per day; ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed made using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations (including VCAPCD Rule 55) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

As shown in Table 7, ROC and NO_X emissions generated during both phases would not exceed 25 pounds per day. As discussed previously, although sediment management activities under the proposed project could occur each year, air pollutant emissions would only occur for a short period of time, including up to 17 days during Phase 1 and 16 days during Phase 2; therefore, project emissions are compared to VCPACD thresholds for project emissions. As noted earlier under *Air Pollutant Emission Thresholds*, the VCAPCD's 25 pounds per day thresholds for ROC and NO_X do not apply to project emissions because such emissions are temporary. Nonetheless, for comparison, the VCAPCD recommends mitigation if ROC or NO_X emissions exceed 25 pounds per day during project activities. The proposed project would not exceed this threshold.

As discussed in the introduction to this impact analysis, as a worst-case scenario for air quality emissions, it was assumed that the project's entire 6-acre sediment management area, including 1.3 acres under Phase 1 and an additional 4.7 acres under Phase 2, would be addressed in the same year, with Phase 2 implemented immediately after Phase 1. Additionally, it is assumed that the same level of effort and associated air quality emissions would occur each time that Phase 1 and/or Phase 2 sediment management activities are implemented. Therefore, the calculations presented above for the initial year of the project are also applicable to following years. As shown above, potential impacts associated with these emissions would be less than significant. Therefore, the project's air quality impacts associated with criteria pollutants would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups are considered particularly sensitive to air pollution; these groups include children, the elderly, and people with health problems. Therefore, the majority of sensitive receptor locations for air quality contaminants are schools, hospitals, and residences (VCAPCD 2003). There are no sensitive receptors in the immediate vicinity of the project site. The closest receptor is a single-family residence approximately 3,000 feet (0.6 mile) northwest of the site.

Project activities would result in temporary emissions of diesel particulate matter (DPM), which is a toxic air contaminant (TAC), from the exhaust of off-road, heavy-duty diesel equipment used for project activities. However, due to the temporary nature of project activities and the distance between the project site and the nearest sensitive receptor, the project would not expose sensitive receptors to substantial TAC concentrations. In addition, no CO hotspots would occur as a result of the project because the project site is in a rural location with infrequent vehicle traffic. Therefore, the proposed project would not expose sensitive receptors to substantial CO concentrations.

Project ground-disturbing activities would have the potential to release *Coccidioides immitis* spores. However, the population of Ventura County has been and would continue to be exposed to Valley Fever from agricultural and ground-disturbing activities, such as construction, occurring throughout the region. In addition, substantial increases in the number of reported cases of Valley Fever tend to occur only after major ground-disturbing events such as the 1994 Northridge earthquake (VCAPCD 2003). Implementation of the project would not result in comparable major ground disturbance during the earthwork phase, and compliance with VCAPCD Rule 55 (Fugitive Dust) would limit the number of spores released during ground disturbance. The project would not involve grading of previously undisturbed soils. In addition, the project does not include special events (such as fairs or concerts) or motorized activities that would result in substantial ground disturbance during operation. In addition, the project activities would be removing sediment inundated with water. Thus, it is unlikely that spores would mobilize from wet soil because the water would minimize the amount of soil disturbed and released into the air. Therefore, per VCAPCD guidance, project activities would not result in a substantial increase in entrained fungal spores that cause Valley Fever above existing background levels.

The proposed project would not expose sensitive receptors to substantial pollutant concentrations, and potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Based on the Guidelines, a project may have a significant impact if it would generate an objectionable odor to a degree that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or to the public, or which would endanger the comfort, repose, health, or safety of any such persons or the public, or which would cause, or have a natural tendency to cause, injury or damage to business or property. During proposed project activities, heavy equipment and vehicles would be used and could emit odors associated with vehicle and engine exhaust and during idling. However, such odors would be intermittent and temporary and would cease upon the completion of sediment management activities under Phase 1 and Phase 2. Furthermore, odors disperse with distance and, due to the distance between project activities and the nearest sensitive receptor of approximately 3,000 feet (approximately 0.6 mile), sensitive receptors would not be affected by odors from the project. Overall, project activities would not generate other emissions, such as those leading to odors, affecting a substantial number of people. No impact would occur.

NO IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. 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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	■	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	■	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

A Biological Resources Assessment (BRA) was completed for Phase 1 of the proposed project and is documented in the BRA Report provided as Appendix B to this IS-MND. The BRA Report supports permitting and implementation of Phase 1 of the project, for the initial 1.3-acre sediment management event. An expanded BRA will be conducted to inform permitting and implementation of Phase 2, to address the 4.7-acre expansion to the initial Phase 1 sediment management area, ultimately addressing the project's full potential 6-acre sediment management area. The analysis provided below identifies and characterizes potential impacts to natural resources associated with the combined 6-acre sediment management area, to facilitate environmental compliance for CEQA purposes. As noted, prior to the implementation of Phase 2, which will include regulatory permitting for the 4.7-acre expansion under Phase 2, an expanded BRA would be conducted to support regulatory permitting and project implementation. The analysis provided below incorporates the BRA Report by reference, as applicable to Phase 1 activities, and includes analysis of the project's full potential 6-acre sediment management area, for impacts to natural resources.

Regulatory Setting

This section provides a general summary of the applicable federal, state, and local regulations related to biological resources that could occur within the project study area. Regulated or sensitive biological resources considered and evaluated in this IS-MND include special status plant and wildlife species, bird nests, sensitive plant communities, jurisdictional waters and wetlands, and wildlife movement corridors.

Federal

The federal Endangered Species Act (ESA) was passed by Congress in 1973 to protect and recover imperiled species and the habitat upon which they depend. The lead federal agencies for implementing ESA are the USFWS and the NMFS. Section 9 of the ESA prohibits the "take" of species listed by USFWS and NMFS as threatened or endangered. In addition to the ESA, the Bald and Golden Eagle Protection Act prohibits take of bald or golden eagles, including their nests and eggs, and the Migratory Bird Treaty Act (MBTA) prohibits take, including killing, capturing, selling, trading, and transport, of protected migratory bird species.

The USACE and the USEPA regulate the discharge of dredge or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). The term "discharge of dredged material" means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States. Section 404 (f)(1) states maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures qualify for exemption of permit requirements. Maintenance does not include any modifications changing the character, scope, or size of the original fill design. Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.

The EPA and the California State Water Resources Control Board (SWRCB) regulate surface water quality in waters of the United States under Section 401 of the CWA. The objective is to restore and maintain the chemical, physical and biological integrity of the Nation's waters. Clean Water Act Section 401 states before issuing a license or permit resulting in any discharge to waters of the United States, an applicant for a federal permit or license must obtain a certification noting the discharge is consistent with the CWA from the EPA/Tribe/State where the proposed project is located, including attainment of applicable water quality standards is required.

State

The CESA protects native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline. The CDFW may authorize the take of any such species if certain conditions are met. Incidental take permits (ITPs) can be authorized under Section 2081(b) of the Fish and Game Code (CFGC), which allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if take is incidental to otherwise lawful activities. Section of the CFGC designate fully protected species for which no take authorization can be provided, except under special circumstances. Fully protected species sections include 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish).

In addition to CESA, several section of the CFGC provide varying levels of protection for species. Section 3503 of the CFGC generally protects birds, including their nests and eggs, against take, possession, or destruction; Section 3503.5 of the CFGC specifically protects birds of prey, including their nests and eggs against take, possession, or destruction; and Section 3515 of the CFGC incorporates restrictions imposed by the MBTA with respect to migratory birds (which consists of most native bird species). Section 5901 provides for the protection of fish by prohibiting the construction of any device in a stream that would prevent, impede, or tend to prevent or impede, the passing of fish up and down stream. Section 5931 requires the furnishing a suitable fish passage in the event movement up and down stream may be impeded by a device constructed in a stream. California Fish and Game Code Section 5937 further provides for the protection of fish by requiring sufficient flows of water to pass over, around, or through a dam so as to keep in good condition any fish that may exist below the structure.

California Fish and Game Code Section 1600 et. seq. requires all diversions, obstructions, or changes to the natural flow of bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of the CDFW and require preparation of a Lake or Streambed Alteration Agreement (LSA). If work is necessary to protect life or property; or immediate repairs to public service facilities are necessary to maintain service as a result of a disaster in an area in which the Governor has proclaimed a state of emergency an emergency notification must be submitted in writing within 14 days of beginning emergency project/work.

The SWRCB and local Los Angeles Region RWQCB have jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. Procedures for defining RWQCB jurisdiction pursuant to the SWRCB’s State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State went into effect May 28, 2020.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United’s activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For biological resources, this includes the Ventura County General Plan (County of Ventura 2020), which includes policies for the protection of biological resources, as well as the Ventura County Tree Protection Ordinance, and the Habitat Connectivity and Wildlife Ordinance.

The Ventura County Watershed Protection District (VCWPD) holds authority over its jurisdictional channels. The primary ordinance establishing VCWPD authority and the requirements to obtain permits for any encroachment into VCWPD jurisdictional channels, including right of way, is Ventura County Watershed Protection Ordinance WP-2. Red-line channels are those where the VCWPD has jurisdiction over and a watercourse or encroachment permit is required for work affecting the bed, banks and overflow areas of VCWPD jurisdictional red line channels. Government Code 53091 exempts the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, from the building and zoning ordinances of a county or city. The project site within the Santa Clara River is a jurisdictional channel within VCWPD's "Zone 2" and is therefore subject to a watercourse permit approval from VCWPD.

Environmental Setting

The Santa Clara River is an episodic system in which winter storms typically scour out vegetation that fills back in during lower flows through the summer and fall. During the field surveys in January and February 2021, vegetation communities were mapped to characterize the existing environmental conditions. The vegetation communities summarized below are the dominant community types observed within the study area. Open water accounted for much of the study area, and disturbed/developed areas were present around the Freeman Diversion structure. Vegetation communities and land cover types present include arroyo willow thickets, eucalyptus groves, cattail marshes, and sandbars.

The study area encompasses a portion of the Santa Clara River immediately upstream of the Facility and is mostly characterized by the active riverbed. The dominant vegetation and land cover types in the study area consist of arroyo willow thickets, eucalyptus groves, cattail marshes, sandbars, and open water, as summarized below.

- **Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance).** This alliance typically occurs along stream banks and benches, slope seeps, and stringers along drainages from 0 to 2,179 meters in elevation. The community is dominated by arroyo willow (*Salix lasiolepis*) with over 50 percent relative cover in the tree or shrub layer. Co-dominant species include Fremont cottonwood (*Populus fremontii*), giant reed (*Arundo donax*), and mulefat (*Baccharis salicifolia*) (Sawyer et al. 2009). This vegetation community is ranked G4S4 and is considered a CDFW sensitive natural community (CDFW 2020).
- **Eucalyptus Groves (*Eucalyptus globulus* Semi-Natural Alliance).** This woodland semi-natural alliance is found planted as trees, groves, and windbreaks, as well as in settings where it has become naturalized on uplands or bottomlands and adjacent to stream courses, lakes, or levees from 0 to 1,900 meters in elevation. Within the study area, this alliance is dominated by blue gum eucalyptus (Eucalyptus globulus), being the sole tree species, and occurs in uplands along the southern edge of the study area. This grove was partially burned in a fire in October of 2019 and has since regenerated. The herbaceous layer is sparse.
- **Cattail Marshes (*Typha sp*. Herbaceous Alliance).** This herbaceous alliance is found in semi-permanently flooded freshwater or brackish marshes with clayey or silty soils up to 350 meters in elevation. The community is dominated by cattails (*Typha sp*.), with one or more cattail species having over 50 percent cover in the herbaceous layer. This vegetation community is ranked G5S5 and is not considered sensitive (CDFW 2020b).
- **Sandbars.** Within the study area, sandbars contain large areas of unvegetated mudflats with debris deposits that show evidence of flooding. In some areas the herbaceous layer is intermittent to dense, and common species include watercress (*Nasturtium officinale*),

rabbitsfoot grass, and spotted ladysthumb (*Persicaria maculata*). No tree layer is present, and the shrub layer is intermittent and dominated by arroyo willow. Sandbar willow saplings and mulefat saplings are also present.

- **Open Water.** Open water occurs within the low-flow channels of the Santa Clara River as it passes through the study area and enters the Facility, the extent of which is directly influenced by the depth of the impound created by the Facility. Water also accumulates just downstream of the structure. These open water areas include the active channel within the portion of the riverbed subject to perennial flows as well as meandering low-flow channels between and around sandbars.

Open water makes up the majority land cover of the study area, however, several vegetation communities are present, as discussed above, and provide suitable habitat for many native and special status plant species.

General Wildlife

The study area provides habitat for species that commonly occur in semi-rural and rural areas around the outskirts of urban developed and agricultural lands. The habitat within the study area is adjacent to and unobstructed from the surrounding landscape including the Santa Clara River upstream of the study area, the upland area of South Mountain, and agricultural fields. Within the Santa Clara River, 22 common and special status species of fish are known to occur; 17 species are introduced and potentially invasive, including the common carp (*Cyprinus carpio*), Owens sucker (*Catostomus fumeiventris*), Owens and Santa Ana sucker hybrids (*C. fumeiventris* + *C. santaanae*), prickly sculpin (*Cottus asper*), crappie (*Pomoxis* sp.), mosquito fish (*Gambusia affinis*), fathead minnow (*Pimpephales promelas*), goldfish (*Carassius auratus*), largemouth bass (*Micropterus salmoides*), brown bullhead (*Ameiurus nebulosus*), black bullhead (*A. melas*), bullhead channel catfish (*Ictalurus punctatus*), green sunfish (*Lepomis cyanellus*), threadfin shad (*Dorosoma petenense*), Mississippi silverside (*Menidia beryllina*), striped mullet (*Mugil cephalus*), and Shimofuri goby (*Tridentiger bifasciatus*) (United 2020).

Of the seven native[3] fish species known to occur in the Santa Clara River, five are known to occur in the study area, four of which have special status: arroyo chub (*Gila orcutti*), Santa Ana sucker (*Catostomus santaanae),* Pacific lamprey (*Entosphenus tridentatus*), and steelhead (including the non-special status resident lifeform, rainbow trout). The partially armored stickleback (*Gasterosteus microcephalus*) occurs in the study area and does not have special status. Tidewater goby (*Eucyclogobius newberryi*) and unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) have special status; however, these species are not known to occur in the study area.

Many commonly occurring reptile and amphibian species are found in both upland and riparian habitats of the study area, while others are restricted somewhat to riparian corridors and aquatic habitats. Additionally, several highly aquatic non-native reptiles and amphibians have been introduced to the Santa Clara River watershed such as bullfrog (*Lithobates catesbeiana*) and red eared slider (*Trachemys scripta elegans*) (United 2020). Bird and mammal species are often mobile and widely dispersed but may have specific habitat or resource preferences such as those found within the study area. A list of wildlife species observed within the study area during the January 21 and February 8 field surveys is provided in the BRA Report included as Appendix B.

3 While native to the southern California region, arroyo chub is considered introduced to the Santa Clara River (Moyle 2002) and Santa Ana sucker are listed as Threatened under the federal ESA only in the Los Angeles Basin (USFWS 2021).

Special Status Species

The natural disturbance to the project area caused by recurrent scour and deposition events during high-flow rain events, coupled with the inundation of the project area with sediment, generally result in low potential for special status species to occur in the project area. During the field survey no special status federal or state listed species were observed or otherwise detected in the study area. Based on the investigation and analysis included in the BRA Report provided as Appendix B, a total of 39 special status plant species were identified, one of which has moderate potential to occur, the white rabbit-tobacco (*Pseudognaphalium leucocephalum*), California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 2B.2. This species occurs in chaparral, woodland, coastal scrub, and riparian woodlands communities on sandy or gravelly benches, dry stream bottoms, and canyon bottoms at elevations of under 500 meters (CNPS 2021). The project area is approximately two miles downstream of a known population tracked in the CNDDB (from 2015), and suitable riparian habitat and substrates are present. However, the species was not observed during rare plant surveys conducted in May 2021.

A total of 26 special status wildlife species were identified in the literature review for the BRA, 14 of which have either moderate or high potential to occur or are present in the study area. The following nine special status wildlife species **are present** in the study area:

- Arroyo chub (*Gila orcutti*): State Species of Special Concern
- Santa Ana sucker (*Catostomus santaanae*): Federally Threatened
- Pacific lamprey (*Entosphenus tridentatus*): State Species of Special Concern
- Southern California steelhead (*Oncorhynchus mykiss irideus* pop. 10): Federally Endangered
- Western pond turtle (*Emys marmorata*): State Species of Special Concern
- Two-striped gartersnake (*Thamnophis hammondii*): State Species of Special Concern
- Yellow warbler (*Setophaga petechia*): State Species of Special Concern
- Yellow-breasted Chat (*Icteria virens*): State Species of Special Concern
- Least Bell's vireo (*Vireo bellii pusillus*): Federally Endangered, State Endangered

Arroyo chub, Santa Ana sucker, Pacific lamprey, and steelhead are known to occur in the Santa Clara River and have been documented in the study area. In particular, steelhead are seasonally present in the study area and are expected to occur between January and May, but may be present from June through December.

The study area also contains suitable habitat for western pond turtle and two-striped gartersnake. Both species have been documented in the study area.

The study area contains both suitable nesting and foraging habitat for yellow warbler, yellow-breasted chat, and least Bell's vireo. All three species have been documented within the study area.

Four special status wildlife species have **high potential** to occur in the study area:

- Coastal whiptail (*Aspidoscelis tigris stejnegeri*): State Species of Special Concern
- Coast horned lizard (*Phrynosoma blainvillii*): State Species of Special Concern
- South coast gartersnake (*Thamnophis sirtalis* pop. 1): State Species of Special Concern
- Southwestern willow flycatcher (*Empidonax traillii extimus*): Federally Endangered, State Endangered

The study area contains potentially suitable habitat for coastal whiptail, coast horned lizard, and south coast garter snake. All three reptile species have been documented within five miles of the study area. The study area contains suitable foraging habitat for southwestern willow flycatcher but lacks suitable nesting habitat for the species. Southwestern willow flycatcher has been documented in the Santa Clara River within one mile of the study area.

One special status species has **moderate potential** to occur in the study area:

- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*): Federally Threatened, State Endangered

The study area contains potentially suitable foraging habitat for western yellow-billed cuckoo but lacks suitable nesting habitat for the species. Western yellow-billed cuckoo has not been documented near the study area.

Further discussion of federal- and State-listed and fully protected species is provided in the BRA Report included as Appendix B.

Jurisdictional Waters and Wetlands

The Santa Clara River in the study area is characterized by a wide riverbed with an active channel that winds through the study area from east to west before flowing through and over the Facility. The Santa Clara River is subject to USACE, RWQCB, and CDFW jurisdiction. The Santa Clara River contains an ordinary high-water mark, bed, bank, and channel features, as well as riparian forest community. The entire study area, including the active channel, floodplain terraces, and Freeman Diversion structure, consists of CDFW jurisdictional streambed. USACE and RWQCB wetland waters include the sandbars and other vegetated areas in the active channel, as indicated by the presence of hydrophytic vegetation, hydric soils, and hydrology indicators. Areas of open water were classified as USACE and RWQCB non-wetland waters. No isolated waters of the State are present. An ephemeral tributary enters the southern bank of the Santa Clara River east of the Freeman Diversion facilities. The confluence of the tributary and the main river is just inside the study area; the tributary itself is almost entirely outside the study area. There is no difference in vegetation communities associated with the portion of the ephemeral tributary in the study area.

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. A group of habitat linkages in an area can form a wildlife corridor network. The habitats in the link do not necessarily need to be the same as the habitats that are being linked; rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be located in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

The study area is located within a Habitat Connectivity and Wildlife Corridor in the South Coast Ecoregion which extends roughly from Point Conception to 190 miles into Baja California (South Coast Wildlands 2008). Specifically, the study area is within the Santa Monica–Sierra Madre

Connection and is one of the few coastal to inland connections remaining in the South Coast Ecoregion. This linkage connects the Santa Monica Mountains, Santa Susana Mountains, and the Sierra Madre Ranges of Los Padres National Forest. The study area is not located within any Essential Connectivity Areas (ECAs) as reported in BIOS (CDFW 2021); the nearest ECA to the study area is approximately four miles to the north.

Additionally, the Facility contains a fish passage system that facilitates the movement of steelhead upstream and downstream through this reach of the Santa Clara River. Volitional movement of upstream migrating steelhead past the Facility is directly dependent upon United's ability to operate the fish passage system.

Multiple Species Habitat Conservation Plan

United is currently preparing an MSHCP for the rehabilitation of the Freeman Diversion fish passage facility and future operations. This MSHCP is part of United's application for ITP under Section 10(a)(1)(B) of the ESA, for construction, operation, and maintenance of the Facility. United owns, operates, and maintains water facilities in a number of locations in the Santa Clara River Watershed and Oxnard Plain, including the Freeman Diversion and associated water conveyance and sediment management infrastructure. Renovation of the Freeman Diversion driven by construction of an updated fish passage facility and modifications to the associated water conveyance and sediment management infrastructure as well as diversion operations at the Freeman Diversion have the potential to result in take of federally protected species. The federal ITP would authorize incidental take of 7 species (or populations characterized as subspecies or life history strategy of a subspecies, e.g., southern California steelhead) listed as threatened or endangered under the ESA. The MSHCP provides documentation and analysis to support decisions by federal resources agencies on the issuance of ITPs. In general, an ITP would be issued based on the determination that the effects of incidental take of the covered species would be minimized and mitigated consistent with the standards in the ESA.

No other Habitat Conservation Plans, Natural Community Conservation Plans (NCCPs), or other approved local, regional, or state habitat conservation plan areas are applicable in the study area.

Impact Analysis

Implementation of the proposed project has potential to result in impacts to resources protected by federal and state regulations, and the project therefore requires consultation under the ESA and CFGC. United is preparing an ESA Section 10 MSHCP, which has not yet been approved by regulatory agencies and does not cover the sediment management activities associated with this proposed project, as analyzed herein for CEQA purposes. United is consulting with NMFS, USFWS, and CDFW to determine whether proposed project activities would affect state and federally listed species, including southern California steelhead (NMFS), Santa Ana sucker, western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's vireo (CDFW, USFWS). The project would also impact jurisdictional aquatic features regulated by the USACE, RWQCB, and CDFW, and avoidance of these areas would be infeasible due to the sediment management areas for both Phase 1 and Phase 2 being located within the Santa Clara River channel. These impacts require permits from the abovementioned agencies prior to initiating work in jurisdictional areas.

Project-specific AMMs were developed based upon the findings of analysis conducted for the BRA Report (see Appendix B), which addressed the Phase 1 and Phase 2 project areas; as discussed in the Project Description, AMMs are incorporated into the design of the proposed project and do not constitute mitigation measures. The impact analysis provided below accounts for the

implementation of all AMMs as part of the project design, and identifies project-specific mitigation measures where necessary to supplement the applicable AMMs as needed to avoid or minimize impacts to a less-than-significant level.

a. Would the project 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 Wildlife or U.S. Fish and Wildlife Service?

There are a number of sensitive or special status species in the project area, including special status plants, fish, reptiles, and nesting birds, each of which are addressed below for potential to be impacted by the proposed project.

Special Status Plants

Direct impacts to white rabbit-tobacco could result from project activities if the species is present during the time the proposed activities are performed, and if project activities subsequently result in removal of individuals from the project area. In addition to direct impacts, indirect impacts could result from reduced pollination if project activities result in a reduction of insect species following sediment management activities. The following AMMs, which would be implemented as part of the proposed project, would minimize or avoid the potential for the proposed project's sediment management activities to impact special status plants:

- AMM-1: Best Management Practices
- AMM-2: Schedule/Timing of Work
- AMM-3: Worker Environmental Awareness Training
- AMM-4: Pre-activity Surveys
- AMM-8: Biological Monitoring
- AMM-9: Invasive Species Management

Given the lack of observations of the species within the project area during botanical surveys in May 2021, the fact that the study area is regularly subject to a natural cycle of disturbance due to flood flows and associated floodplain processes, and the relatively small size of the project area in relation to potential habitat for this species within the Santa Clara River, the proposed project is not expected to cause the population of the species within the river to drop below self-sustaining levels. Therefore, potential impacts to special status plants would be less than significant.

Special Status Fish

During certain times of the year and under certain conditions, the project area contains one of the six physical and biological factors (PBFs), also referred to as Primary Constituent Elements (PCEs), that constitute steelhead critical habitat. Specifically, the project footprint includes freshwater migration corridor free of obstruction and excessive risk of predation with adequate water quantity to allow for juvenile and adult mobility, as well as cover, shelter, and holding areas for juveniles and adults, and adequate water quality to allow for survival of individuals. During excavation of the new low-flow channel under Phase 1, no features associated with critical habitat PBFs would be removed in the 1.3-acre project footprint.

Sediment management activities conducted under the proposed project would require work within the active channel of the Santa Clara River. Activities are planned to occur during the dry season

and, for the initial implementation of Phase 1, flows at the Facility ceased in July 2021 and there is a reasonable expectation that the study area will remain completely dry until winter season storms arrive (anticipated for December 2021). Cessation of flows in the river channel and dry conditions within the work area would result in no direct impacts to steelhead, lamprey, arroyo chub, and Santa Ana sucker, as well as other special status aquatic species during excavation of the new low-flow channel and activities associated with the dispersal and compaction of spoils. For project activities subsequent to the initial implementation of Phase 1, including the 4.7-acre expansion included under Phase 2, flows may be present in the river during project activities, and fish species could be directly or indirectly impacted if project activities occur when flowing water is present. If water is present in the channel at the time when project activities are planned, dewatering activities would be required to minimize the potential for impacts to fish. Dewatering activities may also result in direct impacts to fish species, due to potential stranding and relocation efforts to protect fish from possible mortality. Prior to and during dewatering activities, United Environmental Services staff or qualified biologists will enter the dewatered areas and survey for aquatic special status species (and other native species to the extent possible), in accordance with the project AMMs. The potential for dewatering to be required for Phase 2 activities will be addressed in the required regulatory agency approvals, including from the USACE, Los Angeles RWQCB, and CDFW.

Steelhead, Pacific lamprey, arroyo chub, Santa Ana sucker, and other fish species have potential to occur within and surrounding the study area; however, during Phase 1 implementation, the river channel is expected to be completely dry and these species would therefore not be present. There is no documented observation of steelhead in or near the study area during the months of September, October, or November. Excavation of the new low-flow channel would not create any conditions that could obstruct movement of fish species up or down the channel upstream of the Facility. The new low-flow channel would create a relatively direct route through the Santa Clara River that would not significantly alter or impede movement of fish species. The path of the new low-flow channel would be directly oriented at the existing fish passage facility, maintaining a direct route upstream of the Facility. As such, no direct adverse impacts to fish species would occur as a result of Phase 1. Rather, the proposed activities are expected to provide a benefit to the movement of fish species by increasing the reliability of fish passage facility operations. Conversely, if the proposed activities are left undone, continued sediment deposition upstream of the Facility could eliminate United's ability to operate the fish passage facility, thereby significantly impeding the ability of steelhead to migrate upstream past the Facility.

During excavation in support of Phase 2 sediment management activities, water may be present in the channel, necessitating flow rerouting via a screened pipe, to protect fish species from direct impacts during excavation activities. The screened pipe would be designed to avoid obstruction to movement of fish downstream; however, it would temporarily obstruct movement of fish upstream during project implementation. Following the completion of project activities, the screened pipe would be removed, allowing for the free movement of fish and aquatic species. When flows rewater the project site, the new low-flow channel would contain flow velocities, water quantity and quality, and substrate features consistent with the natural condition of the river. Components of a freshwater migration corridor associated with steelhead PBFs would be expected to return to the channel when seasonal flows resume during the next rainy season. No permanent impacts to steelhead critical habitat would occur as a result of Phase 1 or Phase 2 of the project.

United conducted an evaluation of suspended sediment concentrations in response to storm flows prior to excavating the 2019 pilot channel (as a baseline condition) and following excavation of the 2019 pilot channel, to evaluate the effects of the proposed activities on suspended sediment

concentrations in the river. The detailed analysis is included as an appendix within the Biological Resources Assessment Report (Appendix B). While the areal extent of the 2019 earthwork (0.7 acre) was smaller than that currently proposed under Phase 1 (1.3 acres), there was no significant increase in suspended sediment observed as a result of the 2019 pilot channel, relative to storm-induced conditions. The contributions of suspended sediment concentrations resulting from the proposed activities are expected to be negligible with regard to the total suspended sediment concentrations generated by natural storm-induced flows in the Santa Clara River. Increased suspended solid concentration from project activities would be a temporary indirect impact on fish species and would not be significant.

To reduce potential impacts to steelhead, project activities would only be conducted between September 15 and December 31, outside steelhead migration window and when steelhead are not expected to be present on site. Additional limitations on the timing of project activities are included in the design of the proposed project, including through the AMMs listed below to minimize or avoid the potential for impacts to special status fish species:

- AMM-1: Best Management Practices
- AMM-2: Schedule/Timing of Work
- AMM-3: Worker Environmental Awareness Training
- AMM-4: Pre-activity Surveys
- AMM-6: Species Capture and Relocation Protocol
- AMM-8: Biological Monitoring
- AMM-9: Invasive Species Management

During implementation of project activities, including AMMs including in the project design, if a rain event measuring one tenth of an inch or greater is forecasted within 72 hours of project activities, all activities in the sediment management area will cease and all equipment will be removed from the bed, bank, and channel of the Santa Clara River. Prior to and during dewatering activities, if needed prior to Phase 2 implementation, United Environmental Services staff or qualified biologists will enter the dewatered areas and survey for aquatic special status species (and other native species to the extent possible), in accordance with the AMMs listed above and included in the project design. Therefore, potential impacts to special status fish species would be less than significant.

Special Status Reptiles

Impacts to western pond turtle, two-striped gartersnake, south coast gartersnake, coastal whiptail, and coast horned lizard could result from project activities including equipment strikes, crushing of nests, crushing/removal of refugia, general habitat disturbance or removal, disrupting foraging or breeding activities leading to increased stress and reduced fecundity.

Of the special status reptiles with potential to occur within the project area, two-striped gartersnake and western pond turtle have been observed at the Facility and have high potential to be present during project activities. If gartersnakes or turtles are present in the project area during sediment management activities, direct impacts to individuals may occur from incidental crushing of individuals by vehicle traffic from personnel driving to and from the project area daily and while accessing the project area along the access road, during initial grading activities to prepare the site, and during general sediment excavation and dispersal of spoils. No pond turtle nesting is expected to occur during the time when project activities would be conducted, and no incidental crushing of

nests is expected. During Phase 1, the project footprint is expected to be completely dry during work activities, and no impacts to basking pond turtles are expected. Seasonal timing of project activities, according to AMM-2, *Schedule/Timing of Work*, would further facilitate avoidance of direct impact to western pond turtle nesting and breeding behavior. Pre-activity surveys (AMM-4, *Pre-activity Surveys*) would be completed prior to the start of project activities. Any special status reptile species observed would be captured and relocated out of harm's way according to AMM-6, *Species Capture and Relocation Protocol*. All project staff would be required to attend a training according to AMM-3, *Worker Environmental Awareness Training*, prior to the start of work, to ensure workers understand the requirements of project site conditions that constitute permissible working conditions, and to ensure workers are versed in the recognition of special status reptile species and understand what to do in the event of encounters.

Work activities would be limited to the active river channel, except when accessing the project footprint along the access road, and no upland refugia for special status reptile species would be impacted. Ground vibration from moving heavy equipment may impact reptiles near the project footprint; however, ground vibrations would be minimal and would only occur at potentially significant levels when heavy equipment is moving to and from the project footprint along the access road. Otherwise, equipment would be relatively stationary during excavation activities and would only make small movements at a time. Dispersal and compaction of spoils would occur within the active river channel where reptiles may occur. Ground vibration at the banks of the channel where reptiles are expected to be present would be less than significant.

If individuals occur in the project footprint when work is scheduled to occur, they would be captured and relocated to a safe location with suitable habitat upstream or downstream (AMM-6, *Species Capture and Relocation Protocol*) of the study area. Implementation of the capture and relocation protocol to move special status reptiles out of the way of project activities has the potential to result in harm to individuals from efforts to capture and handle individuals, and while temporarily housing and handling individuals during relocation. Safe handling procedures would be implemented to avoid or minimize mortality to the extent possible and no mortality is anticipated during relocation.

Implementation of the following AMMs as part of the project design would minimize or avoid the potential for impacts to affect special status reptiles:

- AMM-1: Best Management Practices
- AMM-2: Schedule/Timing of Work
- AMM-3: Worker Environmental Awareness Training
- AMM-4: Pre-activity Surveys
- AMM-5: Nesting Birds
- AMM-6: Species Capture and Relocation Protocol
- AMM-7: Noise Abatement Protocol
- AMM-8: Biological Monitoring

United Environmental Services staff or qualified biologists will be present and monitoring during all project activities for observance of special status reptiles. With the implementation of AMMs listed above and included in the project design, potential impacts to western pond turtle, two-striped gartersnake, south coast gartersnake, coastal whiptail, and coast horned lizard would be less than significant.

Special Status and Nesting Birds

Implementation of the proposed project would not result in direct impacts to special status and nesting birds primarily because sediment management activities would not occur during the bird nesting season (February 1 – September 15) or when migratory bird species would be expected to be present. Indirect impacts could affect special status and nesting birds through impacts to suitable habitat; however, such impacts are expected to be minimal because the disturbance footprint is limited to open water and sandbars within the active channel of the Santa Clara River. The proposed activities are designed to redirect the specific location and pattern of surface flow within the project site by recontouring the sediment management area to provide a more direct flow path into the Facility while preserving some of the natural sinuosity of the river channel. Certain portions of the site will undergo a habitat type conversion, such as open water converted to exposed sand/gravel bar or emergent vegetation converted to open water, and a vegetation successional stage reset. The sediment management area is entirely within the active channel of the Santa Clara River, which is normally subject to a natural cycle of disturbance (i.e., habitat-type conversion and vegetation successional stage reset) due to flood flows. The proposed project activities will result in a more frequent habitat-type conversion and successional stage reset than may otherwise occur, but the project would not result in a total loss of ecological function such as would occur if permanent development were proposed.

Emergent vegetation is expected to quickly recolonize disturbed areas following earthwork. AMM-9, *Invasive Species Management,* which would be implemented as part of the proposed project, would include the application of BMPs for invasive species management, including but not limited to equipment washing and inspections, certification that all imported and exported materials are free of invasive species, and the active removal of invasive species on an opportunistic basis. Alterations to the project site via habitat-type conversion and successional stage reset will not result in a net loss of usable wildlife habitat or the open space nature of the project site. The project site does not contain mature riparian vegetation due to the natural floodplain processes of the Santa Clara River and maintaining it as such would not constitute a significant impact. No impacts to mature riparian vegetation on the riverbanks adjacent to the project area are proposed.

During active use of heavy machinery, temporary impacts to special status birds could occur if they are present outside the nesting season due to noise and other general work disturbance resulting in avoidance behavior. Project activities involving use of heavy equipment are proposed to be limited to the period between September 15 and December 31, with the target period between September 15 and October 31 as practicable, which is outside the nesting season of February 1 through September 15. Avoidance of the nesting season is also required by AMM-1, *Best Management Practices*, which would be implemented as part of the proposed project design.

- **Least Bell's vireo** is present within and surrounding the study area. Known breeding territories and nests have been documented downstream of the project area and along the north bank of the river. No nests have been recorded or observed directly within the sediment management area; however, breeding territories are known to overlap the sediment management area. Seasonal timing of work activities (AMM-2, *Schedule/Timing of Work*) would help avoid direct impacts to least Bell's vireo. Indirect impacts to individuals could occur from the loss of foraging opportunities as a result of the project. Temporary removal of up to six acres of potential foraging habitat (the combined Phase 1 and Phase 2 sediment management areas) could impact the species from a reduction of foraging opportunities in the immediate area of the Facility. Noise, dust, and other nuisances associated with project activities could indirectly impact the species, if individuals are present during project activities. Least Bell's vireo typically make their

southward migration (i.e., leave the region) in late-July through late-September (Griffith and Griffith 2000; NatureServe 2016), and are therefore not likely to be present during project implementation between September and December. Once individuals return to the project area in the season following the completion of work, the site is expected to have returned to a condition that would again support foraging opportunities for the species.

- **Southwestern willow flycatcher** has no documented breeding territories within the sediment management areas. A breeding territory for southwestern willow flycatcher has been documented approximately 1.1 miles from the Facility but has been unoccupied since 2017. Southwestern willow flycatchers typically make their southward migration (i.e., leave the region) from July through September (Sogge et al. 2010) and are not likely to be present during the proposed time of work. Given the lack of suitable nesting habitat within the project area, and the timing of migration, direct impacts to southwestern willow flycatcher from project activities are not expected. Seasonal timing of work activities (AMM-2, *Schedule/Timing of Work*) would further avoid the potential for direct impacts to southwestern willow flycatcher. Indirect impacts are similarly not anticipated, due to the lack of nesting habitat and the timing of migration, as well as the project's anticipated lack of permanent impact to foraging habitat. Returning seasonal flows prior to the start of the next migratory and nesting season would provide suitable foraging opportunities to southwestern willow flycatcher if they occur in the study area in the future.
- **Western yellow-billed cuckoo** has not been observed near the Facility, and no breeding territories for western yellow-billed cuckoo have been documented to date within the sediment management areas. Therefore, no take of cuckoo nests or individuals is expected from project activities, due to the lack of suitable nesting habitat as well as the seasonal timing of work activities (AMM-2, *Schedule/Timing of Work*) would help avoid direct impacts to the species. Temporary removal of six acres of potential western yellow-billed cuckoo foraging habitat could result in reduced of potential breeding, nesting, and foraging opportunities in the immediate area of the Freeman Diversion, which would constitute indirect impacts. Similarly, noise, dust, or other similar disturbances could indirectly impact the species if it unexpectedly occurs during project activities. However, yellow-billed cuckoo typically make their southward migration (i.e., leave the region) between late-July and mid-September (Laymon 1998) and are not likely to be present during the proposed time of work. Further, emergent vegetation communities are expected to recolonize the project site when yellow-billed cuckoo are returning to the region.
- **Yellow-breasted chat** and **yellow warbler** are present within and surrounding the study area. Direct impacts to these species could occur if sediment management is implemented during the nesting season. Seasonal timing of work activities (AMM-2, *Schedule/Timing of Work*) would help avoid direct impacts. Temporary removal of up to six acres of yellow-breasted chat and yellow warbler foraging habitat across the combined Phase 1 and Phase 2 sediment management areas could result in indirect impacts from a reduction of potential breeding, nesting, and foraging opportunities in the immediate area of the Freeman Diversion. Noise, dust, or other similar nuisances during project activities could indirectly impact these species if present during project activities. However, yellow-breasted chat typically occupy breeding habitat between early-April and late-August (Small 1994) and yellow warbler typically occupy breeding habitat between late-March and early-October (Shuford and Gardali 2008); as such, these species are not likely to be present during project activities which are anticipated to occur between September and December. In addition, as described above, emergent vegetation communities are expected to recolonize the project site when yellow-breasted chat and yellow warbler returning to the region in the season following completion of the project.

Special status and other nesting birds could be affected by direct and indirect impacts from the proposed sediment management activities; however, due to the implementation of AMMs that are included in the design of the proposed project, and the anticipated recovery of foraging in the sediment management areas following completion of the project, potential impacts to least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, yellow-breasted chat, yellow warbler, and nesting birds would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Phase 1 of the proposed project, which would be conducted on the initial 1.3-acre sediment management area, would not result in impacts to southern riparian scrub, referred to as arroyo willow thickets. Sediment management activities would be confined to areas of open water and sandbars, and therefore would have no impacts to arroyo willow thickets.

Phase 2 of the proposed project, which would expand the initial sediment management area of 1.3 acres by an additional 4.7 acres, for a total sediment management area of up to six acres, would result in impacts to up to 1.65 acres of arroyo willow thicket. Phase 2 sediment management activities would create a vegetation successional stage reset of areas within the project footprint that are colonized with arroyo willow thickets. These arroyo willow thickets are within the active channel of the Santa Clara River and would be maintained as an early successional stage under the natural floodplain processes. Additionally, areas of the project site are expected to be naturally recolonized by arroyo willow thicket following sediment management activities; however, the frequency of successional stage reset will be artificially increased by project activities, as compared to the natural floodplain processes of the Santa Clara River. This increase will not result in a total loss of ecological function or value of the study area, but rather a shift in composition dynamically through time.

The 1.65 acres of arroyo willow thicket anticipated to be impacted during Phase 2 represents a small portion of the arroyo willow thicket community present along the Santa Clara River. Because areas of the project site would recolonize with arroyo willow thicket, including with consideration to variability between years, arroyo willow thicket would not be permanently lost as a result of the project. Implementation of the following AMMs as part of the project design would minimize or avoid the potential for impacts to arroyo willow thickets:

- AMM-1: Best Management Practices
- AMM-3: Worker Environmental Awareness Training
- AMM-8: Biological Monitoring
- AMM-9: Invasive Species Management

In addition to the AMMs listed above, which are included in the design of the proposed project, Mitigation Measure BIO-1, *Compensatory Mitigation*, would be implemented to provide habitat preservation and enhancement, thereby further reducing potential impacts to arroyo willow thickets, and maintaining the dynamic nature of the community within the project site.

Mitigation Measures

Mitigation Measure BIO-1, *Compensatory Mitigation*, presented in full below, would be implemented during Phase 2 of the proposed project to reduce potential impacts to arroyo willow thickets to a less than significant level.

BIO-1 Compensatory Mitigation

To offset the disturbance and alteration of the channel of the Santa Clara River and the sensitive natural communities present in the project area, compensatory mitigation would be provided in the form of off-site mitigation lands located at United owned parcels (APNs: 128-004-020, 129-002-006, 129-002-001) within the Santa Clara River downstream of the Freeman Diversion Facility. Mitigation lands would be preserved in perpetuity through a conservation easement at a ratio of 3:1 (mitigation: impacts), resulting in 18 acres of mitigation lands. Restoration activities may be undertaken at the off-site mitigation property as needed to ensure the site provides suitable in-kind habitat for protected resources impacted by the project. A Habitat Mitigation and Monitoring Plan will be developed to provide specific measures and success criteria for mitigation. As a component of the conservation easement, funding will be secured via a non-wasting endowment to ensure mitigation and monitoring measures are successfully implemented.

Significance After Mitigation

With the implementation of Mitigation Measure BIO-1, *Compensatory Mitigation*, potential impacts to arroyo willow thicket natural communities resulting from Phase 2 of the proposed project would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The Santa Clara River is subject to the jurisdiction of the USACE, RWQCB, and CDFW within the study area. A jurisdictional delineation documented the location and extent of non-wetland waters of the U.S., wetland waters of the U.S., and waters of the U.S., as well as CDFW jurisdictional streambed. Jurisdictional waters in the project area are summarized below in Table 8.

Table 8 Summary of Jurisdictional Waters within the Study Area

	USACE			RWQCB			CDFW
Jurisdictional Area	Non-Wetland Waters of the U.S. (acres [lin. ft.])	Wetland Waters of the U.S. (acres)	Waters of the U.S. (acres [lin. ft.])	Non-wetland Waters of the State (acres [lin. ft.])	Wetland Waters of the State (acres)	Waters of the State (acres [lin. ft.])	CDFW Jurisdictional Streambed (acres [lin. ft.])
Santa Clara River	2.95 (1,166)	4.34 (1,133)	7.29 (1,166)	2.95 (1,166)	4.34 (1,133)	7.29 (1,166)	9.91 (1,192)

Phase 1 of the proposed project would result in temporary direct impacts to 1.3 acres of waters of the U.S. and the CDFW jurisdictional streambed. Within the 1.3-acre project footprint, 0.7 acre of open water and 0.6 acre of river channel sandbar would be temporarily directly impacted. These

temporary impacts are similar to those expected under the natural disturbance regime of the active Santa Clara River channel (i.e., scour, deposition, vegetational community successional reset).

Phase 2 of the proposed project would result in direct impacts to 2.28 acres of open waters and 4.11 acres of wetland waters of the U.S. and State. Phase 2 of the proposed project would result in repeated temporary impacts similar to those expected under the natural disturbance regime, though at an artificially increased frequency. Indirect impacts from project materials (e.g., stockpiled materials, project equipment, and trash) stored on the Facility site staging area could adversely affect water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) if runoff were to occur during storm events. Implementation of the proposed project would include AMMs to avoid or minimize potential indirect impacts to water quality within the potentially jurisdictional waters. Specifically, the following AMMs, implemented as part of the proposed project design, would address potential impacts to jurisdictional waters:

- AMM-1: Best Management Practices
- AMM-2: Schedule/Timing of Work
- AMM-3: Worker Environmental Awareness Training

With the implementation of these AMMs, included as project design features, potential impacts of the proposed project to jurisdictional waters would be reduced. In addition, Mitigation Measure BIO-1, *Compensatory Mitigation,* identified under impact threshold (a) above, would also be implemented to address this potential impact.

Mitigation Measures

Mitigation Measure BIO-1, *Compensatory Mitigation*, presented above in the discussion of significance threshold (b), would be implemented as applicable to reduce potential impacts to a less than significant level. Mitigation Measure BIO-1 is in addition to the AMMs that would be implemented as part of the proposed project design, as presented in the Project Description under "Avoidance and Minimization Measures", and including AMMs -1, -2, and -3, as listed above.

Significance After Mitigation

With the implementation of Mitigation Measure BIO-1, *Compensatory Mitigation*, potential impacts to arroyo willow thicket natural communities resulting from Phase 2 of the proposed project would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project area is located within a known wildlife corridor that provides connectivity for wildlife between the Santa Monica Mountains, Santa Susana Mountains, and the Sierra Madre Ranges of Los Padres National Forest. Additionally, the Santa Clara River facilitates regional wildlife movement through the study area. The proposed project does not include the installation of any permanent fences or other structures that would impede wildlife movement, and the project would not permanently modify the Santa Clara River in a manner which would hinder wildlife movement or result in the loss of the open-space characteristic of the study area. The project may result in a

temporary discouragement of wildlife movement within the study area for the duration while project activities are being conducted (i.e., moving or migrating wildlife may avoid active heavy machinery); however, the Phase 1 active work period is planned for approximately two weeks (13 to 16 days) with no nighttime work and would not be a significant impact. Phase 2 activities are expected to be completed within similar work periods. Implementation of AMM-1, *Best Management Practices* and would help assure the project would be completed in a manner to avoid long-term impacts to wildlife movement corridor and implementation of AMM-2, *Schedule/Timing of Work* would help assure the project would be completed during a time when species migration is typically not occurring, further avoiding direct impacts to wildlife movement.

Sediment management activities themselves are not intended to obstruct or impede the flow of water, but rather alter the specific location and characteristics of flow to direct the thalweg of the river toward the Facility. Upon completion of project activities, during the following wet season, the study area would become inundated with new flows and aquatic species could move freely within and through the project area.

The project may result in a temporary discouragement of wildlife movement within the study area while project activities are being conducted (i.e., moving or migrating wildlife may avoid active heavy machinery). AMMs included in the design of the proposed project would include BMPs to minimize or avoid such indirect disturbances, including through the following:

- AMM-1: Best Management Practices
- AMM-2: Schedule/Timing of Work

Overall, the proposed project is not expected to substantially hinder wildlife movement in the project area, due to no new development or permanent installations being proposed, as well as the implementation of AMMs to avoid indirect temporary disturbances. Therefore, potential impacts of the project to wildlife movement and migration would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed under “Background and Purpose” in the Project Description, United is a special district established in accordance with California Water Code Section 74000 et seq. that is authorized to, among other things, acquire water rights, build facilities to store and recharge water, and construct wells and pipelines for water deliveries. Because United is a local agency that provides water and constructs and maintains water delivery infrastructure, some of its activities are exempt from plans, policies, and regulations administered by local municipalities. Given these regulatory limitations, not all elements of the project evaluated in this IS-MND are subject to local plans, policies, and regulations, and as a matter of law, this IS-MND need not consider all such plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United does reference, describe, and address in this IS-MND those local land use plans, policies, and regulations that may otherwise be relevant to the proposed project.

For the purposes of this significance criterion, such plans and policies include the Ventura County Tree Protection Ordinance, and the Ventura County General Plan. The Ventura County Tree Protection Ordinance requires a permit be obtained for the removal, alteration, or encroachment into the tree protection zone (TPZ) of a protected tree. No trees protected by the Ordinance were

identified within the project area; therefore, the proposed project would not conflict with the Ventura County Tree Protection Ordinance.

The Ventura County General Plan contains policies regarding locally important species, wildlife movement, and wetland habitats. As discussed in the impact analyses provided above, AMMs included in the design of the proposed project would avoid or minimize the potential for the project to result in impacts to locally important species, and impacts to wildlife movement from the proposed project would be less than significant. In addition, the proposed project does not involve discretionary development and therefore the County's wetland policy is not applicable. Therefore, the proposed project would not conflict with these local policies, and no impact would occur.

NO IMPACT

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The proposed project does not include any activities located within an adopted HCP, NCCP, or other currently approved local, regional, or state habitat conservation plan areas. The Freeman Diversion MSHCP is in preparation by United and is part of United's application for an ITP for federally listed species. The Freeman Diversion MSHCP is not anticipated to be approved before completion of the proposed project; however, the proposed project would not conflict with the provisions of the MSHCP if it were approved earlier than anticipated. Therefore, the proposed project would have no impact to an HCP, NCCP, or other approved local, regional, or state habitat conservation plans, and no impact would occur.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

This section provides an analysis of the proposed project's potential impacts to cultural resources, including historical resources, archaeological resources, and human remains.

Regulatory Setting

Federal

Federal protection of resources is legislated by (a) the National Historic Preservation Act (NHPA) of 1966 as amended by 16 U.S. Code 470, (b) the Archaeological Resource Protection Act of 1979, and (c) the Advisory Council on Historical Preservation. These laws and organizations maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and accompanying regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the main federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed in, or may be eligible, for listing in the NRHP. The NRHP is the nation's master inventory of known historic resources. It is administered by the National Park Service (NPS) and includes listings of buildings, structures, sites, objects, and districts that are considered significant at the national, state, or local level. The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1) The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
2) It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3) It possesses at least one of the following characteristics:

   Criterion A: Association with events that have made a significant contribution to the broad patterns of history (events).

   Criterion B: Association with the lives of persons significant in the past (persons).

Criterion C: Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).

Criterion D: Has yielded, or may be likely to yield, information important to prehistory or history (information potential).

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in or eligible for listing in the NRHP must be evaluated under CEQA.

The National Register Bulletin also provides guidance in the evaluation of archaeological site significance. If a heritage property cannot be placed within a particular theme or time period, and thereby lacks "focus," it is considered not eligible for the NRHP. In further expanding upon the generalized NRHP criteria, evaluation standards for linear features (such as roads, trails, fence lines, railroads, ditches, flumes, etc.) are considered in terms of four related criteria that account for specific elements that define engineering and construction methods of linear features: (1) size and length; (2) presence of distinctive engineering features and associated properties; (3) structural integrity; and (4) setting. The highest probability for NRHP eligibility exists within the intact, longer segments, where multiple criteria coincide.

State

All properties in California that are listed in or formally determined eligible for listing in the NRHP are automatically listed in the California Register of Historical Resources (CRHR). The CRHR is a listing of California resources that are significant within the context of California's history. The CRHR is a statewide program of similar scope and with similar criteria for inclusion as those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historic resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are similar to the NRHP criteria and are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria:

1) Is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2) Is associated with the lives of persons important to local, California, or national history.
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
4) Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a resource must meet one of the above criteria and retain integrity. The CRHR uses the same seven aspects of integrity as the NRHP.

In addition, CEQA requires public agencies to consider the effects of their actions on "historical resources," "unique archaeological resources," and "tribal cultural resources." Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." PRC Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources.

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
2. Is associated with the lives of persons important in our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
4. Has yielded, or may be likely to yield, information important in prehistory or history

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For cultural resources, this includes the Ventura County General Plan (County of Ventura 2020), which includes policies for the protection of cultural resources, as discussed below.

The following policies from Section 6.4 of the Ventura County General Plan (County of Ventura 2020) for the protection of cultural, historical, and archaeological resources may be relevant to the proposed project:

- **Policy COS-4.2 (a): Cooperation for Cultural, Historical, Paleontological, and Archaeological Resource Preservation.** The County shall cooperate with cities, special districts, appropriate organizations and private landowners to identify known cultural, archaeological, historical, and paleontological resources to preserve identified resources within the county […]
- **Policy COS-4.4: Discretionary Development and Tribal, Cultural, Historical, Paleontological, and Archaeological Resource Preservation.** The County shall require that all discretionary development projects be assessed for potential tribal, cultural, historical, paleontological, and archaeological resources by a qualified professional and shall be designed to protect existing resources. Whenever possible, significant impacts shall be reduced to a less than significant level through the application of mitigation and/or extraction of maximum recoverable data. Priority shall be given to measures that avoid resources.

In addition, the following policies from Section 1.8, "Paleontological and Cultural Resources" of the Ventura County General Plan (County of Ventura 2020) may be relevant to the proposed project:

- Discretionary developments shall be assessed for potential paleontological and cultural resource impacts, except when exempt from such requirements by CEQA. Such assessments shall be incorporated into a countywide paleontological and cultural resource data base.
- Discretionary development shall be designed or re-designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical or paleontological consultants, depending on the type of resource in question.
- Mitigation of significant impacts on cultural or paleontological resources shall follow the Guidelines of the State Office of Historic Preservation, the State Native American Heritage Commission, and shall be performed in consultation with professionals in their respective areas of expertise.
- Confidentiality regarding locations of archaeological sites throughout the county shall be maintained in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- During environmental review of discretionary development, the reviewing agency shall be responsible for identifying sites having potential archaeological, architectural, or historical significance and this information shall be provided to the County Cultural Heritage Board for evaluation.
- The Building and Safety Division shall utilize the State Historic Building Code for preserving historic sites in the county.

Environmental Setting

In January 2021, GEI Consultants, Inc. conducted a cultural resources assessment for the Freeman Diversion Fish Passage Facility Geotechnical Exploration Project, which is overlaps the proposed project. The Geotechnical Exploration Project included an analysis of the entire current study area; therefore, the analysis prepared for the Geotechnical Exploration Project is incorporated by reference as applicable to the proposed project. The aforementioned analysis included: a records search of the California Historical Resources Information System at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton; a Native American

Heritage Commission (NAHC) Sacred Lands File (SLF) search; and a pedestrian field survey of the current project site (United 2021). The SCCIC records search was performed to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. The SCCIC records search identified two cultural resources studies conducted within a 0.5-mile radius of the project site, both of which evaluated portions of the project site. The SCCIC search did not identify any previously recorded cultural resources within the project site or a 0.5-mile radius surrounding the project site (United 2021). Additionally, the field survey conducted by the GEI archaeologist did not identify any cultural resources within the project site (United 2021).

Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Rincon reviewed historical aerials and topographic maps from HistoricAerials.com to identify potential cultural resource concerns on the project site (NETR Online 2021). Historical topographic maps from 1903 to 1942 depict the project site as undeveloped land with the Santa Clara River watershed running through the project site (NETR Online 2021). Topographic maps from 1947 to 1964 show changes to the Santa Clara River watershed with the riverbed depicted by 1980. The Facility was built in 1991; however, it does not appear on topographic maps until 2015 (NETR Online 2021). Aerial imagery from 1947 to 1980 depict changes to the Santa Clara River alignment from its current condition by 2005 (NETR Online 2021).

The Facility was built in 1991 and is less than 45 years old; therefore, the Facility does not meet the age requirements to be evaluated as a historic-aged resource. The Facility operation, maintenance, and sediment management do not take place within or near a previously recorded historical resource. As such, no historical resources are recorded within the project site and no impact to historical resources would occur due to the project.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The project site has been disturbed by the previous development of the Facility. No previously recorded archaeological resources are present within the project site or a 0.5-mile radius surrounding the project site. The field survey conducted by GEI Consultants for the Geotechnical Investigation Project identified two shell pieces and two pieces of possible lithic debitage (United 2021). It was determined that neither of the items identified qualified as cultural materials (United 2021).

The project site lies within the Santa Clara River watershed, which may have been ideal for historic or prehistoric sites due to the use of waterways for food resources. No archaeological resources have been previously recorded within the project site; however, unanticipated discoveries are always a possibility during ground disturbance. Therefore, mitigation measures are recommended to address the unanticipated discovery of cultural resources during implementation of Phase 1 or Phase 2 of the proposed project. With implementation of the mitigation measure provided below, potential impacts to unknown archaeological resources would less than significant.

Mitigation Measures

The following mitigation measure, Mitigation Measure CR-1, *Unanticipated Archaeological Resources,* would be implemented during all ground-disturbing activities associated with the proposed project to reduce impacts to a less than significant level.

CR-1 Unanticipated Archaeological Resources

In the unlikely event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the find is prehistoric, then a local Native American representative shall also be contacted to participate in the evaluation of the find. Impacts to the find shall be avoided to the extent feasible; methods of avoidance may include, but shall not be limited to, capping or fencing, or project redesign. If necessary, the archaeologist may be required to prepare a treatment plan for archaeological testing in consultation with the local Native American representative. If the discovery proves to be eligible for the CRHR and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

Significance After Mitigation

Implementation of Mitigation Measure CR-1 would reduce impacts associated with the unanticipated find of archaeological resources to a less than significant level by providing compliance with regulatory requirements related to the analysis and handling of archaeological resources. Potential impacts would be less than significant after mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

No cemeteries are known to exist within the project site or are anticipated to be encountered within the project site, which consists primarily of the Santa Clara River channel. Although unlikely, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are unexpectedly found during any activities, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of the origin and disposition of the remains, pursuant to PRC Section 5097.98. Therefore, in the event of an unanticipated discovery of human remains during implementation of the proposed project, the Ventura County Coroner would be notified immediately. If the human remains are determined by the Ventura County Coroner to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD will complete the inspection of the site within 48 hours of being granted access to the site. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	■

Regulatory Setting

Federal

USEPA's *Construction Equipment Fuel Efficiency Standard* minimizes inefficient, wasteful, or unnecessary fuel consumption.

State

California Code of Regulations Title 13 Sections 2449 and 2485 prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes to minimize unnecessary fuel consumption.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. The Ventura County General Plan (County of Ventura 2020) includes energy policies, however none are applicable to the proposed project sediment management activities.

Environmental Setting

As a state, California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration [USEIA] 2021). Project activities would not require the consumption of electricity or natural gas beyond that currently used for Facility operations; therefore, this analysis focuses on the consumption of fuels from heavy-duty equipment and trucks. Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with

California being one of the top petroleum-producing states in the nation (California Energy Commission [CEC] 2021). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 15.4 billion gallons sold in 2019 (CEC 2020). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2020). Table 9 summarizes the petroleum fuel consumption for Ventura County, in which the project site would be located, as compared to statewide consumption.

Table 9 2019 Annual Gasoline and Diesel Consumption

Fuel Type	Ventura County (millions of gallons)	California (millions of gallons)	Proportion of Statewide Consumption[1]
Gasoline	329	15,365	2.1%
Diesel	35	1,756	2.0%

[1] For reference, the population of Ventura County (835,223 persons) is approximately 2.1 percent of the population of California (39,466,855 persons) (California Department of Finance [CDF] 2021).

Source: CEC 2020

Impact Analysis

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Project activities would use nonrenewable energy resources during both Phase 1 and Phase 2. As discussed in the approach to the impact analysis in Section 3, *Air Quality*, the worst-case scenario for air quality emissions would occur if sediment were transported by truck for off-site disposal and therefore, although the project proposes to balance all excavated sediment across the project's combined 6-acre sediment management area (including 1.3 acres under Phase 1 and 4.7 acres under Phase 2), air quality emissions were calculated for the truck trips that would be required to haul a portion of the project's sediment spoils to a landfill for off-site disposal. The calculations also conservatively assumed that if required, all off-site disposal activities would occur during Phase 1. During project activities for both Phase 1 and Phase 2, energy would be consumed in the form of petroleum-based fuels used to power off-road heavy-duty vehicles and equipment on the project site, worker travel to and from the project site, and vehicles used to deliver materials to the site. Information provided by United staff and the CalEEMod outputs for the air pollutant and GHG emissions modeling (Appendix A) were used to estimate energy consumption associated with the proposed project. As shown in Table 10, Phase 1 would require approximately 103 gallons of gasoline and approximately 2,606 gallons of diesel fuel, which would provide for the excavation of up to 4,700 cubic yards of sediment and the hauling by truck for off-site landfill disposal of up to 2,010 cubic yards of sediment spoils. Phase 2 would require approximately 103 gallons of gasoline

and approximately 1,936 gallons of diesel fuel, which would provide for the excavation and on-site redistribution and recontouring of up to 8,000 cubic yards of sediment, with no off-site disposal of sediment spoils. These project energy estimates are conservative because they assume that motorized project equipment would be used during every day of the project.

Table 10 Estimated Fuel Consumption during Project Activities

	Fuel Consumption (gallons)			
	Gasoline		Diesel	
Source	Phase 1	Phase 2	Phase 1	Phase 2
Equipment & Hauling Trips	N/A		2,606	1,936
Worker Vehicle Trips	103	103	N/A	
Total	**206**		**4,542**	

N/A = not applicable

See Appendix C for energy calculation sheets.

Energy use during project activities would be temporary in nature, and heavy-duty equipment used would be typical of similar-sized projects in the region. In addition, project contractors and United staff would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Heavy-duty equipment would be subject to the USEPA *Construction Equipment Fuel Efficiency Standard*, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These practices would result in efficient use of energy necessary to complete project activities. In the interest of cost-efficiency, project contractors and United staff also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project activities would not involve the inefficient, wasteful, and unnecessary use of energy, and impacts related to energy consumption would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

United has not adopted specific renewable energy or energy efficiency plans. Energy-related plans and policies adopted by the County of Ventura would not be applicable to the proposed project. Therefore, no impact associated with conflicting with a renewable energy or energy efficiency plan would occur.

NO IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

This section describes current conditions relative to geology and soils within the project area, including a description of soils and existing geologic and seismic conditions, analysis of environmental impacts, and recommendations for mitigation measures for any significant or potentially significant impacts. The section also includes a discussion of paleontological resources, which include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains that are more than 5,000 years old and occur mainly in Pleistocene or older sedimentary rock units.

Regulatory Setting

Federal

In October 1977, the United States Congress passed the Earthquake Hazards Reduction Act to reduce the risks to life and property from future earthquakes in the United States. To accomplish this, the act established the National Earthquake Hazards Reduction Program (NEHRP). The mission of NEHRP includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns several planning, coordinating, and reporting responsibilities.

State

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (PRC Section 2621-2630) intends to reduce the risk to life and property from surface fault rupture during earthquakes by regulating construction in active fault corridors, and by prohibiting the location of most types of structures intended for human occupancy across the traces of active faults. The act defines criteria for identifying active faults, giving legal support to terms such as active and inactive, and establishes a process for reviewing building proposals in Earthquake Fault Zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across these zones is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for purposes of the act as within the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (California DOC 2007). Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. The law addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The Seismic Hazards Mapping Act of 1990 (PRC Section 2690–2699.6) seeks to reduce damage resulting from earthquakes. In comparison with the Alquist-Priolo Act which addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including ground shaking, liquefaction, and seismically induced landslides. The act's provisions are similar in concept to those of the Alquist-Priolo Act, wherein the State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, while cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local

regulation of development. Permits for development projects are not issued until geologic investigations have been completed and mitigation has been developed to address any issues.

With regards to paleontological resources PRC Section 5097 states "person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency having jurisdiction over the lands".

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For geology and soils, and paleontological resources, this includes policies from the Ventura County General Plan (County of Ventura 2020), as listed below.

The following policies from Section 6.5, *Soil and Mineral Resources,* of the Ventura County General Plan (County of Ventura 2020) related to geology and soils may be relevant to the proposed project:

- **Policy COS-5.1: Soil Protection.** The County shall strive to protect soil resources from erosion, contamination, and other effects that substantially reduce their value or lead to the creation of hazards.
- **Policy COS-5.2: Erosion Control.** The County shall encourage the planting of vegetation on soils exposed by grading activities, not related to agricultural production, to decrease soil erosion.

In addition, consistent with the 2015 Ventura County Multi-Hazard Mitigation Plan (County of Ventura et al. 2015), the Ventura County General Plan 2040 Update identifies policies for geologic and seismic hazards in Ventura County, which include the following areas of concern: earthquake faults; seismic hazards (liquefaction- and earthquake-induced landslides); landslides; soil erosion; expansive soils; and subsidence.

Finally, the following policies from Section 6.4 of the Ventura County General Plan (County of Ventura 2020) for the protection of paleontological resources are relevant to the proposed project:

- **Policy COS-4.2 (a): Cooperation for Cultural, Historical, Paleontological, and Archaeological Resource Preservation.** The County shall cooperate with cities, special districts, appropriate organizations and private landowners to identify known cultural, archaeological, historical, and paleontological resources to preserve identified resources within the county […]
- **Policy COS-4.4: Discretionary Development and Tribal, Cultural, Historical, Paleontological, and Archaeological Resource Preservation.** The County shall require that all discretionary development projects be assessed for potential tribal, cultural, historical, paleontological, and archaeological resources by a qualified professional and shall be designed to protect existing resources. Whenever possible, significant impacts shall be reduced to a less than significant level through the application of mitigation and/or extraction of maximum recoverable data. Priority shall be given to measures that avoid resources.

Environmental Setting

Geology and Soils

The proposed project area is located within a distinctive geologic province of California known as the Transverse Ranges. The Transverse Ranges are a complex series of east-west trending mountain ranges and valleys that strongly contrast with the northwest trend of the adjacent Coast Ranges and Peninsular Ranges. The western limit of the geomorphic province is formed by the islands of San Miguel, Santa Rosa, and Santa Cruz, while the eastern limit extends into the Mojave Desert, and includes the San Bernardino Mountains to the east of the San Andreas Fault. The province contains one of the thickest accumulations of Cenozoic Era sediments in the world. The sediments have been subjected to regional uplift, faulting, and folding. The area is considered geologically young and tectonically active (California Coastal Conservancy [CCC] 2008).

The Santa Clara River flows between the east-west trending mountains of the Transverse Ranges. The topography of the Santa Clara River Watershed is characterized by a low-lying floodplain immediately adjacent to the river, surrounded by mountainous terrain, much of which is within United States National Forest land. Long-term geologic instability in the region has resulted in exposure of many highly deformed, fractured, and faulted rock types in the Santa Clara River Watershed. The project site contains the following primary soil types: San Benito clay loam, 50 to 75 percent slopes; Major Land Resource Area 20; and sandy alluvial land (United 2021). Underlying geology of the project site includes unconsolidated surficial gravel and sand alluvial deposits (stream channel) and weakly consolidated surficial gravel alluvial terrace deposits (United 2021).

The Santa Clara River Watershed is located within the San Andreas Fault system, which forms the dynamic boundary between the Pacific and North America tectonic plates. Relative motion of the tectonic plates includes strike-slip displacement (plates sliding laterally against each other) and convergence (plates compressing against each other). There are a number of faults in this seismically active region; the Santa Clara River roughly follows the axis of a valley that is bounded by active strands of the San Cayetano Fault to the north and the Oak Ridge Fault to the south (California DOC 2015). The proposed project site on the Santa Clara River is immediately north of the Oak Ridge Fault, and within approximately five miles of the San Cayetano Fault to the north of the river. Intense seismic activity in the region is reflected in frequent ruptures along these faults. There are no Alquist-Priolo Earthquake Fault Zones within the project site (California DOC 2021). The project site is located within a liquefaction zone, as shown on the Ventura County Mapper (County of Ventura 2020). Additionally, the project site is located within an area susceptible to landslides (California DOC 2021).

Paleontological Resources

The proposed project area is located in the Transverse Range, which contains finds of many different kinds of fossil organisms (County of Ventura 2020). The western part of the Transverse Range is an area of interest for future paleontological study because of the thick, well-exposed and carefully studied geological cross-sections in this region (County of Ventura 2020). There are 316 vertebrate fossil localities that have been documented within Ventura County, according to a 2016 Paleontological Record Search through the Natural History Museum of Los Angeles (County of Ventura 2020). According to the California Department of Conservation's geologic mapping, the project area primarily consists of quaternary alluvium from the Pliocene to Holocene period, which ranges from low to high paleontological potential. Additionally, there are some areas that are

underlain by older mudstone, sandstone, and conglomerate from the Paleocene to Pleistocene periods, which are considered to have high paleontological potential.

Impact Analysis

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The Facility is not located within an Alquist-Priolo earthquake fault zone. However, there are tectonically active areas near the Facility, including the San Cayetano Fault to the north and the Oak Ridge Fault to the south. Activity along these faults in the vicinity of the Facility could result in seismic ground shaking at the project site, which could in turn result in liquefaction and lateral spreading within the Santa Clara River channel.

Implementation of the proposed project would involve activities within the Santa Clara River channel that would require workers, equipment, and machinery to temporarily be present on-site. Strong ground shaking may cause injury to workers or equipment damage if they are on site at the time. However, due to the temporary nature (i.e., short duration) of sediment management activities to be conducted under the project, it is unlikely a seismic event would occur during such activities. In addition, the proposed project would not affect existing potential for seismic activity to occur in the project area, and would not exacerbate existing conditions. Implementation of the proposed project would not result in a substantial increase in risk of loss, injury, or death resulting from earthquake-related hazards. Therefore, this potential impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Much of Ventura County is subject to seismic-related liquefaction events. As discussed in the Environmental Setting under "Liquefaction and Lateral Spreading," liquefaction occurs when soils behave like a liquid during seismic shaking and re-solidify when shaking stops; the potential for this to occur is highest in areas with high groundwater and loose, fine, sandy soils at depths of less than 50 feet. Liquefaction may also lead to lateral spreading, or the horizontal movement of soil toward an "open face," such as a streambank; the potential for lateral spreading to occur is highest in areas where there is a high groundwater table and there are relatively soft and recent alluvial deposits. The project site within the Santa Clara River channel is characterized by conditions that are conducive to liquefaction and lateral spreading in response to strong seismic events.

The proposed project would not introduce new permanent infrastructure to the project site and would not expose existing infrastructure to hazards associated with liquefaction and lateral spreading. Implementation of the project would require workers and equipment to be temporarily present within the channel during sediment removal and deposition activities, which are anticipated to occur up to once per year. However, it is unlikely that workers and equipment would be present during a liquefaction or lateral spreading event, as the area would have been cleared in response to the seismic event that would have occurred to trigger the liquefaction or lateral spreading. If a

liquefaction and/or lateral spreading event were to occur upstream of the Facility, United, as the owner and operator of the Facility, would need to conduct in-channel sediment management activities such as those included under the proposed project. The project would not alter the existing potential for seismic-related ground failure to occur; however, due to the existing potential for such hazards to occur, potential impacts associated with conducting project activities would be adverse but less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project area is also subject to existing landslide hazards associated with the surrounding hillsides. However, the proposed project activities would be limited to in-channel work, and would not include any ground-disturbing work on hillside areas, where landslide events would initiate. The project would not alter the existing potential for seismic-related ground failure, including landslides, to occur; however, due to the existing potential for such hazards to occur, potential impacts associated with conducting project activities would be adverse but less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil disturbing activities increase the rate at which soil is eroded by increasing the amount of soil exposed to wind and water erosion. Soil disturbing activities would occur each time sediment management activities are conducted, which would take place up to one time per year. During all soil disturbing activities, the proposed project would be required to implement a project-specific SWPPP, for compliance with the National Pollutant Discharge Elimination System (NPDES) program which was established under Section 402 of the Clean Water Act; see Section 10, *Hydrology and Water Quality,* for further discussion regarding required contents of a SWPPP and compliance with the NPDES program.

The NPDES program was established by the federal Clean Water Act to protect receiving waters from pollution, including as associated with erosion and sedimentation. The proposed project's SWPPP would include grading and erosion-control BMPs and specifications with standard erosion control measures (including management and structural controls) for all activities that expose soil. Implementation of SWPPP BMPs would reduce the potential for soil erosion to occur as a result of the proposed sediment removal and deposition activities, and may include the placement of velocity dissipation devices, silt fencing, storm drain inlet protection, wind erosion control, and stabilized project site entrances.

In addition to the SWPPP required for NPDES compliance, the proposed project includes AMMs that are incorporated into the project design to support and parallel the NPDES requirements for the management of soil erosion. These include: AMM-1, *Best Management Practices*, which identifies a suite of BMPs for soil and sedimentation management under AMM-1A, *General BMPs,* and AMM-1B, *Erosion Control*; AMM-2, *Schedule/Timing of Work*; and AMM-3, *Worker Environmental Awareness Training*, which specifies that a WEAT program will be conducted for all project personnel and provide instructions regarding the individual responsibilities under the Clean Water Act, the project's SWPPP, and site-specific BMPs included in the SWPPP. With project compliance with the NPDES program, and implementation of AMMs which are included as part of the project

design, the proposed project would not result in substantial soil erosion or loss of topsoil, and potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The proposed project area has the potential to contain expansive and unstable soils. Expansive soils typically consist of fine-particle clay-based soils that, based on this clay composition, expand in volume when exposed to water. Although soils in the surrounding area may contain expansive characteristics, sediments within the Santa Clara River channel, where the proposed project would occur, are not expansive; as discussed in the introduction to this section, the proposed project site is characterized by unconsolidated surficial gravel, sand alluvial deposits (stream channel), and weakly consolidated surficial gravel alluvial terrace deposits. Unstable soils may also be present in the area surrounding the project site, such as on hillsides and slopes that may be subject to landslides or destabilization if disturbed; however, the proposed project would not disturb hillsides or occur on soils known to be unstable. The proposed project would not introduce new structures and would not cause existing structures to be subject to new or exacerbated hazards associated with the presence of unstable soils, including expansive soils.

Although the proposed project would not be located on a geologic unit or soil that is unstable, it would involve substantial soil disturbance associated with sediment management activities that would ultimately be conducted across the project's combined (Phase 1 and Phase 2) 6-acre sediment management area. To address the potential for these soil disturbing activities to result in instability, particularly from initial excavation of accumulated sediments, AMMs incorporated into the project design would be implemented and include BMPs for soil stability. Specifically, AMM-1B, *Erosion Control,* requires covering of all stockpiles and placement of fiber rolls on level contours to provide slope stability and avoid erosion and sedimentation impacts.

The proposed sediment management activities would not cause existing soils to become unstable from the construction or modification of existing infrastructure. The project would include substantial soil disturbance, particularly during initial excavation activities, and BMPs included in the project design as AMMs would be implemented to reduce or avoid the potential for erosion and sedimentation impacts to occur. The project would not create or alter risks to life or property associated with existing geologic units or soils. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project does not include a septic tank or alternative wastewater disposal system. During project activities, workers would use on-site portable restroom facilities, which would be serviced by a designated contractor. No impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The majority of the project area consists of quaternary alluvium from the Pliocene to Holocene period, which ranges from low to high paleontological potential. There are some areas underlain by older mudstone, sandstone, and conglomerate from the Paleocene to Pleistocene periods, which are considered to have high paleontological potential. Thus, in locations where suitable soils are present, it is possible that previously unknown unique paleontological resources could be encountered during ground disturbing activities. Implementation of the proposed project would require excavation and grading to remove accumulated sediment within the Santa Clara River channel; these activities are associated with operation and maintenance of the Facility, and would generally be conducted in previously disturbed areas where sediment has accumulated and been removed before. However, depending upon the depth of previous excavations and the amount of sediment accumulated since the previous removal, it is possible that the proposed sediment management activities could encounter unknown paleontological resource(s) within the alluvium of the river channel. Therefore, Mitigation Measure GEO-1, provided below, would be implemented.

Mitigation Measures

The following mitigation measure, Mitigation Measure GEO-1, *Paleontological Worker Awareness Training in Areas with Suitable Soils,* would be implemented during all ground-disturbing activities associated with the proposed project to reduce potential impacts to paleontological resources to a less than significant level.

GEO-1 Paleontological Worker Awareness Training in Areas with Suitable Soils

United shall provide an on-site training to all project personnel and operational staff involved regarding the possibility of encountering fossils. The appearance and types of fossils likely to be seen during project activities shall be described. Project personnel shall be trained about the proper notification procedures should fossils be encountered, including halting operations within 100 feet of the find and notifying United who shall then retain a qualified paleontologist for identification and salvage of fossils that would qualify as a unique paleontological resource.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to a less than significant level by alerting workers and operational personnel to the possibility of encountering paleontological resources, and requiring work to stop if a paleontological resource is encountered. With the implementation of Mitigation Measure GEO-1, potential impacts to paleontological resources would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	■

Regulatory Setting

Federal

The United States Supreme Court has ruled that carbon dioxide (CO_2) is an air pollutant as defined under the federal CAA and that the USEPA has the authority to regulate GHG emissions (*Massachusetts et al. v. Environmental Protection Agency et al.,* 549 U.S. Code 497 [2007]). In 2010, the USEPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the federal CAA.

State

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill (SB) 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (accelerates the State's Renewables Portfolio Standard Program). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds

consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalent (CO_2e) by 2030 and two MT of CO_2e by 2050 (CARB 2017).

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project.

The VCAPCD is the primary agency responsible for addressing air quality concerns in Ventura County; its role is discussed further in Section 3, *Air Quality*. To protect public health and agriculture from the adverse effects of air pollution by identifying air pollution problems and developing a comprehensive program to achieve and maintain state and federal air quality standards, the 2018 VCAPCD Implementation and Enforcement Policy Guide provide guidance to the VCAPCD staff, the public, and the regulated community. The VCAPCD enforces the Greenhouse Gas Emission standards through both its own regulations and inspections as well as working with CARB's GHG staff and Enforcement Division staff.

In addition, the Ventura County 2040 General Plan serves as the County's Climate Action Plan (CAP). The CAP is incorporated into the County's 2040 General Plan and includes specific GHG reduction measures. The 2040 General Plan provides goals and associated policies also referred to as climate change mitigation measures, in the Conservation and Open Space Element for the energy use, transportation, water conservation, land use, and solid waste sectors. In addition, Appendix B includes reduction measures and an emissions reduction summary with the long-term reduction targets for unincorporated Ventura County. The intent of the CAP is to guide the County towards achieving or exceeding the State's emissions reductions targets. The CAP documents and forecasts 2020, 2030, 2040 and 2050 GHG emissions.

Environmental Setting

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as CO_2e, which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28,

meaning its global warming effect is 28 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2014).[4]

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Office of Planning and Research [OPR], et al. 2018).

Impact Analysis

GHG emissions associated with project activities were estimated using CalEEMod, Version 2020.4.0, with the assumptions described under Section 3, *Air Quality*.

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to CEQA Guidelines Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. However, United has not formally adopted a Climate Action Plan or other GHG reduction plan to date. Thus, this approach is not currently feasible for this analysis.

To evaluate whether a project may generate a quantity of GHG emissions with the potential to have a significant impact on the environment, local air districts have developed several bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. If project emissions are equal to or below the significance threshold, with or without mitigation, the project's GHG emissions would be less than significant. VCAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses, but it recommends using the California Air Pollution Control Officers Association (2008) *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act* white paper and other resources when developing GHG evaluations (VCAPCD 2003). The CEQA and Climate Change paper provides a common platform of information and tools to support local governments and was prepared as a resource, not as a guidance document. CEQA Guidelines Section 15064.4 expressly provides a "lead agency shall have discretion to determine, in the context of a particular project," whether to "quantify GHG emissions resulting from a project" and/or "rely on a qualitative analysis or performance-based standards." Updates to CEQA Guidelines Section 15064.4 that took effect in

[4] The Intergovernmental Panel on Climate Change's (2014) *Fifth Assessment Report* determined that methane has a GWP of 28. However, the 2017 Climate Change Scoping Plan published by the CARB uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

December 2018 further state that a lead agency should "focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change" and that the analysis should "reasonably reflect evolving scientific knowledge and state regulatory schemes."

This analysis utilizes two thresholds to evaluate the significance of the project's GHG emissions: the South Coast Air Quality Management District (SCAQMD) recommended bright-line threshold and consistency with applicable plans, policies, and regulations for the reduction of GHG emissions.

Neither the United nor VCAPCD have developed a qualified GHG reduction plan. The Ventura County 2040 General Plan is considered a qualified CAP, but the project would not be subject to local municipality plans or policies since United is the local agency. Therefore, the project would not tier off of the County's qualified CAP. Considering that no specific GHG threshold or qualified GHG reduction plan has been recommended or adopted by United or VCAPCD and the County's CAP would not be applicable, it is appropriate to refer to guidance from other agencies when discussing GHG emissions. The VCAPCD generally refers to SCAQMD methodology for evaluating GHG emissions. In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010 (SCAQMD 2010):

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT of CO_2e per year for industrial projects and 3,000 MT of CO_2e per year for non-industrial projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO_2e per year for land use projects.

The project would not be statutory or categorically exempt, and therefore Tier 1 does not apply. As previously stated, United does not have a local, qualified GHG reduction plan for the project to tier from, and Tier 2 would not apply. Service population is defined as employees plus residents; because the project is related to the operation and maintenance of water infrastructure, it would not generate any residents or require new employees; therefore, a service population threshold would not provide an accurate depiction of project GHG emission impacts. Thus, for the purposes of this analysis, the bright-line threshold developed by the SCAQMD of 3,000 MT of CO_2e per year for non-industrial projects is used in this analysis to determine the significance of GHG emissions in accordance with Tier 3.

According to the CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or

substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of GHG emissions." Therefore, a lead agency can make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions. The proposed project's consistency with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions is evaluated qualitatively. A project is considered consistent with the provisions of these documents if it meets the general intent in reducing GHG emissions in order to facilitate the achievement of local and state-adopted goals and does not impede attainment of those goals.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Project activities would generate GHG emissions during Phases 1 and 2, primarily from the operation of heavy-duty equipment within the sediment management area, as well as from vehicles transporting workers to and from the project site, and heavy trucks to export sediment spoils for off-site disposal (assumed to occur under the worst-case-scenario air quality emissions calculations). Table 11 below provides an overview of GHG emissions associated with Phase 1 and Phase 2 of the project, respectively.

Table 11 Estimated Project Activities GHG Emissions

Year	Emissions (MT of CO_2e)
Phase 1	32
Phase 2	23
Total	**55**
SCAQMD Threshold[1]	3,000
Exceeds Threshold?	No

MT = metric tons; CO_2e = carbon dioxide equivalents

[1] The threshold of 3,000 MT of CO_2e per year is the threshold recommended for non-industrial projects by the SCAQMD under Tier 3.

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for CalEEMod results.

As shown in Table 11, Phase 1 would generate an estimated 32 MT of CO_2e each time it is implemented, and Phase 2 would generate an estimated 23 MT of CO_2e each time it is implemented. If Phase 1 and Phase 2 are conducted in the same year, the total estimated CO_2e emissions would be 55 MT of CO_2e; it is assumed the phases would be implemented consecutively, with Phase 2 implemented immediately following Phase 1. Under each annual scenario (Phase 1, Phase 2, or both Phase 1 and Phase 2) the estimated emissions from project activities would remain below the SCAQMD threshold of 3,000 MT of CO_2e. Therefore, potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Several plans and policies have been adopted to reduce GHG emissions in the southern California region, including the State's 2017 Scoping Plan (CARB 2017). United has not adopted a GHG reduction plan to date; therefore, this discussion focuses on the project's consistency with the CARB's 2017 Scoping Plan. The principal State plans and policies addressing GHG emissions include AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020, which was achieved in 2016 (CARB 2018), and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the CARB's 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions.

The 2017 Scoping Plan strategies applicable to the proposed project include reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation. The proposed project would support United's water conservation goals by providing sediment management activities that will facilitate optimal operation of the Facility, including the management of groundwater recharge basins that reduce seawater intrusion resulting from over-pumping of local groundwater resources beneath agricultural lands. The project would not increase energy demand compared to existing Facility operations, and would not generate increased VMT since existing United employees would provide labor to conduct the sediment management work. There would occasionally be fossil fuel used during the future project activities; however, United would furnish diesel equipment with engines certified to meet USEPA's Tier 4 emission standards, as defined in 40 Code of Federal Regulation 1039, such that project equipment would have cleaner emissions than have traditionally been associated with the equipment. Furthermore, the Facility does not generate waste products nor would it lead to an increased VMT since existing employees would maintain the Facility. Therefore, the project would not conflict with the 2017 Scoping Plan, and no impacts would occur.

NO IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☐	■
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	■	☐

This section describes the project's potential impacts related to hazards and hazardous materials. The evaluation provided in this section is based on public databases containing lists of known and significant hazardous waste/hazardous materials sites, such as records from the SWRCB's *GeoTracker* and California Department of Toxic Substances (DTSC) *EnviroStor* databases.

Regulatory Setting

Federal

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as requiring measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. The USEPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the federal laws and regulations listed below.

- The Toxic Substances Control Act of 1976 (15 U.S. Code Section 2601 et seq.) regulates the manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. Section 403 of the Toxic Substances Control Act establishes standards for lead-based paint hazards in paint, dust, and soil.
- The Resource Conservation and Recovery Act of 1976 (42 U.S. Code 6901 et seq.) is the law under which the USEPA regulates hazardous waste from the time the waste is generated until its final disposal ("cradle to grave").
- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 U.S. Code 9601 et seq.) gives the USEPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.
- The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC Title 42, Chapter 116), also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release. SARA Title III or EPCRA encourages and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to emergency planning, emergency release notification, reporting of hazardous chemical storage, and inventory of toxic chemical releases.
- The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 U.S. Code 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.

State

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services (OES). Management of hazardous materials is governed by the state laws and regulations listed below.

- The state equivalent to the federal EPCRA is Chapter 6.95 of the California Health and Safety Code, the Hazardous Materials Release Response Plans and Inventory. Under this law, qualifying businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. At such time as the applicant begins to use hazardous materials at levels that reach applicable state and/or federal thresholds, the plan is submitted to the administering agency.
- DTSC is a division of the California Environmental Protection Agency (Cal/EPA); its primary regulatory responsibility is prevention of toxic harm to the public and environment. As required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the state, known as the Cortese List. Individual RWQCBs are the lead agencies responsible for identifying, monitoring, and cleaning up leaking underground storage tanks (LUSTs). The Los Angeles RWQCB has jurisdiction over the proposed project area.
- The Porter-Cologne Water Quality Act is California's statutory authority for the protection of water quality, and requires California's nine RWQCBs to adopt water quality control plans and establish water quality objectives (WQOs). The project site is within the jurisdiction of the Los Angeles RWQCB, and subject to the management direction of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). Please see Section 10, *Hydrology and Water Quality*, for further discussion of Porter-Cologne and the Basin Plan.
- OSHA's corresponding state regulatory agency is the California Occupational Safety and Health Administration (Cal/OSHA), which assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are located in Title 8 of the CCR and are generally more stringent than federal OSHA regulations. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project. For hazards and hazardous materials, these include the Ventura County Certified Unified Program and the Ventura County General Plan, as summarized below.

- **Ventura County Certified Unified Program.** A Certified Unified Program Agency (CUPA) is a local agency that has been certified by Cal/EPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. The Ventura County Environmental Health Division (Ventura County CUPA) is the certified CUPA for Ventura County, including the project site. As such, the Ventura County CUPA provides regulatory oversight for six statewide environmental programs, as listed below.

- Hazardous Materials Business Plan
- Hazardous Waste
- Tiered Permitting
- Underground Storage Tanks
- Aboveground Petroleum Storage
- California Accidental Release Prevention Program

The Ventura County CUPA implements State and federal laws and regulations, County ordinance code, and local policies for the above programs. Compliance is achieved through routine and follow-up inspections, educational guidance, and enforcement actions. The Ventura County CUPA is also involved with hazardous materials emergency response, investigation of illegal hazardous waste disposal, and public complaints.

- **Ventura County General Plan**. The Ventura County General Plan was originally adopted by the County Board of Supervisors on May 24, 1988, and since then been amended multiple times. On September 15, 2020, the County of Ventura adopted a General Plan Update with a horizon year of 2040. Below is a summary of General Plan guidance applicable to hazardous materials handling, use, and safety (County of Ventura 2020).
  - Policy 2.1.2-3: Essential facilities, special occupancy structures and hazardous materials storage facilities shall be designed and constructed to resist forces generated by earthquakes, gravity, precipitation, fire and winds.

Environmental Setting

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined in the CFR as "a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous wastes" are defined in California Health and Safety Code Section 25141(b) as wastes that:

> … because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

The Cal/EPA website provides a compilation of the following lists which provide information on facilities or sites qualifying the Cortese List:

- Hazardous Waste and Substances sites from the DTSC's EnviroStor database
- LUST sites from SWRCB's GeoTracker database
- Solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- Active Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB
- Hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC and listed in the EnviroStor database

The SWRCB GeoTracker database includes: LUSTs; permitted underground storage tanks; and spills, leaks, investigations, and cleanup database sites. The DTSC EnviroStor database includes: federal and state response sites; voluntary, school, and military cleanups and corrective actions; and permitted sites. The data sources cited above identify sites with suspected and confirmed releases of hazardous materials to the subsurface soil and/or groundwater. The status of these sites changes as identification, monitoring, and clean-up of hazardous materials progress. Typically, a site is closed once it has been demonstrated that existing site uses combined with the levels of identified on-site contamination present no significant risk to human health or the environment.

Based on a review of the aforementioned websites, several hazardous materials sites were identified within the county, only one of which is located within five miles of the project site, as summarized in Table 12 below.

Table 12 Hazardous Materials Cleanup Sites within Five Miles of the Project Site

Site Name	Address	Site Type	Cleanup Status
Southern Pacific Milling Company	1368 Mission Rock Road Santa Paula, California	Voluntary Cleanup	No further action as of 2004

DTSC 2021; SWRCB 2021

The site identified by DTSC as the "Southern Pacific Milling Company" site, which requires no further cleanup action, is located approximately two miles upstream of the Facility. Lands immediately surrounding the project site are generally owned by the Lloyd-Butler Trust, none of which are listed by the DTSC or SWRCB as active hazardous materials cleanup sites. In addition to hazardous materials and hazardous wastes, this analysis addresses airports and air hazards, schools, emergency response, and wildland fire hazards, as discussed below.

- **Airports and Air Hazards.** Airport influence areas are used in land use planning to identify areas commonly overflown by aircraft as they approach and depart an airport, or as they fly within established airport traffic patterns. The nearest airport or air strip to the proposed project site is the Santa Paula Airport, located approximately four miles upstream from the Facility, along the Santa Clara River in the city of Santa Paula. Santa Paula Airport is a privately-owned airport open for public use (Ventura County Airport Land Use Commission [ALUC] 2000). The Oxnard Airport, a primary commercial service airport, is located approximately ten miles south-southwest of the project site, in the city of Oxnard.

- **Schools**. Schools are considered sensitive receptors because children are particularly susceptible to long-term effects of hazardous materials from hazardous air emissions as well as accidental releases associated with the handling of extremely hazardous materials, substances, or wastes. The nearest schools to the Facility are as follows:
  - Saticoy Elementary School is located approximately 2.5 miles to the west-southwest of the Facility, in the unincorporated community of Saticoy
  - Mesa Union Elementary School is located approximately 2.5 miles to the southeast of the Facility, in the unincorporated community of Somis
  - Linda Vista Adventist Elementary School and Rio Mesa High School are located approximately 3 miles and 3.5 miles, respectively, to the south of the Facility in the city of Oxnard

There are no schools located within two miles of the Facility.

- **Emergency Response.** The Ventura County Emergency Operations Plan (EOP) outlines emergency response actions to identified hazards in the area, and delineates the county's coordinated response by all employees with specific responsibilities detailed in the event the plan is activated (Ventura County Sherriff OES 2021). The Ventura County Sheriff OES is responsible for the administration of countywide disaster planning, mitigation, response, and recovery activities. In the event of a disaster, the OES is responsible for the County's Emergency Operations Center, coordination of the County's Emergency Management Team, and for recovering the County's disaster response costs from state and federal governments. The OES Manager is responsible for the day-to-day administration of the County's disaster preparedness and response program, as well as the County's EOP (Ventura County Sherriff OES 2021).
- **Wildland Fire Hazards.** Fire protection for the proposed project area is provided by Ventura County Fire Department (VCFD), which provides emergency services to all unincorporated areas of the county and some cities. Outside of the boundaries of the cities of Fillmore, Oxnard, Ventura, and the Los Padres National Forest, Ventura County Fire Protection District (VCFPD) has responsibility for wildfire suppression on all private land. The VCFD Fire Prevention Bureau is charged with developing and implementing programs and policies that prevent or reduce the magnitude of emergency occurrences, such as loss of life and property, personal injury or environmental damage. Wildland fire conditions, risks, and firefighting capabilities in the project area are addressed in detail in Section 20, *Wildfire*.

Impact Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The proposed project activities would require the use of heavy equipment and machinery, which in turn would require the use of potentially hazardous materials consisting of vehicle fuels and other fluids. Pursuant to 40 CFR 112, the project is required to prepare a spill prevention and treatment plan for rapidly, effectively, and safely cleaning up and disposing of any spills or releases that may occur during sediment management activities at the project site. In addition to 40 CFR 112, project compliance with the Construction General Permit (2009-0009 DWQ; as amended by revised orders

2010-0014-DWQ and 2012-0006-DWQ) requires spill prevention and containment plans to avoid spills and releases of hazardous materials and wastes into the environment.

In accordance with the aforementioned regulatory requirements, inspections would be conducted to verify consistent implementation of NPDES requirements, including BMPs to avoid and minimize the potential for spills and releases, and of the immediate cleanup and response thereto. In addition, the proposed project includes AMMs that specify BMPs to address the handling and use of hazardous materials, as well as the appropriate actions for response to an unanticipated spill of hazardous materials. These AMMs, which would be implemented as part of the proposed project, include AMM-1, *Best Management Practices*, which specifies under AMM-1A, "No substances that could be hazardous to aquatic life will be allowed to contaminate the soil and/or enter or be placed where it may be washed by rainfall or runoff into jurisdictional waters." In addition, AMM-1C, *Waste Management and Materials Pollution Control*, provides requirements for the use, storage, and maintenance of project vehicles and equipment, to minimize the potential for an unanticipated spill to occur, and further requires that all fueling trucks and fueling areas are equipped with spill kits and other spill protection devices.

The use and handling of any hazardous materials or wastes during project implementation would occur in compliance with applicable laws and regulations, and the project would be implemented with a suite of project design features to minimize or avoid potentially adverse impacts associated with hazardous materials. The project would not create a significant hazard to the public or the environment, and would not create a significant hazard associated with transport, use, or disposal of hazardous materials. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

There are no schools located within 0.25 mile of the proposed project site, and the proposed project would not involve the transportation or handling of acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. In addition, the only emissions that would occur during the proposed sediment management activities would be associated with the equipment and machinery used to conduct sediment movement within the Santa Clara River channel, and would not result in hazardous emissions that could reach an existing or proposed school. No impact would occur.

NO IMPACT

d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project site is not included on a list of hazardous material sites, and would not create a hazard to the public or the environment associated with such a site. No impact would occur.

NO IMPACT

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. No impact would occur.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project activities are limited to sediment removal and deposition at the existing Facility on the Santa Clara River; implementation of the project would not require any lane or road closures that could interfere with emergency response activities. In addition, the project would not introduce unusual or particularly hazardous activities to the area, such as would require an increased level of emergency preparedness or response than is presently available to the site. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impact would occur.

NO IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Please see Section 20, *Wildfire*, for detailed discussion of this topic. In summary, the proposed project would not exacerbate existing wildland fire hazards in the project area, and would not cause people or structures to be exposed to wildland fires. If a wildland fire were to occur while workers are present on the project site, they would evacuate the area in accordance with the Ventura County 2021 EOP (Ventura County OES 2021), as would occur under present conditions. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	■
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	☐	■
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	■

Regulatory Setting

Numerous federal, State, and local acts, rules, plans, policies, and programs define the framework for regulating hydrology-related factors, such as flood control, drainage, and stormwater runoff and water quality of surface water and groundwater in the affected environment, as discussed below.

Federal

CLEAN WATER ACT

The federal CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States (including wetlands) and regulating quality standards for surface waters and gave the USEPA the authority to implement control programs. The CWA authorizes the USEPA to delegate many permitting, administrative, and enforcement aspects of the CWA to state governments, with the USEPA retaining oversight responsibilities. In turn, the USEPA has delegated various authorities for establishing water quality standards and regulating controllable factors affecting water quality to the State. Federal regulations and policies relevant to implementing the proposed project include: CWA Section 401 (Water Quality Certifications), Section 402 (NPDES permit program), Section 404 (regulation of the discharge of dredged or fill material into waters of the United States), and Section 303(d), which addresses water quality-related impairments of surface waters. Each of these CWA sections is discussed below.

- **Section 401 – Water Quality Certifications**. Section 401 of the CWA requires any person applying for a federal permit or license to conduct any activity, including the construction or operation of facilities, that may result in any discharge into navigable waters, to provide the licensing or permitting agency a certification from the state in which the discharge originates or will originate that the discharge will comply with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until after Section 401 certification has been granted by the applicable state agency, and no license or permit may be issued if certification has been denied. Permits issued under Section 404 of the CWA trigger the requirement for Section 401 clearance. Similarly, permits issued under Sections 9 and 10 of the Rivers and Harbors Act also require Section 401 clearance. The Los Angeles RWQCB administers the Section 401 Water Quality Certification for the project area.
- **Section 402 – NPDES Permit Program**. Section 402 of the CWA established the NPDES permit program, which regulates point- and nonpoint-source discharges to waters of the United States. In California, the SWRCB and its nine RWQCBs administer the NPDES permit program. The NPDES stormwater program requires permits for discharges from construction activities that disturb one or more acre of land. The SWRCB adopted a general NPDES permit for stormwater discharges associated with construction activity (Construction General Permit) in Order No. 2009-0009-DWQ, which became effective on July 1, 2010 (as amended by revised orders 2010-0014-DWQ and 2012-0006-DWQ). Projects throughout the state may therefore receive Section 402 NPDES clearance by complying with the Construction General Permit, subject to the approval of the RWQCB.

  The Construction General Permit includes specific requirements for coverage, based on the "risk level" of the project site. Three different risk levels are dependent on two factors: (1) project sediment runoff risk and (2) receiving water risk. Obtaining coverage under the Construction General Permit requires filing of a Notice of Intent with the RWQCB, and implementing a SWPPP which specifies BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges. The Construction General Permit requires implementation of BMPs

that control pollutant discharges using the best available technology economically achievable for toxic contaminants, the best conventional technology for conventional contaminants, and any other necessary BMPs to meet water quality standards.

The Construction General Permit contains technology-based numeric action levels for pH and turbidity and requires visual monitoring for potential contaminant runoff at all sites, and effluent monitoring at all risk level 2 and 3 sites, with follow-up actions required for exceedances of numeric action levels. Risk level 2 and 3 sites also must prepare and implement Rain Event Action Plans for all storm events forecast to have measurable precipitation. The Construction General Permit also specifies runoff reduction requirements for all sites not covered by a municipal NPDES permit, to minimize postconstruction stormwater runoff impacts. Authorization for coverage under the Construction General Permit will be acquired for the project, and appropriate BMPs will be implemented to ensure compliance with the permit conditions.

The NPDES stormwater program also requires permits for discharges from municipal separate stormwater sewer systems (MS4s). The Los Angeles RWQCB has issued an MS4 NPDES permit that covers all areas within the boundaries of Ventura County and the co-permittees, which include the cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Santa Paula, Simi Valley, Thousand Oaks, and Ventura. This MS4 Permit is discussed further below, in the "Local" section.

- **Section 404 – Discharge of Dredged for Fill Material.** Section 404 of the CWA established a program to regulate the discharge of dredged or fill material into waters of the United States. The USACE administers the NPDES program, including review and issuance of permits. The basic premise of the NPDES program is that no discharge of dredged or fill material may be permitted if (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's waters would be significantly degraded. In other words, when applying for a permit, the applicant must demonstrate that steps have been taken to avoid impacts on wetlands, streams, and other aquatic resources; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts. As described above for Section 401, when a project requires a Section 404 permit from the USACE, it then also requires a Section 401 Water Quality Certification from the RWQCB.
- **Section 303(d) – Water Quality-Related Impairments of Surface Water Bodies.** Section 303(d) of the CWA requires states to develop a list of water bodies (or sections of water bodies) that will not attain water quality standards after implementation of minimum required levels of treatment by point-source dischargers (i.e., municipalities and industries). The law requires that states establish priority rankings for waters on the lists and develop total maximum daily loads (TMDLs) for these waters. In California, the SWRCB is required to provide the USEPA with a 303(d) list for impaired waters throughout the state. The 303(d) list also identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment, typically in the form of a TMDL. The TMDL specifies the amount of the target pollutant the water body can sustain on a daily or annual basis. The SWRCB delegates 303(d) authority to the nine RWQCBs. TMDLs are prepared by the RWQCBs and result in amendments to the applicable Water Quality Control Plan (Basin Plan), which are subject to the approval of the USEPA. The 303(d) list is used by the USEPA to prepare biennial federal CWA Section 305(b) National Water Quality Inventory Reports to Congress. Generally, NPDES permit limitations (as applicable under the CWA Section 402, discussed above) for Section 303(d)-listed pollutants must be consistent with the load allocation identified in the TMDL.

The Facility sits between two reaches of the Santa Clara River: Reach 3, which stretches for 32 miles from A Street in Filmore to the Facility, and Reach 2, which stretches for 6.39 miles from the Facility, downstream past the crossing of Los Angeles Avenue/SR 118, to U.S. Highway 101. The Reach 2 segment is not identified on the state's Section 303(d) list as water quality impaired (SWRCB 2019). The Reach 3 segment is identified as impaired for several water quality constituents, as detailed below in Table 13.

Table 13 Santa Clara River Reach 3 – CWA Section 404(d) Listings

Pollutant	Pollutant Category	Final Decision	TMDL Status	TMDL Dates
Total Dissolved Solids	Salinity	Do Not Delist	TMDL required list	2015
Toxicity	Toxicity	List on 303(d) list	TMDL required list	2021[1]
Chloride	Salinity	Do Not Delist	Being addressed with USEPA-approved TMDL	2010[2]
Selenium	Metals/Metalloids	List on 303(d) list	TMDL required list	2027[1]
Indicator Bacteria	Fecal Indicator Bacteria	List on 303(d) list	Being addressed with USEPA-approved TMDL	2012[2]
Trash	Trash	List on 303(d) list	Being addressed by action other than TMDL	2027[3]

TMDL: Total Maximum Daily Load; USEPA: United States Environmental Protection Agency
[1] Expected TMDL Completion Date
[2] USEPA TMDL Approved Date
[3] Expected Attainment Date
Source: SWRCB 2019

FEDERAL ANTIDEGRADATION POLICY

In addition to the federal CWA, the Federal Antidegradation Policy was adopted as part of the 1972 amendments to the CWA, to compel individual states to implement policies that protect existing instream water uses. The Federal Antidegradation Policy established three tiers or types of waterbodies to guide analysis:

- Tier 1 maintains and protects existing uses and water quality conditions to support such uses and applies to all surface waters.
- Tier 2 is comprised of "High Quality Waters" which have higher water quality than required to support designated uses.
- Tier 3 is comprised of "Outstanding National Resource Waters" and no water quality degradation is allowed in Tier 3 waterbodies.

The federal policy directs states to adopt a statewide policy that includes the following primary provisions (40 CFR 131.12):

1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
2) Where the quality of waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the state finds, after full satisfaction of the intergovernmental

coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

3) Where high quality waters constitute an outstanding National resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

In August of 2005, the USEPA issued a memorandum addressing procedures for antidegradation analyses; this memo states that a 10 percent reduction in remaining assimilative capacity is "considered to be workable and protective in identifying those significant lowering of water quality that should receive a full antidegradation review, including public participation" (USEPA 2005).

State

PORTER-COLOGNE WATER QUALITY CONTROL ACT

Porter-Cologne is California's statutory authority for the protection of water quality. Under Porter-Cologne, California must adopt water quality policies, plans, and objectives that ensure that beneficial uses of the state are reasonably protected. Porter-Cologne requires California's nine RWQCBs to adopt water quality control plans and establish WQOs, and authorizes the SWRCB and nine RWQCBs to issue and enforce permits with requirements for discharges to surface waters and land. The applicable RWQCB for the proposed project is Los Angeles RWQCB. Under the Porter-Cologne Act, each RWQCB must formulate and adopt a water quality control plan (known as a "Basin Plan") for its region. Los Angeles RWQCB has adopted the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, which includes both narrative and numeric WQOs designed to provide protection for all designated beneficial uses in all its principal streams and tributaries.

CALIFORNIA ANTIDEGRADATION POLICY

Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, also known as the California Antidegradation Policy, was adopted by the SWRCB in 1968. This is similar to the federal policy except that the State policy applies to both groundwater and surface waters, whereas the federal policy applies only to surface waters. Resolution No. 68-16 states, in part:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The California Antidegradation Policy incorporates the Federal Antidegradation Policy, discussed above, which is applicable if a discharge that began after November 28, 1975, would lower existing surface water quality.

CALIFORNIA WATER CODE

The California Water Code is enforced by the California Department of Water Resources (DWR). The mission of the DWR is "to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments." The DWR is responsible for promoting California's general welfare by ensuring beneficial water use and development statewide. Groundwater management is outlined in the California Water Code, Division 6, Part 2.75, Chapters 1–5, Sections 10750–10755.4.

California Water Code Section 8400 et seq. establishes the Cobey-Alquist Flood Control Act, which states that a large portion of land resources of the State of California is subject to recurrent flooding, and that the public interest necessitates sound development of land use because: (1) land is a limited, valuable, and irreplaceable resource, and (2) the floodplains of the state are a land resource to be developed in a manner that, in conjunction with economically justified structural measures for flood control, will prevent loss of life and economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is State of California policy to encourage local levels of government to plan land use regulations to accomplish floodplain management and to provide State assistance and guidance.

GROUNDWATER MANAGEMENT ACT AND SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Groundwater Management Act was first introduced in 1992 as AB 3030 and has since been modified by SB 1938 in 2002, AB 359 in 2011, and the Sustainable Groundwater Management Act (SB 1168, SB 1319, and AB 1739) in 2014. The intent of the acts is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a Groundwater Management Plan.

The Sustainable Groundwater Management Act of 2014 (SGMA) became law on January 1, 2015, and applies to all groundwater basins in the state (Water Code Section 10720.3). By enacting SGMA, the legislature intended to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater within their jurisdiction (Water Code Section 10720.1). In 2014, DWR ranked California's groundwater basins as "high," "medium," "low," or "very low" priority. In this ranking process within Ventura County, the Piru, Fillmore, Oxnard, Mound, Pleasant Valley, and Las Posas Valley groundwater subbasins were deemed "high" priority, and the Santa Paula subbasin was deemed "very low" priority (groundwater rights in the Santa Paula subbasin were adjudicated in 1996). The Oxnard and Pleasant Valley subbasins were also listed as being in "critical overdraft." The high dependency on groundwater in these areas was a primary factor in the rankings. In 2019, the DWR released draft results for Phase 2 of its SGMA Basin Prioritization efforts: the Piru, Fillmore, Mound, and Oxnard subbasins were all deemed "high" priority, with the Oxnard subbasin also listed as being in "critical overdraft".

Pursuant to the SGMA, any local agency that has water supply, water management, or land use responsibilities within a groundwater basin may elect to be a "groundwater sustainability agency" for that basin (Water Code Section 10723). The Fox Canyon Groundwater Management Agency (Fox Canyon GMA) elected to be the groundwater sustainability agency under the SGMA for the basins within its Fox Canyon GMA boundary. In 2017, the Fillmore and Piru Basins Groundwater

Sustainability Agency (Fillmore and Piru GSA) was formed as a joint powers authority composed of United, the County of Ventura, and the City of Fillmore and covering the Fillmore and Piru subbasins. Also in 2017, the Mound Basin Groundwater Sustainability Agency (Mound Basin GSA) was formed as a joint powers authority composed of United, the County of Ventura, and the City of Ventura covering the Mound subbasin.

CALIFORNIA DRAINAGE LAW

California drainage law is case law through which the courts have established the following general principles, which apply in general to development projects:

- The downstream property owner is obligated to accept and make provision for those waters that are the natural flow from the land above.
- The upstream property owner shall not concentrate water where it was not concentrated before without making proper provision for its disposal without damage to the downstream property owner.
- The upstream property owner may reasonably increase drainage runoff by paving or construction of other impervious surfaces, including buildings, without liability. The upstream property owner may not further increase drainage runoff by diversion of water that previously drained to another area. Reasonableness is often based on prevailing standards of practice in the community or region.
- No property owner shall block, or permit to be blocked, any drainage channel, ditch, or pipe. No property owner shall divert drainage water without properly providing for its disposal.

Local

As a special district established in accordance with California Water Code Section 74000 et seq. that is authorized to, among other things, acquire water rights, build facilities to store and recharge water, and construct wells and pipelines for water deliveries, some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United does reference, describe, and address in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project.

VENTURA COUNTY MUNICIPAL STORMWATER SYSTEM PERMIT

The County of Ventura and the incorporated cities therein are co-permittees under the municipal stormwater NPDES Permit for the Ventura County MS4, which covers the project site. On July 8, 2010, Los Angeles RWQCB adopted Order No. R4-2010-0108 (2010 MS4 Permit) for a 5-year term under the CWA and the Porter-Cologne Act, which updated the previous Order No. CAS004002 (Los Angeles RWQCB 2010). The 2010 MS4 Permit expired on July 8, 2015, but is on administrative extension until a new permit is adopted.

On March 5, 2018, the VCWPD as the Principal Permittee (of the MS4) and on behalf of the Co-Permittees, requested the removal of fecal coliform from the monitoring requirements for freshwaters, for consistency with the RWQCB's Resolution No. R10-005, which removes the water quality objective for fecal coliform in freshwaters designated for water contact recreation (REC-1). On May 23, 2018, the Los Angeles RWQCB approved this modification to the Ventura County MS4 Permit (Los Angeles RWQCB 2019). The Los Angeles RWQCB is currently developing a new regional

permit to cover Ventura County and all the incorporated cities therein; this regional permit, once adopted, will supersede the Order (R4-2010-0108) that currently covers the Permittees in Ventura County (Ventura County Stormwater Quality Management Program [VCSQMP] 2021). The first step for all stormwater permit renewals is the submittal of a Report of Waste Discharge (ROWD) to the RWQCB, which summarizes the accomplishments and challenges of the permittees under the current permit. The ROWD was submitted to Los Angeles RWQCB in January 2015, and the Los Angeles RWQCB released the tentative Regional Phase I MS4 NPDES Permit (Tentative Regional MS4 Permit) for public comment on August 24, 2020 (VCSQMP 2021).

Under the 2010 MS4 Permit, the permittees are required to implement development planning guidance and control measures that control and mitigate stormwater quality and quantity impacts on receiving waters as a result of new development and redevelopment. The permittees also are required to implement other municipal source detection and elimination programs, as well as maintenance measures. The Ventura County Stormwater Quality Management Program (VCSQMP) defines the requirements of the 2010 MS4 Permit. Elements of the VCSQMP include NPDES permit coverage and provisions, institutional arrangements, program structure, monitoring and reporting, fiscal resources, and legal authority. The VCSQMP also addresses specific stormwater pollution requirements for new developments.

VCWPD Encroachment and Watercourse Permits

The VCWPD provides for the control and conservation of floodwater and stormwater and for the protection of watercourses, watersheds, public highways, life, and property in the county from damage or destruction caused by these waters. Various ordinances relating to the protection and regulation of flood control facilities and watercourses provide the VCWPD authority and the requirement to obtain permits for any encroachment into VCWPD jurisdictional channels, including rights-of-way. The VCWPD issues two types of permits: an Encroachment Permit is required for work being done within VCWPD's real estate holdings, and a Watercourse Permit is required where development or activity would affect the floodplain associated with a jurisdictional channel. The project site within the Santa Clara River is a jurisdictional channel within VCWPD's "Zone 2" and is therefore subject to a watercourse permit approval from VCWPD.

Ventura County Hydromodification Control Plan

As mentioned previously, Ventura County is subject to the 2010 MS4 Permit issued by Los Angeles RWQCB. In July 2013 and consistent with the 2010 MS4 Permit, the VCWPD developed a preliminary draft Hydromodification Control Plan with the objective of minimizing hydromodification impacts associated with applicable future new development and redevelopment in Ventura County (VCWPD 2013). The Hydromodification Control Plan seeks to achieve this objective through compliance with the Hydromodification Control Criteria stipulated in the county's 2010 MS4 Permit and described in the Hydromodification Control Plan.

Salt and Nutrient Management Plan for the Lower Santa Clara River

The SWRCB's Recycled Water Policy (Resolution No. 2009-0011) requires the development of regional or subregional salt and nutrient management plans for groundwater basins in California. The intent of the Recycled Water Policy is to increase the use of recycled water from municipal wastewater sources, which contain salts and nutrients, while protecting groundwater resources from increased salt and nutrient loading. Several stakeholders in Ventura County, with the VCWPD as the lead agency, collaborated to develop the Lower Santa Clara River Salt and Nutrient

Management Plan (SNMP), which covers the Piru, Fillmore, Santa Paula, Mound, and Oxnard subbasins within the Lower Santa Clara River Groundwater Basin (VCWPD 2015). The Los Angeles RWQCB adopted the SNMP into its Basin Plan in 2015. The adopted Lower Santa Clara River Basin salt and nutrient management strategies are voluntary measures designed to maintain water quality that is protective of beneficial uses and prevent additional loading in localized areas of elevated salt and nutrient concentrations (VCWPD 2015). The stakeholders also developed a protocol for managing future projects that may affect salt and nutrient loads and have identified additional potential control measures to be implemented should it become necessary (VCWPD 2015).

VENTURA COUNTY GENERAL PLAN

Below is a summary of General Plan guidance applicable to water resources in the county, including groundwater, surface water, water quality, and flood-related hazards (Ventura County 2020).

- Discretionary development which is inconsistent with the goals and policies of the County's Water Management Plan (WMP) shall be prohibited, unless overriding considerations are cited by the decision-making body.
- Discretionary development shall comply with all applicable County and State water regulations.
- Discretionary development shall not significantly impact the quantity or quality of water resources within watersheds, groundwater recharge areas or groundwater basins.
- Use of the Santa Clara River as a multiple resource (i.e., source of supply for water, concrete aggregates and biological habitat) shall be permitted to continue; with the use of the river as a water resource having priority over all other uses.
- Development proposed within the floodplain shall be designed and built to standards intended to mitigate to the extent possible the impacts from the one percent annual chance storm.
- The design of any structures which are constructed in floodplain areas as depicted on the Hazards Protection Maps, shall be governed by Federal regulations, specifically Title 44 CFR Sections 59 through 70, as well as the County Floodplain Management Ordinance and shall incorporate measures to reduce flood damage to the structure and to eliminate any increased potential flood hazard in the general area due to such construction.

Environmental Setting

The proposed project is located at the Facility within the Santa Clara River channel. This area is within the jurisdiction of the Los Angeles Region RWQCB, and subject to the management direction of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Designated beneficial uses of the portion of the Santa Clara River between the Freeman Diversion and U.S. Highway 101 (Reach 2) are listed below, as identified in the Basin Plan (Los Angeles RWQCB 2020):

- Municipal and Domestic Water Supply (MUN)
- Industrial Service Supply (IND)
- Industrial Process Supply (PROC)
- Agricultural Supply (AGR)
- Groundwater Recharge (GWR)
- Freshwater Replenishment (FRSH)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Rare, Threatened or Endangered Species (RARE)
- Migration of Aquatic Organisms (MIGR)
- Wetland Habitat (WET)
- Contact Water Recreation (REC-1)
- Non-contact Water Recreation (REC-2)

The portion of the Santa Clara River between the Freeman Diversion and A Street in Fillmore (Reach 3, upstream of the Facility) has the same designated beneficial uses as listed above for Reach 2, except for COLD, which is not a designated beneficial use for Reach 3, upstream of the Facility.

The project site and adjacent areas both upstream and downstream of the Facility is located within the Regulatory Floodway, which is managed by the VCWPD which is a division of the Ventura County Public Works Agency (PWA), and the 100-year flood hazard area, as designated by FEMA as the area of land subject to inundation by at least one foot of water in response to a 100-year flood event, or the event magnitude with a likelihood of occurring once every 100 years (FEMA 2021).

The portion of the Santa Clara River where the project is located overlies the Santa Paula Groundwater Basin, which is one of 27 adjudicated basins throughout the state. Recharge to the Santa Paula Subbasin occurs via percolation of surface flow in the Santa Clara River, Santa Paula Creek, and other minor tributary streams; subsurface flow from the Fillmore Subbasin, percolation of precipitation, and percolation of unused irrigation waters provide recharge as well (DWR 2004). Groundwater in Santa Paula Subbasin flows toward the southwest, along the Santa Clara River.

The Superior Court of the State of California for the County of Ventura entered a stipulated judgment in March of 1996 to establish pumping allocations and a management plan for the Santa Paula Groundwater Basin (United Water Conservation District vs. City of San Buenaventura, original March 7, 1996, amended August 24, 2010 ["Judgment"]). Members of the Santa Paula Basin Pumpers Association (SPBPA) and the City of San Buenaventura (Ventura) exercise rights to pump groundwater from the basin for reasonable and beneficial uses. The Judgment provides for the creation of a Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from United, the SPBPA, and the City of Ventura. The TAC is charged with establishing a program to "monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of inflow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality." The Judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the safe yield of the basin.

Following the 1996 Judgment, in July 2003 an Investigation of Santa Paula Basin Yield was prepared to determine sustainable yield of the basin. It was determined that extractions of 26,000 acre-feet per year (AFY) from the subbasin would be sustainable, although it is possible that the yield of the subbasin could be increased by various management actions. However, since that time, data have indicated a long-term groundwater elevation decline within the subbasin despite average annual groundwater extraction of approximately 26,000 AFY. For this reason, an updated safe yield study was prepared in May 2017, titled *Santa Paula Basin Hydrogeologic Characterization and Safe Yield Study,* which recommended safe yield of the basin is approximately 25,500 AFY (Fox Canyon GMA 2020). The Piru, Fillmore, Santa Paula, and Mound Subbasins, as well as the northern part of the Oxnard Plain known as the Oxnard Plain Forebay Subbasin, collectively comprise the Santa Clara River Valley. In the Santa Paula Subbasin, the Santa Clara River has migrated south of the ancestral river that deposited the sediments of the Oxnard aquifer and mostly overlies non-water-bearing rocks of Tertiary age; as a result, the Santa Clara River does not overlie the Oxnard aquifer throughout most of the Santa Paula Subbasin (USGS 2003).

Because the Santa Paula Subbasin is adjudicated and managed pursuant to the direction of the Judgement discussed above, it is exempt from SGMA, and a GSP for this basin is not required. Surrounding groundwater basins, including the Piru, Fillmore, and Mound Subbasins of the Santa Clara River Valley, are subject to SGMA, and are managed by a designated GSP responsible for implementing basin-specific GSPs.

Designated beneficial uses of the groundwater basins in the Santa Clara River Valley include MUN, IND, PROC, and AGR (Los Angeles RWQCB 2020).

Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

As discussed above, under the Environmental Setting discussion, the project area is subject to the management direction of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, which includes both narrative and numeric WQOs designed to provide protection for all designated beneficial uses of surface water and groundwater resources within the Basin Plan area. The proposed project would be implemented in compliance with water quality permits designed to achieve and maintain the Basin Plan WQOs, such that the proposed project would not violate water quality standards or waste discharge requirements. The proposed project would also be implemented with a suite of project design features identified as AMMs, to minimize or avoid adverse impacts. Specifically, AMM-1 identifies general BMPs including AMM-1B, *Erosion Control*, AMM-1C, *Sanitary/Septic Waste Management*, and AMM-1D, *Waste Management and Materials Pollution Control,* which directly provide for water quality protection during all project activities.

It is possible that during implementation of sediment management activities, an accidental spill or release of potentially hazardous materials could occur, and potentially lead to degradation of surface water or groundwater quality. Such potentially hazardous materials include but are not limited to fuels and other fluids associated with the operation of equipment and machinery. However, the proposed project would include development and implementation of a SWPPP with BMPs to avoid an accidental spill or release of hazardous materials, as well as BMPs to promptly respond to such accidental conditions, however unlikely, and prevent released materials from being conveyed in stormwater runoff or transmitted to groundwater resources. The SWPPP will also designate staging areas where equipment and vehicles would be stored outside the regulatory floodway when not in use, and re-fueling areas to ensure that re-fueling is conducted in a controlled environment and in accordance with applicable BMPs to reduce or avoid the potential for accidental release conditions to occur.

It is also anticipated that the proposed sediment management activities would result in temporary increases to turbidity and suspended sediment concentration (SSC) within the work area, due to the nature of the project being to physically move accumulated sediment within the channel. Such effects are anticipated to be limited to the immediate sediment management area, as work areas would be dewatered as needed to accommodate project activities. The Santa Clara River downstream of the Freeman Diversion Facility would not be significantly affected by turbidity and SSC associated with project activities, because these effects would be temporary and of short duration, limited to the active sediment management work, and because any temporary increases to turbidity and SSC due to project activities will be insignificant compared to the increases generated during a natural runoff event (for a detailed analysis, see Appendix B, *BRA Report*). In addition, as discussed above for the regulatory environment applicable to hydrology and water quality, regarding the federal Clean Water Act, the NPDES Construction General Permit contains technology-based numeric action levels for turbidity, among other factors, and requires visual monitoring for potential contaminant runoff at all sites, as well as effluent monitoring, follow-up actions for exceedances of numeric action levels, and implementation of a Rain Event Action Plan for all storm events forecast to have measurable precipitation. The Construction General Permit further specifies runoff reduction requirements for all sites not covered by a municipal NPDES

permit, to minimize postconstruction stormwater runoff impacts, such as but not limited to turbidity.

Authorization for coverage of the proposed project under the NPDES Construction General Permit will be acquired prior to the start of construction, and appropriate BMPs will be implemented to ensure compliance with the permit conditions. In addition, as discussed above, the proposed project includes design features identified as AMMs that would be implemented as part of the project to complement regulatory requirements and provide protection against potentially adverse impacts to water quality. Therefore, the potential of the proposed project to result in water quality degradation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Implementation of the proposed sediment management activities would not require a water supply and would therefore not decrease groundwater supplies through direct use. The underlying Santa Paula Subbasin is adjudicated, and any use of groundwater from the subbasin must occur in compliance with the Adjudication Judgment; however, because the project would not require a water supply, it also would not require approval of the Watermaster for consistency of project activities with the Adjudication Judgment. The proposed activities would not introduce new impervious surfaces or otherwise alter existing drainage patterns in such a way that recharge to the underlying groundwater basin would be impeded. Rather, by facilitating the intended function and conveyance capacity of the existing Freeman Diversion Facility, the proposed project would also facilitate continued groundwater recharge associated with infiltration from United's existing spreading grounds immediately downstream of the Facility. Further, the proposed project would likely improve groundwater recharge from the spreading basins because, with effective sediment management upstream of the Facility, flows through the Facility would have improved reliability of diversion and fish passage operations. Conversely, if the proposed activity is left undone, continued sediment deposition upstream of the Facility could eliminate United's ability to divert water and operate the fish passage facility, which would interfere substantially with groundwater recharge..

The sediment removed during Phase 1 and Phase 2 would be deposited in designated sediment management areas, where contour grading may be conducted to achieve the planned dimensions of the sediment placement area; this would occur within the Santa Clara River, and would not constitute the introduction of impermeable surfaces such that recharge to the underlying groundwater basin would be substantially affected, and the project activities would not impede sustainable management of the groundwater basin. No adverse impact would occur.

NO IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The proposed project consists of the excavation and redistribution with recontouring of sediment within the Santa Clara River channel and would inherently result in localized drainage pattern alterations within the sediment management area as well as immediately upstream of the Facility, as a result of achieving the desired sediment management results. These activities would be conducted as part of the operation and maintenance of the existing Facility, and are designed to maintain the planned function of the Facility. The project would redirect the specific location and pattern of surface flow but it would not substantially change the course of a stream or river, and would not introduce new impervious surfaces that could result in substantial erosion, siltation, or flowing on- or off-site. Standard erosion control BMPs would be implemented at the staging and access locations in compliance with the project SWPPP required under CCWA Section 402 and the Construction General Permit; measures may include but would not be limited to the placement of straw wattles and silt fencing to prevent the conveyance of disturbed soils in stormwater flows, and the avoidance of sediment management activities during or immediately after large storm events. Potential impacts associated with erosion, sedimentation, and flooding on- or off-site resulting from drainage pattern alterations associated with the proposed project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As discussed above for impact thresholds c.(i) and c.(ii), the proposed project would not alter the course of a stream or river or introduce substantial new areas of impervious surfaces. The proposed activities are designed to redirect the specific location and pattern of surface flow within the project site by recontouring the sediment management area to provide a more direct flow path into the Facility while preserving some of the natural sinuosity of the river channel. By nature of the project being for the purpose of sediment management, the project would result in site-specific drainage pattern alterations within the Santa Clara River channel. The proposed sediment management activities would not create or contribute runoff water which would exceed the capacity of stormwater drainage systems, as the proposed activities would occur within the existing channel, which would continue to provide stormwater conveyance, and the proposed activities were designed to provide for the planned function of the Facility, including as related to flow capacity. In addition, the proposed project would occur in compliance with a suite of regulatory agency permits applicable to water quality, and would be implemented with project design features that include requirements for spill avoidance and response, specifically under AMM-1, *Best Management Practices*. The proposed project would not result in additional sources of polluted runoff, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

As discussed above for impact thresholds c.(i) through c.(iii), the proposed project redirect the specific location and pattern of surface flow but it would not substantially change the course of a stream or river or introduce substantial new areas of impervious surfaces, although the project would result in site-specific drainage pattern alterations within the Santa Clara River channel by redistributing accumulated sediment from upstream of the Facility. This would not impede flood flows. The removal and deposition of accumulated in-channel sediments that would occur under the project would restore flood conveyance capacity within the channel, and facilitate maintenance of the existing operation capacity of the Facility. Accordingly, the project would not impede or redirect flood flows, and no impact would occur.

NO IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

As discussed under "Surface Water" in the Environmental Setting discussion above, the project site is located within the Santa Clara River channel, which is a regulatory floodway and a flood hazard area as defined by FEMA. This project site is not located within a tsunami inundation area, as defined by the California DOC, which produces tsunami inundation maps for emergency planning; the proposed project site is shown on the Oxnard Quadrangle (California DOC 2021). In addition, the project site is not considered subject to inundation by a seiche, which occur as waves generated within an enclosed or restricted body of water such as a harbor, lake, or swimming pool. According to County of Ventura's Background Report for the 2040 General Plan Update, there is no record of a seiche occurring in Ventura County, and the actual threat posed by seiches in Ventura County is small (County of Ventura 2020). Therefore, the project site is not subject to inundation by tsunami or seiche, but it is subject to inundation by flood hazard.

During implementation of the proposed project, sediment accumulated within the Santa Clara River channel behind the Facility would be managed to provide natural conveyance downstream and ultimately to the ocean. Sediment management activities are part of operation and maintenance of the Facility, and therefore must occur in compliance with regulatory permits, including as applicable to water quality. Project activities would be scheduled to avoid the rainy season and would occur only during dry conditions as discussed in detail in Section 4, *Biological Resources*, and in accordance with AMM-2, *Schedule/Timing of Work*, which would be implemented as part of the proposed project. Equipment, machinery, and vehicles used for sediment management activities would be staged or stored in designated areas outside the regulatory floodway and flood hazard area, such that fuels and other fluids associated with the use of equipment, machinery, and vehicles would not be accidentally released into flood flows. Potential impacts associated with a risk of release of pollutants due to project inundation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed under impact threshold (b) above, the proposed project would not result in adverse impacts to groundwater resources, including as related to the implementation of a sustainable groundwater management plan. Rather, the proposed project is anticipated to result in beneficial impacts to groundwater recharge, by improving the reliability of flows through the Facility and therefore the reliability of flows available for recharge at United's spreading basins downstream of the Facility. Also as discussed above, under Environmental Setting, the project area is subject to the management direction of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, which includes both narrative and numeric WQOs designed to provide protection for all designated beneficial uses of surface water and groundwater resources within the Basin Plan area. The proposed project would be implemented in compliance with water quality permits designed to achieve and maintain the Basin Plan WQOs, such that the proposed project would not conflict with or obstruct implementation of a water quality control plan. Therefore, no impact would occur.

NO IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■

This section addresses the project's potential impacts related to land use and planning, including discussion of the applicable federal, state, and local regulations and policies related to land use and planning, and analysis of the potential impacts to land use and planning associated with implementation of the proposed project.

Regulatory Setting

There are no federal or State plans, policies, laws, or regulations related to land use and planning that are relevant to the analysis in this IS-MND.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project. For land use and planning, this include the Ventura County General Plan, and the MSHCP for the Facility, which is currently in development.

The Ventura County General Plan (2040) indicates that the current land use designation for the project site is Open Space. The project site is also within the planning area of the Freeman Diversion MSHCP; please see Section 4, *Biological Resources*, for further discussion of the MSHCP.

Environmental Setting

The project site is within the Santa Clara River channel, in an area that has been previously developed by the existing Facility, and the proposed project would directly facilitate the existing operation and capacity of the Facility. The project site is characterized by the river channel itself, while the surrounding areas consist of the banks and floodplain of the Santa Clara River, bare ground and vegetated hillsides, and private land.

Impact Analysis

a. Would the project physically divide an established community?

The proposed project does not include any new developments and would not divide an established community through the introduction of new infrastructure. In addition, access to and from the project site would occur on existing roads and would not require road modifications or new road construction that could result in disruption of an established community. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project has been developed with consideration to the Freeman Diversion MSCHP, which is currently being analyzed for CEQA compliance, and includes a series of project design features as AMMs to minimize or avoid potential impacts to species addressed in the MSHCP. As such, the project would not conflict with the MSHCP. The proposed project is also consistent with the Ventura County General Plan, because it would provide for continued operation and maintenance of the existing Facility, and would not change land uses the in area or alter existing operations of the Facility. By providing sediment management activities necessary to maintain flows through the Facility for groundwater management and species protection, the project would not result in any conflicts with a land use plan, policy, or regulation. No impact would occur.

NO IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

Regulatory Setting

No federal mineral resource-related regulations are applicable to the proposed project.

State

The Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code [PRC] §§2710-2796) and its implementing regulations (14 California Code of Regulations §3500 et seq.) establish a comprehensive state policy for the conduct of surface mining operations and for the reclamation of mined lands to a usable condition that is readily adaptable for alternative land uses. SMARA encourages the production, conservation, and protection of the state's mineral resources and recognizes that "the state's mineral resources are vital, finite, and important natural resources and the responsible protection and development of these mineral resources is vital to a sustainable California" (PRC §2711). Under SMARA, the term "minerals" includes "any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and bituminous rock, but excluding geothermal resources, natural gas, and petroleum" (14 California Code of Regulations §3501).

The California Geological Survey (CGS) maps and regulates the locations of potential mineral resources in California consistent with SMARA. In order to protect these potential mineral resources, the CGS has classified the regional significance of mineral resources into Mineral Resource Zones (MRZs) and mapped them. The project site is located within MRZ-2, as discussed below under "Environmental Setting".

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different

entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For mineral resources, this include the Ventura County General Plan.

Ventura County safeguards access to mineral resources by designating appropriate areas as Mineral Resource Areas and then applying zoning requirements known as the Mineral Resource Protection Overlay Zone to those areas (County of Ventura 2020). The project site is within an area designated as MRZ-2, consistent with the overall designation of the Santa Clara River Valley. The Ventura County General Plan Update identifies Policy COS-6.4, *Mineral Resource Area Protection*, which states that discretionary development within MRZs is prohibited if the use will significantly hamper or preclude access to or extraction of mineral resources (County of Ventura 2020).

Environmental Setting

The project site is located within a SMARA study area for sand, gravel, and crushed rock resource areas, known as the Simi production-consumption region. The project site, as with most of the Santa Clara River Valley, is designated as MRZ-2, which indicates areas that contain identified mineral resources (California DOC 1981). The portion of the Santa Clara River between Santa Paula and EI Rio, a distance of seven miles, comprises the Santa Clara River-Ventura production district (California DOC 1981). Records of aggregate production show that two companies were producing aggregate from three locations in the lower Santa Clara River-Ventura production district prior to 1925, and in 1979 there were four companies operating from six properties within the Santa Clara River-Ventura production district (California DOC 1981).

Impact Analysis

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The proposed project would not introduce a demand for mineral resources, and would not result in a direct loss through consumption of the availability of a known mineral resource. In addition, the proposed project would not result in an indirect loss of availability of a mineral resource such as by impeding access to an existing or potential extraction site. The proposed project's sediment management activities would be limited to the project's total 6-acre sediment management area, which includes the 1.3-acre area for Phase 1, and the 4.7-acre area for Phase 2, if necessary. No impacts associated with the loss of availability of a known mineral resource would occur as a result of the project.

NO IMPACT

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The project site is not located within the vicinity of a locally important mineral resource recovery site. As discussed in the environmental setting section above, records of aggregate production in the 1970s show that mining activities have previously occurred in the project area, which is within the Santa Clara River-Ventura production district as defined by the California DOC (1981). However, mining activities in the lower Santa Clara River have not occurred since the 1990s. There are no locally important mineral resource recovery sites in the project area. No impact would occur.

NO IMPACT

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	■	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013). Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013). Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Regulatory Setting

There are no federal or State plans, policies, laws, or regulations related to noise that are relevant to the analysis in this IS-MND.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project. For the issue area of noise, this include the Ventura County General Plan, and Ventura County's Construction Noise Threshold Criteria and Control Plan, as summarized below.

- **Ventura County General Plan.** The Ventura County General Plan was originally adopted by the County Board of Supervisors on May 24, 1988, and since then been amended multiple times. On September 15, 2020, the County of Ventura adopted a General Plan Update with a horizon year of 2040. Below is a summary of General Plan guidance applicable to noise (County of Ventura 2020).

- **Policy HAZ-9.1:** The County shall prohibit discretionary development which would be impacted by noise or generate project-related noise which cannot be reduced to meet the standards prescribed in Policy Haz-9.2. This policy does not apply to noise generated during the construction phase of a project.
- **Policy HAZ-9.2: Noise Compatibility Standards.** The County shall review discretionary development for noise compatibility with surrounding uses. The County shall determine noise based on the following standards:
  1. Noise sensitive uses located near highways, truck routes, heavy industrial activities and other relatively continuous noise sources shall incorporate noise control measures so that indoor noise levels in habitable rooms do not exceed Community Noise Equivalent Level (CNEL) 45 and outdoor noise levels do not exceed CNEL 60 or Leq1H of 65 dB(A) during any hour.
  2. Noise generators, proposed to be located near any noise sensitive use, shall incorporate noise control measures so that ongoing outdoor noise levels received by the noise sensitive receptor, measured at the exterior wall of the building, does not exceed any of the following standards:
     i. L_{eq1H} of 55dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.;
     ii. L_{eq1H} of 50dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.; and
     iii. L_{eq1H} of 45dB(A) or ambient noise level plus 3dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

- **Policy HAZ-9.7:** Noise Control Priorities. The priorities for noise control for discretionary development shall be as follows:
  1. Reduction of noise emissions at the source.
  2. Attenuation of sound transmission along its path, using barriers, landform modification, dense plantings, building orientation and placement, and the like.
  3. Rejection of noise at the reception point using noise control building construction, hearing protection or other means.

- **Policy HAZ-9.7: Implement Noise Control Measures for Traffic Noise.** The County shall require noise control measures to be implemented along roadways for new discretionary development generating traffic noise if either of the following circumstances would exist:
  - The discretionary development would result in traffic noise levels above a County noise compatibility standard stated in Policy HAZ 9.2 in an area where traffic noise levels, under existing conditions, do not exceed the County noise compatibility standard; or
  - The discretionary development would result in an increase in traffic noise levels of 3 dBA or greater in an area where traffic noise levels under existing conditions exceed a County noise compatibility standard stated in Policy HAZ 9.2.

- **Ventura County Construction Noise Threshold Criteria and Control Plan.** In accordance with the County's Construction Noise Threshold Criteria and Control Plan, construction activities that generate noise should be restricted to daytime hours only, from 7:00 a.m. to 7:00 p.m. on Monday through Friday and from 9:00 a.m. to 7:00 p.m. on weekends and holidays. The County's daytime construction noise threshold criteria are shown in Table 14.

Table 14 Daytime Construction Activity Noise Threshold Criteria

Construction Duration Affecting Noise-sensitive Receptors	Fixed $L_{eq(h)}$, dBA[1]	Hourly Equivalent Noise Level (L_{eq}), dBA[1, 2, 3]
0 to 3 days	75	Ambient $L_{eq(h)}$, + 3 dB
4 to 7 days	70	Ambient $L_{eq(h)}$, + 3 dB
1 to 2 weeks	65	Ambient $L_{eq(h)}$, + 3 dB
2 to 8 weeks	60	Ambient $L_{eq(h)}$, + 3 dB
Longer than 8 weeks	55	Ambient $L_{eq(h)}$, + 3 dB

[1] Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building
[2] The instantaneous L_{max} shall not exceed the NTC by 20 dBA more than 8 times per daytime hour.
[3] Local ambient L_{eq} measurements shall be made on any mid-weekday prior to project work.
Source: Figure 4 of the County of Ventura Construction Noise Threshold Criteria and Control Plan, November 2005.

Depending on project duration, the daytime noise threshold criteria shall be the greater of the fixed Leq(h) limit (which includes non-construction evening and nighttime noise) or the measured ambient Leq(h) plus 3 dBA.

Environmental Setting

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Hazards and Safety Element of the Ventura County General Plan identifies noise-sensitive land uses as including: residences; schools; historic sites; cemeteries; parks, recreation, and open space areas; hospitals and care facilities; sensitive wildlife habitats, including the habitat of rare, threatened, or endangered species; hotels and other short-term lodging (e.g., bed and breakfasts, and motels); places of worship; and libraries (County of Ventura 2020).

The nearest noise-sensitive receivers to the proposed project sediment management areas are single-family homes on agricultural properties located approximately 3,000 feet (approximately 0.6 mile) northwest of the project site. There is a caretaker's residence located adjacent to Southern Pacific Milling Road (over 8,000 feet [1.5 miles] from the project site), however, the resident is employed by United and responsible for overseeing United facilities and therefore is not considered noise sensitive.

The most prevalent sources of noise in the project site vicinity are agricultural activities and industrial uses surrounding the project site. A 15-minute noise level measurement was conducted on May 28, 2021, to characterize ambient noise levels near existing uses near the project site. An Extech Model 407780A ANSI Type 2 integrating sound level meter was used to conduct the measurements. Table 15 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix D.

Table 15 Project Site Vicinity Sound Level Monitoring Results – Short-Term

Measurement Location		Sample Times	Approximate Distance to Primary Noise Source	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)
NM1	North of project site near existing uses	12:21 – 12:36 p.m.	75 feet to industrial activities	62	56	80

L_{eq} = average noise level equivalent; dBA = A-weighted decibel; L_{min} = minimum instantaneous noise level; L_{max} = maximum instantaneous noise level
Detailed sound level measurement data are included in Appendix D

Impact Analysis

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptor used for this study is the equivalent noise level (L_{eq}), which is one of the most frequently used noise metrics and considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a one-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Authority [FTA] 2018).

Community noise is usually measured using Day-Night Average Level (L_{DN}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise is also measured using Community Noise Equivalent Level (CNEL or L_{DEN}), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).[5] The dBA penalties account for the tendency of nighttime noise to be more disturbing than daytime noise. The relationship between the peak-hour L_{eq} value and the L_{DN}/CNEL depends on the distribution of noise during the day, evening, and night; however, noise levels described by L_{DN} and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Both Phase 1 and Phase 2 of the proposed project would generate temporary noise at the project site and in the immediate vicinity. Project-related noise would be characterized by the operation of heavy-duty trucks and equipment required to conduct the proposed sediment management activities. The same types of equipment would be used during Phase 1 and Phase 2 sediment management activities, such that the types of noise associated with the project would be consistent across both phases. However, the duration and extent of noise-generating activities associated with the project would be greater during implementation of Phase 2 than during Phase 1, due to the larger sediment management area, with the project footprint increasing from 1.3 acres under Phase 1 to up to six acres under Phase 2.

In order to characterize the project-generated noise for this analysis, noise levels were estimated using reference noise levels and equipment use factors from the FHWA Roadway Construction Noise Model (RCNM). Noise impacts from Phase 1 and Phase 2 project equipment were assessed from the center of the equipment activity area over the time period of one construction workday, and accounting for the types of equipment necessary to install the proposed cofferdam (when needed for Phase 2 dewatering), conducting sediment management, and demobilizing the sediment management event. A conservative approach to noise modeling for the proposed project was used, and assumed simultaneous operation of two dozers, an excavator, and a dump truck during both

[5] Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

Phase 1 and Phase 2. Maximum hourly noise levels were estimated to be 77 dBA L_{eq} at a distance of 100 feet (RCNM calculations are included in Appendix D to the IS-MND).

Per *Ventura County's Construction Noise Threshold Criteria and Control Plan*, daytime project activities occurring between 7:00 a.m. and 7:00 p.m. on Monday through Friday, and between 9:00 a.m. and 7:00 p.m. on weekends and holidays, shall not exceed the fixed hourly noise level that is based on the duration of project activities or the hourly ambient noise level plus 3 dBA. The closest sensitive noise receivers to the proposed project activities consist of a residence located approximately 3,000 feet (0.6 mile) northwest of the project site, surrounded by agricultural development. Project construction would generate noise levels up to approximately 47 dBA L_{eq} at the nearest sensitive receivers. As shown in Table 13, these noise levels do not exceed the daytime construction noise threshold of 75 dBA L_{eq} for construction activities occurring zero to three days, the 55 dBA L_{eq} for construction activities occurring longer than eight weeks, or 65 dBA L_{eq} (ambient plus three dBA). Therefore, Phase 1 and Phase 2 noise impacts from sediment management activities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 16.

Table 16 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 17.

Table 17 Vibration Annoyance Potential Criteria

	Vibration Level (in/sec PPV)	
Human Response	**Transient Sources**	**Continuous/Frequent Intermittent Sources[1]**
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

[1] Continuous/Frequent intermittent noise sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

The County of Ventura has not adopted standards to assess vibration impacts during construction and operation. However, Caltrans has developed limits for the assessment of vibration from transportation and construction sources, which are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources. The thresholds of significance to evaluate vibration impacts are based on the impact criteria shown in Table 16, which specifies a limit of 0.20 in/sec PPV before structural damage occurs, and Table 17, which specifies a limit of 0.25 in/sec PPV before annoyance occurs.

Neither Phase 1 nor Phase 2 of the project would involve activities typically associated with excessive groundborne vibration such as pile driving or blasting. However, some pieces of equipment utilized during project activities would generate vibration; these include loaded trucks and bulldozers. The nearest sensitive noise and vibration receptors to the project's sediment management areas consist of a residence located approximately 3,000 feet (approximately 0.6 mile) to the northwest. Table 18 provides the estimated maximum vibration levels that could affect this receptor during Phase 1 or Phase 2 sediment management activities.

Table 18 Vibration Levels at Sensitive Receivers

Equipment	Estimated in/sec PPV at Nearest Building (3,000 feet)
Large Bulldozer	0.0005
Loaded Truck	0.0004
Threshold	**0.2**
Threshold Exceeded?	No

As shown in Table 18, vibration generated by project equipment would not exceed the threshold at which damage can occur to the closest residential structure, 0.20 in/sec PPV, or the threshold at which transient vibration sources would be distinctly perceptible of 0.25 in/sec PPV. Therefore, vibration impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The airport nearest to the project site is the Santa Paula Airport, located approximately four miles to the northeast of the proposed project site. The project site is not located within the noise contours of the airport, as shown in Exhibit E6 of the Ventura County Airport Comprehensive Land Use Plan (Ventura County ALUC 2000). Therefore, project workers would not be subject to substantial noise exposure from airport operations, and no impact would occur.

NO IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	■
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

Regulatory Setting

No federal, State, or local regulations for population and housing are applicable to the proposed project.

Environmental Setting

The project site is located in the unincorporated area of Ventura County. The population in Ventura County decreased from 841,219 in January 2020 to 835,223 in January 2021, representing a population decrease of approximately 0.7 percent (DOF 2021).

Impact Analysis

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed project would provide for operation and maintenance of the existing Facility by conducting necessary sediment management activities under Phase 1 and, if necessary, Phase 2. The project would not introduce new housing or any other infrastructure that may support increased population. In addition, the project would not expand or otherwise modify existing operation of the Facility, beyond providing sediment management to facilitate operational capacity of the Facility. The proposed project would not directly or indirectly induce substantial unplanned population growth. Similarly, the proposed project would not displace any people or housing. No impact would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	1 Fire protection?	☐	☐	☐	■
	2 Police protection?	☐	☐	☐	■
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

Regulatory Setting

No federal or State regulations for public services are applicable to the proposed project.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For public services, these include the Ventura County General Plan, as summarized below.

- Ventura County General Plan, Section 5, *Public Facilities, Services, and Infrastructure Element*, identifies Policies PFS-11.1 through PFS-11.8, which address Goal PFS-11 to protect the public through effective law enforcement, disaster preparedness, and emergency services.

Environmental Setting

The project site is located within the unincorporated area of Ventura County. Law enforcement services to this area are provided by the Ventura County Sheriff, and fire protection services are provided by the Ventura County Fire Department. Schools, parks, and other public facilities such as but not limited to public libraries are managed by the County of Ventura. As discussed in Section 9, *Hazards and Hazardous Materials,* there are no schools located within 0.25 mile of the project site, and the nearest school to the project site is Saticoy Elementary School, located approximately 2.5 miles to the west-southwest of the Facility, in the unincorporated community of Saticoy. The nearest park is the Saticoy Community Park located approximately 2.3 miles west of the project site.

Impact Analysis

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Fire protection services for the project site are provided by the Ventura County Fire Department. As discussed in Section 20, *Wildfire*, the nearest State Responsibility Area (SRA) is located approximately 200 feet from the project site. The proposed project would not affect wildfire potential associated with the SRA and would not necessitate new or expanded fire protection facilities. In addition, the proposed project would provide for continued operation and maintenance of the existing Facility and would not introduce new developments requiring fire protection services. Furthermore, implementation of the proposed project would not impede access for emergency response vehicles or require any temporary traffic closures during project activities. No impacts associated with the provision of new or altered fire protection facilities would occur as a result of the proposed project.

Similarly, the proposed project would not necessitate new or expanded police protection facilities, because the project would provide for continued operation and maintenance of the existing Facility and would not introduce new developments requiring police protection services. No impacts associated with the provision of new or altered police protection facilities would occur as a result of the proposed project.

NO IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

As discussed in Section 14, *Population and Housing,* the proposed project would not directly or indirectly result in a population increase to the surrounding area. As such, the project would not require the provision of new or expanded public facilities, including schools, parks, and other facilities such as libraries. In addition, the project would have no impact on existing schools, parks, or other public facilities, the nearest of which are at least 2.5 miles away from the project site. Therefore, the project would not result in impacts associated with the construction or expansion of schools, parks, or other public facilities. No impact would occur.

NO IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

This section addresses the project's potential impacts related to recreational uses and facilities. The section describes the applicable federal, state, and local regulations and policies related to recreation and recreational facilities; discusses the existing parks and other public recreational facilities, or lack thereof, in the project site; and analyzes the potential impacts from implementation of the project on recreational facilities and opportunities.

Regulatory Setting

There are no federal or State plans, policies, laws, or regulations related to recreation that are relevant to the analysis in this IS-MND.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For recreation, these include the Ventura County General Plan, as summarized below.

- Ventura County General Plan, Section 5, *Public Facilities, Services, and Infrastructure Element*, identifies Policies PFS-10.1 through PFS-10.9, which address Goal PFS-10 to develop and maintain a comprehensive system of parklands and recreational facilities that meet the active and passive recreational needs of residents and visitors, as funding is available.

Environmental Setting

The project site is located within the Santa Clara River channel. The Santa Clara River provides various informal recreational opportunities, including inner tubing, kayaking, swimming, wildlife viewing, and hiking. However, recreational opportunities downstream of the Facility are limited because a large portion of the watershed is privately owned and flows in portions of the mainstem of the river are intermittent or nonexistent during the dry summer season. The mainstem of the Santa Clara River is closed to recreational fishing for all fish species year-round (i.e., the Santa Clara River meets the CDFW definition of an anadromous water that is closed to all fishing all year) (CDFW 2020). Thus, the lower Santa Clara River watershed does not support a recreational fishery.

Impact Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project would not increase the use of parks or other recreational facilities, because the proposed project would facilitate the operation and capacity of the existing Facility, and would not increase population such that additional recreational facilities would be required to serve the community, and would not remove existing recreational facilities from use. Project activities during implementation of the proposed sediment management activities would generate short-term impacts that could indirectly affect the recreational enjoyment of undeveloped outdoor spaces surrounding the project site, such as from temporary noise and project related traffic. However, such effects would be temporary and of short duration, limited to the Phase 1 and Phase 2 implementation periods. Additionally, there are no formal recreational facilities available for public use in the immediate vicinity of the proposed project activities. Although the project site is designated as Open Space, due to the presence and operation of the existing Facility, there are no recreational opportunities at the project site itself. The proposed project does not include expanding existing facilities or constructing new recreation facilities. The proposed project would not increase the use of existing recreational facilities and would not result in the degradation of recreational facilities. No impact would occur.

NO IMPACT

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	■
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
d. Result in inadequate emergency access?	☐	☐	☐	■

Regulatory Setting

No federal or state regulations for transportation are applicable to the proposed project.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local plans, policies, and regulations that may be relevant to the proposed project. For transportation, these include the Ventura County General Plan, as summarized below.

- Ventura County General Plan, Section 4, *Circulation Element*, identifies Policies CTM-1.1 through CTM-1.15, which address Goal CTM-1 to ensure the design, construction, and maintenance of a safe and efficient roadway system for the movement of persons and goods.

Environmental Setting

Access to the project site would be via Los Angeles Avenue/SR 118 to Southern Pacific Milling Road, which is aligned parallel to the south of the Santa Clara River between SR 118 and the project site. SR 118 enters Ventura County from Los Angeles County at Rocky Peak Park and terminates at the junction with SR 126 in the city of Ventura near Saticoy. SR 118 is considered to be a conventional highway throughout its length in Ventura County and has a truck designation of Surface Transportation Assistance Act Route/Terminal Access Route (County of Ventura 2020). SR 126,

which is located approximately one mile to the northwest of the project site, is an access-controlled freeway from U.S. Highway 101 in Ventura through the city of Santa Paula, and a conventional highway from that point to the Los Angeles County line (County of Ventura 2020). Primary access to the project site will occur via SR 118 to Southern Pacific Milling Road, which is commonly used for agricultural operations which are prevalent throughout the county. Project-related vehicles traveling to the project site from the north would also travel on SR-126 to reach SR 118.

Impact Analysis

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project would not conflict with any program plan, ordinance, or policies. Existing public and private roads would be utilized to deliver equipment, supplies, and workers to and from the project site. The project would not require any road closures or result in inadequate emergency access. Since no new roads are being developed, the project would not increase hazards due to a geometric design feature or incompatible uses.

NO IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3 provides guidance for evaluating a project's transportation impacts, and states that VMT is the appropriate measure of transportation impacts. In this context, VMT refers to the amount and distance of vehicle travel that is attributable to a project. Subsection (b) identifies criteria for analyzing transportation impacts, and item (1) of subsection (b) states that in general, projects that are located within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. The project site is located approximately 2.8 miles upstream of Los Angeles Avenue/SR 118, and approximately one mile east of SR 126. While this is greater than the 0.5-mile threshold identified in Section 15064(b) for transportation impacts to be presumed less than significant, the proposed project is not anticipated to result in VMT that would cause a significant transportation impact.

The number of truck trips associated with project activities will depend upon the project phase being implemented; the larger sediment management area under Phase 2 would involve more trucks and equipment usage than the smaller sediment management area under Phase 1. However, if sediment spoils are hauled via truck for off-site disposal, which is considered in this analysis as a potential worst-case scenario for air quality emissions, it is assumed that would occur during Phase 1[6]. It was further assumed that under Phase 2, excavated sediments would be redistributed within the sediment management area, and no excavated sediments would be trucked off-site. Therefore, VMT would be higher for Phase 1 than Phase 2. As discussed in the Project Description under "In-Channel Sediment Management", United is seeking approvals to conduct these activities on an as-needed basis, up to once per year. As such, VMT associated with sediment management activities under either Phase 1 or Phase 2 of the project would occur up to once per year and would not be continuous throughout the year.

[6] As discussed in the Project Description and Section 3, *Air Quality*, the proposed project is designed to balance all cut and fill on-site such that off-site disposal of sediment spoils would not occur; however, the air quality emissions calculations account for off-site disposal of spoils associated with a portion of the project's total excavations, to characterize worst-case air quality emissions.

Due to the project site being located near major transportation corridors (SR 118 and SR 126), and the temporary nature of sediment management activities being limited to once per year, potential impacts to transportation from VMT would be less than significant. In addition, in 2018 the State of California OPR issued a Technical Advisory on evaluating transportation impacts in CEQA which states that, absent substantial evidence to the contrary, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact (OPR 2018). The proposed project would not introduce 110 truck trips under either project phase and including consideration to off-side sediment spoils disposal under worst-case air quality emissions. Therefore, potential impacts of the project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The proposed project would not modify existing roads and would not cause or result in hazardous geometric design features such as sharp curves or dangerous intersections. In addition, the roads surrounding the project site are regularly used for agricultural purposes, and trucks such as those that would travel to and from the project site during sediment management activities, particularly during Phase 1 when excavated sediments would be transported off-site for disposal, would not represent an unusual or incompatible use of the area roadways. No impact associated with transportation hazards or incompatible uses would occur as a result of the project.

NO IMPACT

d. Would the project result in inadequate emergency access?

The project activities would take place within the Santa Clara River channel at the existing Facility, where such activities would not obstruct emergency access or interfere with emergency response activities, because no such activities occur in the river channel. In addition, the project would include transport of heavy vehicles and equipment to and from the project site, particularly during Phase 1 which would involve the off-site transport of sediment spoils under the worst-case scenario for air quality emissions; however, this would be limited to the active sediment management activities which are anticipated to occur up to once per year, and therefore would be intermittent and temporary. Further, the transport of such vehicles and equipment would occur on local roadways where such use would not be unusual or incompatible. The proposed project would not result in inadequate emergency access. No impact would occur.

NO IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code 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 Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	■

Regulatory Setting

There are no federal plans, policies, laws, or regulations related to tribal cultural resources that are relevant to the analysis in this IS-MND.

State

CEQA requires lead agencies to consider whether projects will impact tribal cultural resources. PRC Section 21074 states the following:

1. "Tribal cultural resources" are either of the following:
    a. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
        i. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
        ii. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
    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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
2. A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
3. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and the County coroner be notified. If the remains are of a Native American, the coroner must notify NAHC, which notifies and has the authority to designate the most likely descendant of the deceased. The Act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Health and Safety Code, Sections 7050.5 and 7052

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the NAHC. Section 7052 states that the disturbance of Native American cemeteries is a felony.

Public Resources Code, Section 5097

PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states the following:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

PUBLIC RESOURCES CODE SECTION 21080.3

AB 52, signed by the California Governor in September of 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in PRC 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation before the release of an environmental impact report, negative declaration, or mitigated negative declaration. AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). AB 52 further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and as those resources which meet one of the following criteria:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)
2. 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 PRC Section 5024.1.

In applying the criteria above for identification of a tribal cultural resource, the lead agency shall consider the significance of the resource to a California Native American tribe. AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project. For tribal cultural resources, this include the Ventura County General Plan, which addresses Cultural, Tribal Cultural, and Paleontological Resources in Section 4.5 (Ventura County 2020).

Environmental Setting

As mentioned in Section 5, *Cultural Resources,* in January of 2021, United conducted CEQA analysis for the Freeman Diversion Fish Passage Facility Geotechnical Exploration Project, which overlaps the proposed project (United 2021). Part of the CEQA analysis conducted for the Geotechnical Exploration Project included contacting the NAHC to request a Sacred Lands File (SLF) search for the project site. Because the proposed project and the Geotechnical Exploration Project are both located at the Facility on the Santa Clara River, the NAHC records search results for the Geotechnical Exploration Project are considered relevant and applicable to the proposed project. The NAHC

returned the SLF request with negative, indicating no known cultural resources were present in the Geotechnical Exploration Project site. Although this records search was conducted for a different project, the location provided for the records search is the same as the proposed project location; therefore, it is reasonably determined that no known cultural resources are present in the proposed project site.

AB 52 requires that consultation is conducted for each applicable proposed project. However, no California Native American tribes have requested consultation under AB52, PRC Section 21080.3.1. Therefore, there is no trigger for consultation for the proposed project. Impact Analysis

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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?*

As of the date of this draft, no tribes have requested consultation under AB 52. In addition, based on the results of the January 2021 cultural resources study conducted at the project site (United 2021), no archaeological resources are known to exist within the project site. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. No impact would occur.

NO IMPACT

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	■
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	■
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	■
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	■

This section evaluates the availability of utilities and service systems to support proposed project activities, as well as potential impacts of the proposed project on existing utilities and service systems. Utilities and service systems include water supply, stormwater conveyance, electrical power, natural gas, telecommunication facilities, and solid waste. However, the proposed project would not include housing or substantially increase electricity or natural gas demand, and no new telecommunication facilities would be needed to serve the project. Therefore, implementation of the proposed project would not require or result in the relocation or construction of new or electric power, natural gas, or telecommunications facilities, and these topics are not addressed further for the purposes of this IS-MND. Accordingly, the analysis provided below is specific to water supply and solid waste. Energy use associated with the proposed project is discussed in Section 6, *Energy*.

Regulatory Setting

Federal

The federal Safe Drinking Water Act (SDWA) (Public Law 93-523), passed in 1974, mandates the USEPA to regulate contaminants of concern for domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of a domestic water supply. The USEPA set standards known as primary and secondary MCLs to help regulate these types of contaminants; MCLs and the process for setting these standards are reviewed every three years, and amendments to the federal SDWA enacted in 1986 established an accelerated schedule for setting drinking water MCLs. In California, the USEPA has delegated responsibility for the drinking water program to the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW). The SWRCB-DDW is accountable to the USEPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by the USEPA.

State

CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT

The California Integrated Waste Management Act of 1989 requires all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of their waste. The State determines compliance with this mandate to "divert" 50 percent of generated waste (which includes both disposed of and diverted waste) through a formula that compares a "base year" waste generation rate against which future diversion is measured. The city or county calculates the diversion rate by subtracting the amount of material disposed at landfills annually from the base year amount (PRC Section 41780.2).

CALIFORNIA CODE OF REGULATIONS TITLE 14, NATURAL RESOURCES – DIVISION 7

CalRecycle, created January 1, 2010, through legislation merging the programs of the former California Integrated Waste Management Board and the beverage container recycling program that was previously managed by the California DOC, administers and provides oversight for all of California's state-managed waste handling and recycling programs. This section of the California Code of Regulations contains current CalRecycle regulations pertaining to all other non-hazardous waste management in California. Title 14 Chapter 3 Article 5 describes solid waste storage and removal standards that owners and operators must follow, including design requirements for proper storage of waste and timing of removal from the site. Chapter 9.1 mandates recycling for any commercial or public entity that generates four cubic yards or more of commercial solid waste per week.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project. For utilities and service systems, this include Ventura County Ordinance 4421, as summarized below.

Ventura County Ordinance 4421 requires all discretionary permit applicants whose proposed project includes construction and/or demolition activities to reuse, salvage, recycle, or compost a minimum of 65 percent of the solid waste generated by their project. The County of Ventura Public Works Agency (PWA) Integrated Waste Management Division (IWMD) implements a waste diversion program that ensures this 65 percent diversion goal is met prior to issuance of a Certificate of Occupancy. This provides consistency with the Ventura County General Plan; specifically, Waste Treatment and Disposal Facility Goals 4.4.1-1 and 4.4.1-2 and Policies 4.4.2-1, 4.4.2-2, and 4.4.2-6.

Environmental Setting

The environmental setting for water supply is discussed in Section 10, *Hydrology and Water Quality.* United provides water supply for agricultural uses across the Oxnard Coastal Plain. However, as discussed below, the proposed project would not require a water supply.

Solid waste in the project area is collected by a private contractor and sent to a local landfill facility. The two nearest solid waste disposal facility the Toland Road Landfill, located at 3500 Toland Road in unincorporated Ventura County, approximately 13 miles east-northeast from the Facility. Toland Road Landfill is managed by the VRSD and accepts solid residential, commercial, non-hazardous industrial, and agricultural waste and de-watered sludge. The landfill has a total permitted capacity of 30 million cubic yards, and current design capacity of approximately 22.8 million cubic yards; accounting for airspace used as of December 2019, the landfill's remaining capacity is approximately 8.4 million cubic yards or approximately 7.6 million tons (VRSD 2020). At the current rate of landfilling (423,776 tons per year), Toland Road Landfill would reach its design capacity in the year 2038; however, based on the amount of waste anticipated to be directed to Toland Road Landfill (approximately 574,864 tons per year), the landfill would reach its design capacity in the year 2036 (VRSD 2020).

Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The proposed project would not require or result in the relocation or construction of new utilities or service systems, including as related to water supply, wastewater, stormwater, electric power, natural gas, and telecommunications. Accordingly, the project would not result in impacts associated with the relocation or construction of such facilities. No impact would occur.

NO IMPACT

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The proposed project is part of the operation and maintenance the existing Facility and does not constitute new development. Additionally, the proposed project would not introduce a new water demand and would therefore not affect the sufficiency of water supplies available to serve development within the area. As discussed in Section 10, *Hydrology and Water Quality,* under impact threshold (b), implementation of the proposed sediment management activities would not require a water supply and would therefore not decrease groundwater supplies through direct use; also as discussed therein, the project would not adversely affect groundwater recharge rates or

patterns through the introduction of new impervious surfaces. No impact related to water supply availability would occur.

NO IMPACT

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

During implementation of sediment management activities, workers would use on-site portable restroom facilities that would be serviced by a designated contractor. The proposed project would not generate wastewater, and therefore will not affect the treatment capacity of existing wastewater treatment providers. No impact would occur.

NO IMPACT

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed project would remove accumulated sediment from within the Santa Clara River channel and place removed sediment within designated sediment management areas. As previously discussed, the proposed project would redistribute sediment spoils from Phase 1 and Phase 2 excavations across the total 6-acre sediment management area within the existing river channel. However, the worst-case air quality emissions scenario was assumed to include the hauling and off-site disposal of spoils associated with a portion of the project's excavations, up to 2,010 cubic yards, and that off-site disposal activities would be limited to Phase 1. Should the worst-case air quality emissions scenario occur, up to 2,010 cubic yards of spoils would be hauled to Toland Road Landfill, approximately 13 miles east-northeast of the Facility, in Santa Paula. As discussed above for "Solid Waste", Toland Road Landfill has sufficient capacity to meet planned solid waste disposal needs through the year 2036. In addition, Ventura County's recent reporting, required under PRC Sections 41770 and 41822, and Title 14, California Code of Regulations Section 18788, indicates that Ventura County has a combined total of over 52 years of disposal capacity available at existing solid waste disposal facilities, including the Toland Road Landfill (Ventura County Water and Sanitation Department [VCWSD] 2010; Ventura County IWMD 2017).

Therefore, although the United proposes to balance sediment spoils within the sediment management areas for Phase 1 and Phase 2, respectively, under the calculated worst-case scenario for air quality emissions, a portion of the project's sediment spoils would be hauled by truck for off-site disposal; as discussed above, sufficient disposal capacity is available. Therefore, the project would not have an impact associated with solid waste disposal and would comply with applicable regulations related to solid waste. No impacts would occur.

NO IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	■
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	■	☐
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

This section evaluates the effects of the proposed project's sediment management activities on wildfire and wildfire-related risks. This section provides background and context on wildfire concepts, such as wildfire behavior and the wildfire environment for Ventura County. Information used in this section was obtained from the Ventura County General Plan, relevant fire and emergency-related plans, scientific journal articles, and relevant reports.

Regulatory Setting

No federal plans, policies, regulations, or laws related to wildfire are applicable to the proposed project.

State

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately-owned wildlands. PRC Sections 4125-4137 establish that CAL FIRE has the primary financial responsibility of preventing and suppressing fires in the State Responsibility Areas (SRA). PRC Section 4290 states that CAL FIRE also has responsibility for enforcement of Fire Safe Standards including road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; fuel breaks and greenbelts. PRC Section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on non-federal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

Local

As a special district established in accordance with California Water Code Section 74000 et seq., some of United's activities are exempt from plans, policies, and regulations administered by local municipalities. As such, this IS-MND need not, as a matter of law, consider all local plans, policies, and regulations that might normally be applicable to similar activities undertaken by a different entity. Nevertheless, in the exercise of its discretion, United addresses in this IS-MND those local land use plans, policies, and regulations that may be relevant to the proposed project. For the issue area of wildfire, this includes Ventura County's Unit Fire Plan, Multi-Hazard Mitigation Plan, and Wildfire Action Plan, as summarized below.

- As part its contract with CAL FIRE, Ventura County has developed a Unit Fire Plan that is part of the California Strategic Fire Plan discussed above. The Unit Fire Plan covers all of Ventura County, and identifies wildfire risks and clarifies priorities for funding and programs to reduce impacts of wildfire on the communities at risk. Building on the Weed Abatement Program implemented by VCFD under the authority of the Healthy Forests Restoration Act, the County's Unit Fire Plan documents and prioritizes the projects that stakeholders within communities at risk have identified (VCFD 2020).
- The *2015 Ventura County Multi-Hazard Mitigation Plan* identifies hazards in the county, analyzes risks to people and facilities, and determines mitigation actions and strategies (County of Ventura 2015a). Jurisdictions and special districts in the project area participating in the plan include United, the City of Ventura, the City of Oxnard, the City of Santa Paula, and the City of Fillmore. The County of Ventura also has an EOP for use by all county employees in case of a disaster or emergency. The plan outlines the County's coordinated response by all employees and assigns specific responsibilities in the event the plan is activated (County of Ventura 2013).
- The VCFD provides fire protection and emergency response services for the unincorporated areas of Ventura County as well as seven cities within the county. Together, these areas compose the Ventura County Fire Protection District (VCFPD), which has adopted a local ordinance that requires mandatory 100-feet of brush clearance around structures and 10-feet for road access located in or adjacent to Hazardous Fire Areas. The Fire Hazard Reduction Unit manages this requirement throughout the VCFPD jurisdiction (VCFD 2020).

  The Ventura County Fire Department also maintains guidance documents to help community members, especially those that live in or adjacent to the wildland urban interface, to prepare for wildfires. The Wildfire Action Plan (*Ready, Set, Go! Your Personal Wildfire Action Plan)* consists of information and checklists for homeowners to prepare themselves and to make their home resistant to wildfires and prepare their families to leave early and safely (VCFD 2016).

Environmental Setting

Human influence on wildfire is broad and can be substantial. It includes direct influences such as the ignition and suppression of fires, and indirect influence through climate change and alterations in land use patterns that support modified vegetative regimes and increased development in the Wildland-Urban Interface.

Wildfires are a significant threat in California, particularly in recent years as the landscape responds to climate change and decades of fire suppression. As climate change persists, it will produce increasing temperatures and drier conditions that will generate abundant dry fuels. All wildfires (those initiated by both natural and manmade sources) tend to be larger under drier atmospheric conditions and when fed by drier fuel sources (Balch et al. 2017).

Within an SRA, wildland fire protection is the responsibility of the State, whereas in Local Responsibility Areas (LRA), wildland fire protection is the responsibility of city fire departments, fire protection district, counties, and CAL FIRE under contract to local government. LRA typically include incorporated cities and cultivated agricultural lands. CAL FIRE maintains fire hazard severity zone maps for the LRA and SRA. These areas are mapped based on fuels, terrain, weather, and other relevant factors. The project site is located within a moderate, high, or very high fire hazard severity zone (CAL FIRE 2010, 2021).

Impact Analysis

The following analysis considers drivers of wildfire risk, and how project implementation and operations and maintenance-related activities could add to such risks or expose people or structures to wildfire risk.

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The nearest SRA to the Facility and the project site is located approximately 200 feet upstream of the project site. Implementation of the proposed project would include the transport and use of heavy equipment and machinery to the project site to conduct the proposed sediment management activities; the presence of such equipment and machinery on local roadways is not unusual due to the agricultural uses surrounding the project site which frequently require the transport of similar heavy equipment and machinery. Implementation of the project's sediment management activities would not require road closures, including temporary lane closures, and traffic associated with project activities would not obstruct access for emergency vehicles. Implementation of the proposed sediment management activities would occur within the Santa Clara River channel, where project activities would not impede emergency response activities. Therefore, the proposed project's sediment management activities from within the Santa Clara River would not substantially impair an adopted emergency response plan or emergency evaluation plan, and there would be no impact.

NO IMPACT

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As discussed above, the project area is considered subject to moderate, high, or very high fire hazard severity risk (CAL FIRE 2010, 2021), and the nearest SRA to the project site is approximately 200 feet upstream of the sediment management areas. Although there are small variations in elevation surrounding the site, the project is located in a relatively level location and is not situated on slopes. Sediment management activities would not occur on slopes.

The project would be implemented in compliance with requirements related to project equipment and fire suppressant such that project equipment will be outfitted with standard fire safety features such as spark protectors and fire hydrants (PRC Section 4442). Compliance with applicable State requirements would provide that project activities would not exacerbate wildfire risk. However, the project site and surrounding area would be subject to the same wildfire risk that currently characterizes the area. Because the project would follow regulatory compliance measures related to project equipment for mitigating wildfire risk and would not expose residents to increased pollutant concentrations, the project's impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The proposed project would not install new infrastructure, as all activities conducted under the proposed project would be to implement the proposed sediment management activities. Implementation of these activities would not require the installation or maintenance of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk. Therefore, no impact would occur.

NO IMPACT

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The proposed project's sediment management activities would be limited to the Phase 1 and Phase 2 sediment management areas within the Santa Clara River channel. Project activities would not disturb hillsides surrounding the project site and would not involve any activities on slopes that could affect slope stability or landslide susceptibility. The project would include implementation of erosion control BMPs under the project's SWPPP, discussed in detail in Section 10, *Hydrology and Water Quality*, as well as under the project design features which include AMM-1, *Best Management Practices.* Additionally, the project would not affect overall drainage patterns of the Santa Clara River, other than improving flows through the Facility by providing sediment management. The project would not expose people or structures to wildfire risks associated with slope stability or drainage patterns, and no impact would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	■	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	■	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The analysis of the proposed project, as documented in this IS-MND, concludes that implementation of the proposed project would not have a significant impact on the environment. As evaluated in Section 4, *Biological Resources*, impacts on biological resources would be less than significant or less than significant with mitigation incorporated. The proposed project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of an endangered, rare, or

threatened species. As discussed in Section 5, *Cultural Resources*, the proposed project would not eliminate important examples of the major periods of California history or prehistory. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The environmental impact analysis prepared for the proposed project determined that potential impacts of project implementation would be less than significant, in some cases with the implementation of mitigation measures, and that no potential impacts of the project would be significant and unavoidable. A cumulative impact could occur if an impact of the proposed project would be similar to impact(s) of other projects within the same geographic and temporal scope of the project, also referred to as the "cumulative scenario", such that impact(s) of the proposed project and cumulative project(s) would combine to result in a greater impact, or "cumulative" impact. Cumulative impacts may be less than significant, or cumulatively significant.

The identification of cumulative impacts requires consideration of relevant projects in the cumulative scenario. The proposed project site is located in an undeveloped area, within an active river channel, co-located with an existing permanent flow diversion facility. As such, the geographic extent of the cumulative scenario for the proposed project is limited to the channel of the Santa Clara River where the project footprint is located, and other activities within the Santa Clara River watershed that are physically coincident with the project and would occur at the same time as the project's sediment management activities, up to once per year. As such, cumulative projects are primarily related to other activities of United, including implementation of the MSHCP, and conducting maintenance and repairs to other flood control facilities.

The Freeman Diversion MSHCP, which is currently being analyzed for CEQA purposes, will influence how regulatory permits are issued for activities such as those included under the proposed project, including for potential impacts to the bed and banks of the Santa Clara River, and the habitat areas and species (vegetation and wildlife) that occur within the watershed. The proposed project is not anticipated to result in cumulative impacts with the MSHCP, because potential impacts of MSHCP implementation to environmental issue areas would largely be beneficial and associated with the protection of habitat and species. As discussed above, potential impacts of proposed project activities to protected species, including those addressed in the MSHCP, would be less than significant or mitigated to a less-than-significant level; as such, the proposed project would not result in impacts that would be cumulatively considerable as a result of the MSHCP.

The Santa Felicia Dam Safety Improvement Project, which is located on Piru Creek, an upstream tributary of the Santa Clara River, would include raising the crest of the existing Santa Felicia Dam, modifying the spillway, and relocating the outlet-works facility on Piru Creek. These activities would, similar to the proposed project, include in-channel construction activities and substantial ground-disturbing activities, as well as the associated potential to impact local vegetation and wildlife species and habitat areas. However, Santa Felicia Dam is located more than 25 miles upstream of the project site, and construction of the Santa Felicia Dam Safety Improvement Project would not occur until at least several years after the initial sediment management events for the proposed project. Additionally, the Santa Felicia Dam Safety Improvement Project is subject to the same regulatory permitting requirements as the proposed project, including CWA Section 404 (USACE),

CWA Section 401 (Los Angeles RWQCB), and LSAA (CDFW), as well as federal clearances associated with licensing of the dam with the Federal Energy Regulatory Commission (FERC). It is possible that future sediment management events (after the initial implementation of Phase 1) of the proposed project could occur coincident to construction of the Santa Felicia Dam Safety Improvement Project; however, due to the distance between the project site and Santa Felicia Dam, as well as the requirements for compliance with regulatory permits to address potential impacts, this project would not result in significant cumulative impacts with the proposed project.

As discussed in the issue area analyses for the proposed project, neither Phase 1 nor Phase 2 would result in significant unavoidable impacts. Of the less than significant project impacts, including those that are reduced to a less than significant due to mitigation measures, none are anticipated to combine with similar impacts of other projects in the cumulative scenario, due to the limited extent of development within the cumulative scenario, and the geographic and temporal separation between the proposed project activities and activities of other activities in the cumulative scenario. Therefore, potential impacts of the proposed project would not be cumulatively considerable, and potential cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The project would result in less than significant impacts and would not cause substantial adverse effects on human beings, either directly or indirectly. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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