

WaterSMART

Aquatic Ecosystem Restoration Projects

Notice of Funding Opportunity No. R23AS00106



Freeman Diversion Fish Passage Rehabilitation Project

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Section 1: Technical Proposal

1.1 Executive Summary

Date: January 24, 2024
Applicant Name: United Water Conservation District
City, County, State: City of Oxnard, Ventura County, California
Category and Task: Category A, Task Area B: Construction
Project Name: Freeman Diversion Fish Passage Rehabilitation Project

United Water Conservation District (United) will facilitate safe, timely, and effective upstream and downstream passage for federally endangered Southern California steelhead (*Oncorhynchus mykiss*) and other native aquatic species in the lower Santa Clara River, within Ventura County, California. The Freeman Diversion Fish Passage Rehabilitation Project (Project) includes the construction of a hardened ramp fish passage facility, an innovative nature-like fishway, to promote unimpeded migration at United's Freeman Diversion. United is a California Special District which helps maintain the health of the groundwater basins within its service boundary and contribute to the water supplies of communities in central and southern Ventura County. United's Freeman Diversion located on the Santa Clara River facilitates diversions of surface flows to recharge groundwater in local groundwater basins and deliver surface water supplies in lieu of groundwater withdrawals. These operations are critical to enhance groundwater sustainability given existing conditions of overdraft and seawater intrusion in these basins. Without United's recharge and conjunctive-use operations, the region faces the prospect of major water-supply restrictions, which could impact regional water supply reliability and the County's multi-billion-dollar agriculture industry. However, the Santa Clara River Watershed has been identified as critical for the survival and recovery of endangered steelhead, and the existing Freeman Diversion facility has been found to create limitations to the migration of endangered steelhead. The proposed Project was selected and designed in close coordination with the National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) among other stakeholders, as the alternative that would provide the best fish passage benefits while allowing United to divert sufficient water to maintain the sustainability and resilience of the underlying aquifers. The Project is supported by numerous planning documents, including the NMFS Southern California Steelhead Recovery Plan which outlines actions related to the Freeman Diversion for protecting and facilitating recovery of steelhead that the Project will specifically address.

The Project is scheduled to be completed by September 2029 based on an approximately 2-year construction timeframe and completion of remaining design, environmental review, and permitting activities.

The Project is not focused on a Federal facility and will not involve Federal land.

1.2 Project Location

The Freeman Diversion, and site of the proposed Project, is located within unincorporated Ventura County, California, on the Santa Clara River approximately 4 miles southwest of the city center of Santa Paula, and approximately 10.5 river miles upstream of the Pacific Ocean. The project site is centered at approximately 34.299082, -119.108188. See Figure 1, below.

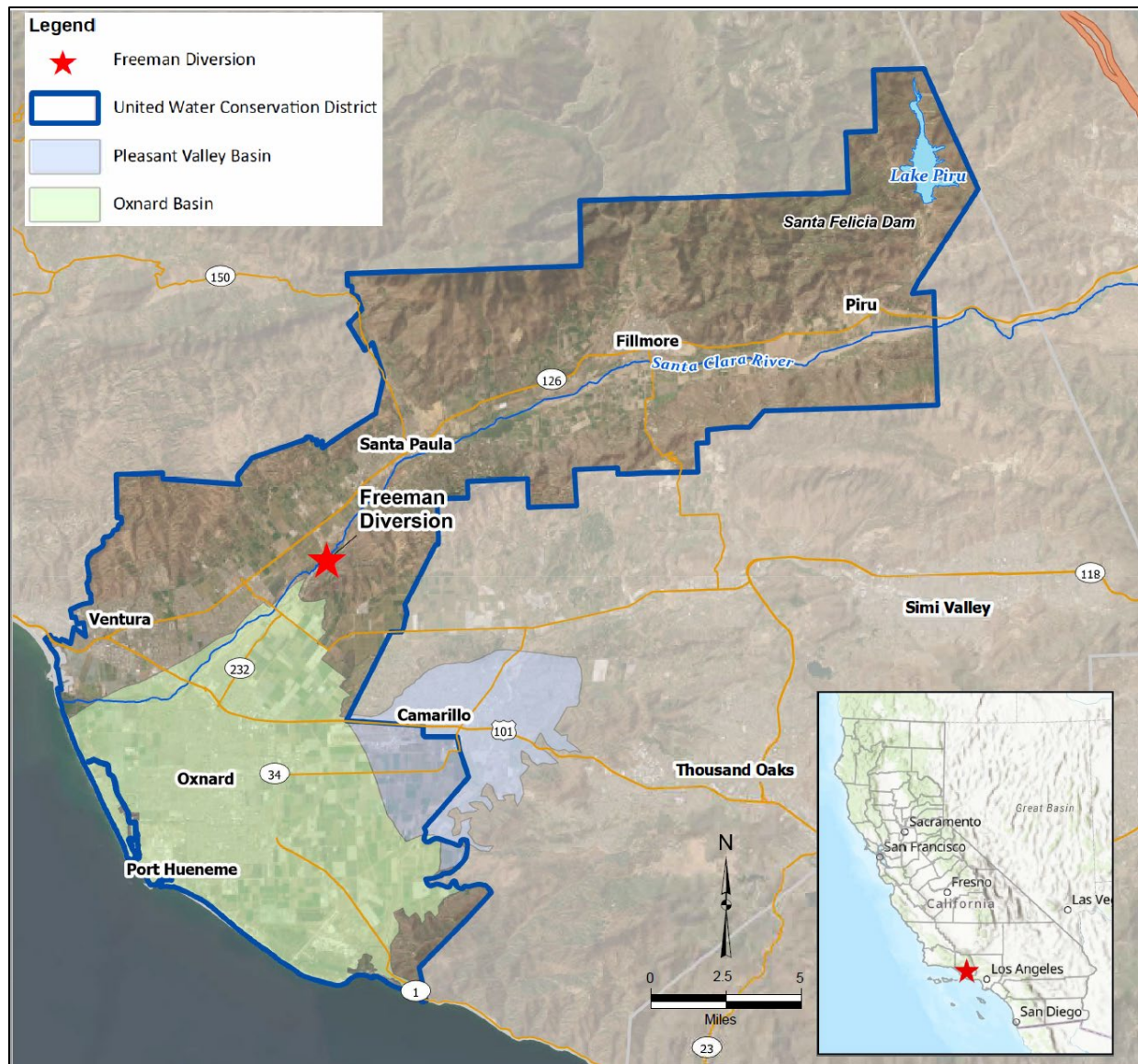


Figure 1 Project Location

1.3 Technical Project Description

Project Need and Background

United's mission and statutory purpose includes maintaining the health of groundwater basins in its service boundary. The primary means of providing these services is through surface water diversions along the Santa Clara River via the Freeman Diversion for groundwater recharge or delivery to agricultural uses in lieu of pumping in the local groundwater basins. Currently the average diversion yield of the Freeman Diversion is 60,000 acre-feet per year (AFY).

United's water operations contribute to the water supplies of nearly 350,000 people in central and southern Ventura County, including in the City of Oxnard, the Port Hueneme Water Agency, and Naval Base Ventura County in lieu of coastal groundwater extractions. United's water supplies are vital to recharge groundwater basins of the Oxnard Plan, including the Oxnard and Pleasant Valley (OPV) basins which are considered to be critically overdrafted (FCGMA 2019).

In addition, the Oxnard basin has been historically impacted by seawater intrusion. The Oxnard plain provides highly productive farmland, contributing to the County's multi-billion-dollar agricultural industry. As such, maintaining these supplies is critical to regional water supply reliability, including drought resiliency, and economic opportunity of the region.

The Freeman Diversion was constructed on the mainstem of the Santa Clara River in 1991 to improve United's ability to divert Santa Clara River water (especially higher flows following large storm events) for groundwater recharge in order 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. In addition, the Freeman Diversion helps prevent both further channel incision and disruption of riparian habitats in areas upstream of the Facility.

Much of the water diverted from the Santa Clara River consists of storm flows in the wet season of above-average rainfall years, but also includes imported water purchased by United and conveyed down the river to mitigate chronic groundwater overdraft on the Oxnard Plain.

The Santa Clara River is the largest river system in Southern California remaining in a relatively free-flowing state. There is abundant wildlife, including twenty-two common and special-status fish species known to occur in the Santa Clara River system. Among those include two native anadromous fish species: Southern California steelhead and Pacific lamprey (*Entosphenus tridentatus*). As such, the Santa Clara River channel is a migratory corridor for steelhead and lamprey. The Southern California steelhead are listed as federally endangered and as a candidate species at the state-level and are the main focus of this Project.

In 1997, following construction of the Freeman Diversion, Southern California steelhead were listed as federally endangered and United pursued incidental take coverage under Section 7 of the federal Endangered Species Act (ESA). The U.S. Bureau of Reclamation (Reclamation) consulted with NMFS regarding the operation of the Freeman Diversion Project; this culminated in a final jeopardy biological opinion (BO) with reasonable and prudent alternatives (RPA) in 2008. Reclamation concluded that it had no authority to enforce the RPA and the BO was not adopted. United agreed to a process in which a panel of fish passage experts would evaluate fish passage at the Freeman Diversion. The panel was given criteria and guidance from NMFS to evaluate the current fish passage system which consists of a Denil fish ladder and was charged with recommending feasible options to improve fish passage. Based on their assessment, the panel determined that "the existing fishway was not an adequate fish passage system" (VFDFPP 2010). The Panel recommended that the Hardened Ramp and Vertical Slot fish passage concepts receive further consideration as potential alternatives for a new passage facility at the diversion.

Since then, United has conducted design work and modeling activities in coordination with and in response to the agencies (NMFS, CDFW, Reclamation) and stakeholders. United contracted with the U.S. Bureau of Reclamation Technical Services Center to conduct physical modeling of the hardened ramp. The vertical slot was modeled at the IIHR Hydroscience and Engineering Lab at the University of Iowa in parallel. Modeling efforts related to the hardened ramp and vertical slot concluded in 2023. In July 2023, with support from the agencies, the hardened ramp was selected as the preferred fish passage alternative for the Freeman Diversion.

Importantly, the Freeman Diversion Multiple Species Habitat Conservation Plan (MSHCP) is in progress as part of United's application for incidental take permits (ITPs) under Section 10(a)(1)(B) of the ESA in relation to the rehabilitation of the Freeman Diversion fish passage facility and diversion headworks, along with its operational framework. The ESA allows take of

federally-listed animal species “if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity” (16 U.S.C. §1539(a)(1)(B)) through the issuance of ITPs by U.S. Fish and Wildlife Service (USFWS) and NMFS for approved habitat conservation plans. The Freeman Diversion MSHCP includes details on the Project, a discussion on potential impacts, and a background on the alternatives analysis and stakeholder involvement, among other information. The MSCHP is currently scheduled for completion in early 2024.

Proposed Project

This proposal is for Task B: Construction.

United is proposing the Freeman Diversion Fish Passage Rehabilitation Project, which consists of the construction of a hardened ramp fish passage facility at United’s Freeman Diversion.

The hardened ramp fish passage facility is a 480 ft long in-river feature that functions as a high gradient channel and replaces a section of the diversion structure to provide fish passage. A key feature in the modified concept included the use of an approximately 90 ft wide asymmetric ramp cross sectional shape with a rock-lined low flow channel and baffled shoulder. The design is intended to pass sediment and debris down the ramp while providing suitable hydraulics for passage of steelhead and lamprey at river discharges between 45 cubic feet per second (cfs) and 6,000 cfs. The design allows simultaneous water diversion and fish passage in the ramp without flow control at the crest of the ramp (i.e., no flow control or reservoir impoundment), and the ramp was designed to carry at least the initial 1,200 cfs of river flow before flow spills over the diversion dam crest. A figure of the fish passage facility design is included in Appendix A.

Partial demolition of the existing facility and construction of the rehabilitated facility would take place directly in and immediately adjacent to the river channel. This would require installation of temporary cofferdams and temporary water diversions to protect these portions of the construction site from inundation and to minimize environmental impacts within the river channel. To isolate the construction area from surface river flows, cofferdams will be installed on the upstream, downstream, and river channel sides of the construction site. Cofferdams for this project will consist of sheetpile, king pile, and supersacks filled with gravel.

Stability berms will be constructed to provide access for pile driving equipment to install the sheet pile within the berm. The stability berms on the water side of the sheet piles will be armored with rip-rap or other material to withstand high river flows.

It is estimated that approximately 1,700 feet of cofferdam will be constructed to enclose the construction area, requiring approximately 130,000 cubic yards (cy) of material to build the stability berms. This material is expected to be generated by creation of the water diversion channel described below and initial excavation in the construction area for the foundation of the hardened ramp fish passage facility.

Once the cofferdam is complete the construction area will be shielded from surface flows in the Santa Clara River. However, the sheet piles and cofferdam will not be entirely watertight, with some amount of surface flows, subsurface flows, and groundwater seeping into the construction area. Pumps would be used to displace water from the work area. Dewatering wells may also be installed inside or outside the cofferdam to remove water from soils below the construction area. Pumped water originating from the construction area and dewatering wells would be discharged either downstream or into United’s canal in accordance with water rights, water quality permit requirements, and prescribed instream flow discharges.

Based on historic flows in the Santa Clara River, during the 2-year construction period surface flows at the construction site are expected to vary from less than 1 cfs to several thousand cfs. The cofferdam is primarily intended to protect the construction area during very high flows. To direct low to moderate river flows around the construction area a diversion channel will be excavated in the riverbed north of the construction area. The diversion channel will collect river water upstream of construction area, carry the water around the construction area, and end at the grade control structure. It will be sited as far south as possible in the river channel to minimize effects on established riparian vegetation in the riverbed.

Following installation of the cofferdam and establishment of the work area, the existing Freeman Diversion headworks, Denil fish ladder, and approximately 100 feet of the existing grade control structure will be removed.

Once demolition activities are complete, areas within the existing facility footprint would be excavated and/or graded to prepare the site for installation of the new facility components. Excavation and grading would consist of the following activities:

- ▶ remove approximately 1,200 cy of existing rip rap downstream of the diversion and stockpile for replacement of rip rap once fish passage renovation is complete;
- ▶ excavate approximately 190,000 cy of material for the hardened ramp fish passage facility and headworks;
- ▶ excavate approximately 14,311 cy in the existing fish passage facility footprint for installation of new fish passage facility components; and
- ▶ excavate approximately 3,600 cy of river sediment immediately downstream of the grade control structure face to facilitate resurfacing; following completion of the resurfacing of the grade control structure downstream face, the excavated river sediment would be replaced

Upon completion of demolition and grading activities, the construction of the hardened ramp and bullnose wall will be carried out in a series of steps described below. The hardened ramp will replace a portion of the existing grade control structure, the foundation of which extends down to bedrock at an elevation of approximately 125 to 131 feet elevation, or approximately 31 to 37 feet below the crest elevation of 162 feet. The existing grade control structure is constructed out of roller compacted concrete (RCC), and to meet engineering requirements, all but the uppermost 2-feet of the hardened ramp structure and bullnose wall will match the existing facility and be constructed out of RCC founded on competent bedrock.

Installation of RCC will be carried out in a series of lifts whereby concrete will be placed to a set depth and compacted with the use of heavy equipment (rollers). Following compaction, the next lift will begin, incrementally raising the level of the RCC. The 6% transverse slope of the hardened ramp will require RCC to be built to a maximum height of approximately 37 feet, roughly equivalent to the height of the existing grade control structure. The height of the RCC will be greatest on the upstream side of the existing grade control structure, with the height reducing as the 5% slope of the ramp extends downstream. Rock protection features located adjacent to the base of the hardened ramp, bullnose wall, and diversion intake will be installed concurrently with the construction of the hardened ramp. Following the completion of the RCC portion of the hardened ramp, the construction area will be backfilled with stockpiled sediment excavated from the river to raise the construction site grade up to match the invert elevation both

upstream and downstream of the hardened ramp.

The uppermost 2-feet of the hardened ramp will be constructed out of reinforced concrete, on top of which the roughened rock low-flow channel, baffle features, and Obermeyer crest gates will be installed. Reinforced concrete will consist of concrete embedded with steel (rebar) anchored to the RCC portion. The construction of reinforced concrete will involve building forms, building and placing rebar, and pouring concrete to complete the floor of the hardened ramp. Following completion of the hardened ramp floor, the steel baffles will be mounted to the concrete floor and rock material will be placed in the low-flow channel and baffled portions of the hardened ramp.

The new fish passage facility has been designed in close coordination with NMFS and CDFW fish passage engineers with the intention to meet and exceed criteria and guidance stated by NMFS (2001, 2011, 2022a, 2022b), CDFW (2002, 2009), and Reclamation (USBR 2007), in addition to guidance provided by a 2018 Amicus Brief filed by NMFS for choosing a preferred alternative that is expected to meet issuance criteria for an ITP under the ESA. Representatives from both NMFS and CDFW provided extensive input and feedback through the design and modeling process and have agreed that the proposed fish passage facility is the preferred design to carry forward into final design and implementation.

Design features of the new fish passage facility will meet, among other criteria, NMFS' six fish passage objectives presented in the Amicus Brief that were "expected to result in safe, timely, and effective upstream and downstream passage for migrating steelhead" which include the following:

- (a) Improve steelhead-passage opportunity spatially (through the project impact area) ... for all flows between 45 to 6,000 cfs;
- (b) Not interrupt steelhead-passage opportunities by facility operations for sediment management or other maintenance;
- (c) Create upstream and downstream passage in the form of ramps;
- (d) Preclude nuisance attraction flows over the range of steelhead passage flows;
- (e) Steelhead should not be challenged by or be required to transit partially open gates and/or weirs; and
- (f) Install fish screens that protect all life stages of steelhead, by fish screen designs meeting the most recent NMFS fish-screening guidelines that work in conjunction with any proposed ramps and associated headworks.

In order to comprehensively meet fish passage and water resources goals, United will conduct the renovation of the fish passage facility in combination with renovation of the Freeman Diversion headworks to enable United to expand its diversion and recharge capacity primarily to provide greater bypass flows for steelhead migration when flows are receding, while still diverting sufficient water during higher flows to recharge the underlying aquifers. Expanded diversion capabilities at the Freeman Diversion is imperative to increase groundwater recharge and contribute to balancing the sustainable yield in the local basins. As such, criteria for the new facility design also include the ability to pass flows of 750 cfs into the diversion canal once United acquires a modified future instantaneous diversion right in the future.

Overall, the renovations proposed for the Freeman Diversion will significantly improve the fish passage at the facility, enhance the operational flexibility and expand diversion capabilities

helping to ensure that water supplies for the region remain reliable into the future, even in the face of climate change and local groundwater challenges.

At the time of this application, United has reached 60% design levels. Design documents will be available upon Reclamation's request. Additional details on design activities as well as the implementation plan for the proposed Project are described under Sub-Criterion C2.

1.4 Evaluation Criteria

1.4.1 Evaluation Criterion A – Project Benefits

1.4.1.1 Sub-criterion A.1: General Project Benefits

- *What are the critical issues of concern in the watershed? Provide documentation and support for how the critical issues were identified.*

For purposes of this application, the watershed receiving benefits from this Project is the area that falls within the United service boundaries. This area includes the lower Santa Clara River Watershed, the portion within Ventura County, where the proposed Project will be constructed, and the Oxnard Plain which is recharged with water diverted from the Freeman Diversion. This watershed has high significance in the region for its aquatic ecosystem value along the Santa Clara River and as a vital source of local water supply for much of Ventura County.

Aquatic Ecosystem Concerns:

The Santa Clara River is the largest river system in Southern California remaining in a relatively free-flowing state, which as a result supports a variety of habitats and high biological diversity. The Santa Clara River channel is a migratory corridor for steelhead and lamprey, both of which are native anadromous fish species. Steelhead are listed as federally endangered. Currently, the Freeman Diversion, via the Denil fish ladder, provides an upstream migratory pathway for steelhead and lamprey, as well as any other aquatic species that may pass through the facility, while also allowing for downstream passage through the facility or over the diversion crest. However, NMFS considers the Denil fish ladder to be ineffective at total river discharge above 500 cfs, thereby potentially impeding migration above 500 cfs, because of inadequate attraction flow emanating from the fish ladder entrances and distraction flow when water flows over the crest. As such, current conditions provided with the existing Freeman Diversion are not adequate for promoting a safe and effective migratory corridor in the lower Santa Clara River.

The naturally spawned steelhead in the Santa Clara River are part of the Southern California steelhead Distinct Population Segment (DPS) which is covered by a recovery plan finalized by NMFS in 2012. The recovery plan identifies the Santa Clara River Watershed as a Core 1 population, critical for the survival and recovery of endangered steelhead. The recovery plan identifies two recovery actions regarding the Freeman Diversion in particular: (Recovery Action SCR-SCS 4.1) develop and implement plans to physically modify the diversion to allow natural rates of steelhead migration between the estuary and upstream habitats, and (Recovery Action SCR-SCS 4.2)) develop and implement operating criteria to ensure the pattern and magnitude of water releases from the diversion provide the essential habitat functions to support the life-history and habitat requirements of adult and juvenile steelhead. Note that both of these recovery actions are deemed "critical recovery actions" by NMFS in the recovery plan (NMFS 2012).

Water Supply Concerns:

Water resource reliability and groundwater sustainability are also major concerns in the

watershed. Among the primary issues are groundwater overdraft, seawater intrusion, and water supply resilience in the face of climate change, including growing drought risks. United's artificial recharge operations and conjunctive-use projects have been successful in slowing basin-wide groundwater level declines and historic seawater intrusion, but chronic overdraft conditions persist in the OPV basins. The California Department of Water Resources (DWR) continues to classify these 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 (FCGMA 2019).

Groundwater sustainability metrics are tied to the Sustainable Groundwater Management Act of 2014 (SGMA), which requires the development of a groundwater sustainability plan (GSP) for high and medium priority basins within the state. Within United's service boundary, the Freeman Diversion primarily benefits the "critically overdrafted" groundwater basins on the Oxnard coastal plain, most specifically the OPV basins. The average annual diversion yield of 60,000 acre-feet (AF) is far below the current total annual volume of groundwater extractions (FCGMA 2019), which have ranged from approximately 70,000 to 90,000 AF per year in the past decade. Under SGMA, groundwater extracted in excess of the sustainable yield (i.e., "unsustainable groundwater use") will be restricted in the future through cuts in pumping by 2040, and the GSPs for the OPV basins currently anticipate a 40% cut if new water-supply projects aren't constructed (FCGMA 2019). Development of new projects can increase the sustainable yield in the basins, and ideally eliminate the need to cut pumping by 2040.

Although United is working with other stakeholders to develop plans to bring a broader portfolio of water sources to the region, no identified local water supply alternatives are as cost effective and energy efficient as maximizing artificial recharge of flows diverted from the Santa Clara River via the Freeman Diversion. The Freeman Diversion is vital to United's groundwater recharge operations, surface water deliveries in-lieu of pumping in areas susceptible to seawater intrusion, and to reducing or even reversing seawater intrusion into the aquifers of the Oxnard Plain (UWCD 2021). However, without a new fish passage that addresses aquatic ecosystem concerns, in particular steelhead recovery, United is unable to operate the Freeman Diversion at full capacity. This poses serious concerns for the reliability of water supplies across the United service area and thereby much of Ventura County.

- *Explain how your project will benefit aquatic ecosystems, including benefits to plant and animal species, fish and wildlife habitat, riparian areas, and ecosystems. For example, will your project create new habitat, improve water quality, improve stream or riparian conditions, restore fish passage and connectivity, or otherwise benefit aquatic ecosystems. Note: In your response to this criterion, A.1., please generally describe the expected benefits of your project to aquatic ecosystems; a quantitative explanation of project benefits is requested below in response to criterion A.2.*

The Project will improve fish passage in the lower Santa Clara River, with a focus on providing safe, timely, and effective upstream and downstream passage for migrating steelhead, lamprey, and other native aquatic species that may pass through the Freeman Diversion.

The new hardened ramp fish passage facility will be constructed and operated to provide physical and fluvial conditions at and through the Freeman Diversion for unimpeded upstream and downstream passage of adult and juvenile steelhead, and unimpeded migration of Pacific lamprey. The hardened ramp may also provide suitable conditions for the upstream and

downstream passage of other native fish species including resident rainbow trout, arroyo chub, Santa Ana sucker, and partially armored threespine stickleback.

The Project will also enable implementation of a comprehensive upstream migration strategy with specific operational protocols as part of the MSHCP to maintain instream flows that provide a functional migration corridor. The new Freeman Diversion headworks will be operated to maximize fish passage opportunities through the hardened ramp and maintain flows and pathways that protect smolts. This strategy will help minimize alteration of natural flows that support unimpeded migration of adult and juvenile steelhead and lamprey (i.e., timing, frequency, duration, rate-of-change, and magnitude of flows) to and from the Santa Clara River estuary and the Freeman Diversion.

- *Does the project affect water resources management in 2 or more river basins (defined as a minimum HUC-10 level)? Explain how and identify the area benefitted (provide a map).*

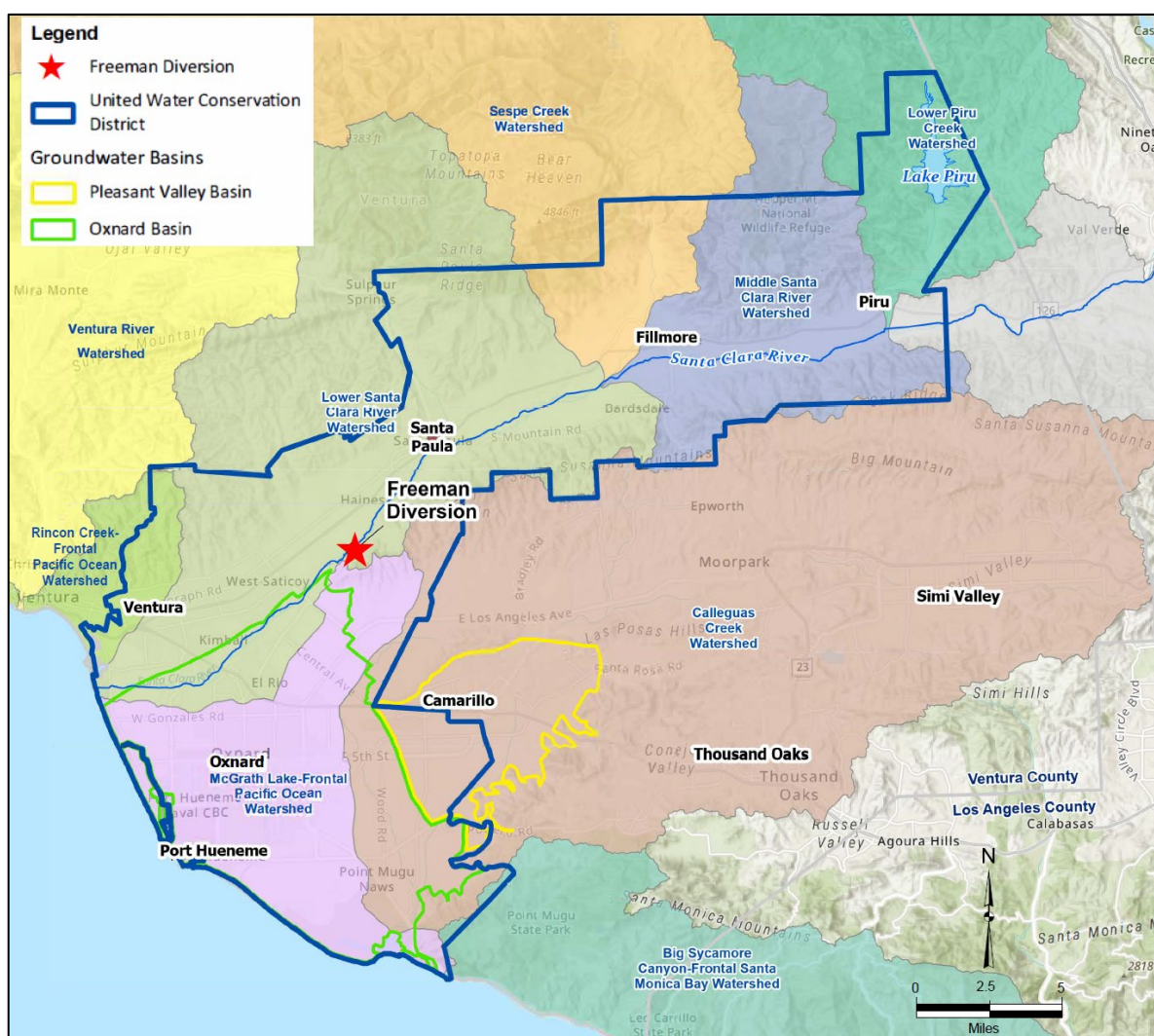


Figure 2 Benefit Area with HUC 10 Watershed Boundaries

Yes, the Project beneficially affects water resources management of multiple river basins within Ventura County, with targeted aquatic ecosystem improvements and critical water supply reliability benefits. United's boundaries encompass nearly 213,000 acres of central and southern

Ventura County. This area includes the downstream (Ventura County) portion of the Santa Clara River Valley and the Oxnard Plain which alone falls within portions of seven different watersheds (see Figure 2 above). United's operations focus on maximizing water resources of the lower Santa Clara River Valley and Oxnard Plain which include primarily the watersheds of the Lower Santa Clara River (HUC 1807010209), Calleguas Creek (HUC 1807010301) and McGrath Lake-Frontal Pacific Ocean (HUC 1807010302).

United's diversions on the Santa Clara River at the Freeman Diversion and associated groundwater recharge operations help reduce groundwater pumping in the overdrafted OPV basins of the Oxnard Plain and are a critical component of water resource management and water supply reliability to the region. Water supplies made available by United's water diversion and recharge operations directly and indirectly provide irrigation supplies and potable water to customers in the Cities of Oxnard, Ventura, and Camarillo, the Port Hueneme Water Agency, numerous small mutual water companies, and Naval Base Ventura County in lieu of coastal groundwater extractions. As such, these operations contribute to the water supplies of over 350,000 people and to the County's multi-billion-dollar agricultural industry. These benefits are also shared by the many economically disadvantaged communities in United's service area who rely on cost-effective water supplies and often on local agriculture as a source of income.

With this Project, United will improve aquatic ecosystem conditions in the lower Santa Clara River with the installation of a hardened ramp fish passage facility for improved steelhead and lamprey migration at and through the Freeman Diversion. In addition, improved operational flexibility and expanded diversion capacity will enable United to divert sufficient water to recharge the aquifers of the Oxnard Plain basins to support sustainability goals required under SGMA. This Project will ensure that United can continue operating these facilities for improved regional water supply reliability while promoting a safe and effective migratory corridor in the lower Santa Clara River.

Additional details on water supply benefits are provided below.

- *Does the project provide regional benefits, in addition to fish or habitat restoration, including:*
 - *Supporting water needs for multiple water uses (i.e., agricultural, municipal, Tribal, environmental, recreational)?*

Given the significance of the Freeman Diversion for United's water resource management operations, the Project also has significant water supply benefits that are regional and support multiple water uses. Overall, United's operations contribute to the water supplies of nearly 350,000 people, including multiple disadvantaged communities. The majority of flows diverted at the Freeman Diversion are recharged to the Oxnard Forebay via United's recharge basins, with the remainder delivered directly to United's diverse customer base. These water supplies provide irrigation supplies and potable water to agricultural and municipal users, including residences, businesses, schools, and others across the Oxnard Plain, including in the Cities of Oxnard, Ventura, and Camarillo, Port Hueneme Water Agency, numerous small mutual water companies, and Naval Base Ventura County in lieu of coastal groundwater extractions.

United's groundwater recharge operations and conjunctive use projects also help reduce groundwater pumping in the overdrafted groundwater basins of the Oxnard Plain and thereby significantly contribute to water supply reliability on the Oxnard Plain. This is of particular importance for agricultural uses given that Ventura County, and in particular the Oxnard Plain, is

regarded as having some of the most productive farmland in the world. In 2022, the total value of County agricultural production was \$2.1 billion; the Oxnard Plain contributed a major portion.

The operational flexibility facilitated with this Project will help ensure that water supplies for the region remain reliable to support United's diverse water users into the future.

The Project also has Tribal and recreational benefits. The Project was developed in coordination with the Wishtoyo Foundation, a local Chumash organization and is considered to contribute to the Wishtoyo Foundation's mission to preserve, protect and restore Chumash culture, the culture and history of the coastal communities, cultural resources and the environment. Additionally, the Freeman Diversion attracts large numbers of recreational users, such as birdwatchers and nature photographers. By enhancing the Freeman Diversion, the Project would support these benefits.

- *Reducing water conflicts?*

As noted above, United's Freeman Diversion is vital to its groundwater recharge operations, and therefore vital to regional groundwater sustainability, and reducing or even reversing seawater intrusion into the aquifers of the Oxnard Plain. Its contributions to replenishing the local groundwater basins of the Oxnard Plain are becoming especially critical in the face of potential groundwater pumping restrictions and growing climate change impacts.

Historically, United's operation of the Freeman Diversion accounts for upwards of 70% of the sustainable yield of the OPV basins. However, without a new fish passage, United is unable to operate the Freeman Diversion at full capacity. If unable to continue contributing to the Oxnard Plain basin replenishment to respond to future conditions, significant mandatory cutbacks in groundwater use in the OPV basins are a likely outcome. These potential reductions are described in Fox Canyon Groundwater Management Agency's (FCGMA) GSPs for the basins (FCGMA 2019). 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, unless new water-supply projects are built. As a result, major reductions could be required in the future to achieve sustainability goals for these basins. Such reductions will have major negative impacts on agricultural and municipal supply unless countered by increased use of other water sources. 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 via the Freeman Diversion.

The Project will allow United to expand its diversion and recharge capacity to provide improved fish passage conditions, while still diverting sufficient water during higher flows to recharge the underlying aquifers. The operational flexibility and expanded diversion capacity facilitated with this Project will help ensure that water supplies for the region remain reliable into the future, including to help maintain sustainability and resilience in the Oxnard Plain basins.

- *Providing other regional benefits, such as job creation or public safety benefits?*

The Project would help ensure that water supplies for the region remain reliable into the future to support employment and public safety benefits. As noted above, United's water operations contribute to the water supplies of over 350,000 people in Ventura County. The Project is therefore a critical factor for improving the reliability of the region's municipal water supplies, including for providing resiliency to drought risks and protecting public health of the community with enhanced water security.

Additionally, major reductions in groundwater availability in the Oxnard Plain could have significant implications for the agricultural sector and the employment it provides. Based on available statistics, agricultural employment makes up nearly 5% of employment in the County, with nearly 20,000 people (VCPH 2024). As noted above the Oxnard plain provides highly productive farmland, contributing to the County's multi-billion-dollar agricultural industry. The Oxnard groundwater basin, which underlies the Oxnard plain, is the primary and, in most instances, the only source of water for agricultural operations in the basin. The link between affordable and plentiful water supply and the viability of agriculture on the Oxnard plain is well established. Indeed, the Ventura County Board of Supervisors recognized the agriculture water link in the 2040 General Plan (2020) which includes the Goal "To sustain the agricultural sector by ensuring an adequate water supply through water efficiency and conservation". The Project would enhance the reliability of the local groundwater supply to sustain agricultural operations and related employment in the Oxnard plain.

- *Is this project a component of a broader strategy or plan to replace aging facilities with alternate facilities providing similar benefits? Describe how this project fits within the strategy or plan and how it will continue to provide benefit.*

No, the Project is not being implemented to replace aging facilities. The main purpose of the Project is to enhance the Freeman Diversion with a new fish passage facility to remove impediments to existing fish passage in the Santa Clara River.

- *Describe the status of the species and/or habitat that will benefit from the project:*

See answers below.

- *Does the project contribute to the restoration of species listed under the Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.)?*

Yes, the Southern California steelhead are listed as federally endangered and are a main focus of this Project.

- *Does the project contribute to the restoration of listed anadromous fish?*

The fish species known to occur in the Santa Clara River system include two native anadromous fish species: Southern California steelhead and Pacific lamprey. The Project includes a hardened ramp fish passage facility which will be constructed and operated in a manner that provides physical and fluvial conditions at and through the Freeman Diversion to approximate unimpeded upstream and downstream passage of adult and juvenile steelhead. As such, the Project is specifically designed to contribute to the restoration of endangered steelhead. See also additional information below.

- *Are the species subject to a recovery plan or conservation plan under the ESA?*

Yes, Southern California steelhead are subject to a recovery plan.

In 1997, NMFS listed Southern California steelhead (*O. mykiss*) as a federally endangered evolutionarily significant unit (ESU) (62 FR 43937). The ESU included populations from the Santa Maria River in southern San Luis Obispo County to Malibu Creek in Los Angeles County. In 2002, NMFS extended the southern boundary of the ESU to the California-Mexico Border (67 FR 21586). In 2005, NMFS designated final critical habitat for the Southern California Steelhead ESU (70 FR 52488). In 2006 following a status review, NMFS replaced the ESU designation

with a DPS designation (71 FR 834). The Southern California steelhead DPS encompasses all naturally spawned steelhead from the Santa Maria River (inclusive) to the U.S. border with Mexico. The DPS encompasses *O. mykiss* that exhibit anadromy below impassible barriers that block upstream migrating adults.

NMFS issued a final recovery plan for the Southern California DPS in 2012 (NMFS 2012), and the most recent five-year review summary and evaluation of the Southern California Coast Steelhead Distinct Population Segment in 2023 (NMFS 2023). The recovery plan identifies the Santa Clara River Watershed as critical for the survival and recovery of endangered steelhead. The recovery plan identifies two specific recovery actions regarding the Freeman Diversion in particular: (Recovery Action SCR-SCS 4.1) develop and implement plans to physically modify the diversion to allow natural rates of steelhead migration between the estuary and upstream habitats, and (Recovery Action SCR-SCS 4.2)) develop and implement operating criteria to ensure the pattern and magnitude of water releases from the diversion provide the essential habitat functions to support the life-history and habitat requirements of adult and juvenile steelhead (NMFS 2012). The Project directly addresses both recovery actions.

- *Has there been a designation of critical habitat? If so, how does the proposed action benefit such critical habitat?*

There has been a designation of critical habitat for steelhead within the Project area. In its critical habitat designation, NMFS developed physical or biological features (PBFs) which are considered essential for the conservation of steelhead. They involve those sites and habitat components that support one or more steelhead life stages and in turn contain physical or biological features essential to steelhead survival, growth and reproduction, and the overall conservation of the DPS. The Project benefits critical habitat by addressing these PBFs, in particular by providing an improved freshwater migration corridor free of obstruction.

The Project will protect and enhance critical habitat primarily by improving migration corridor conditions for the federally endangered steelhead in the lower Santa Clara River. The new hardened ramp fish passage facility will be constructed and operated in a manner that provides physical and fluvial conditions at and through the Freeman Diversion to approximate unimpeded upstream and downstream passage of adult and juvenile steelhead over a design flow range of 45 to 6,000 cfs that greatly improves migration opportunities, particularly for upstream migrating steelhead, but also for juvenile steelhead and other native aquatic species. The hardened ramp is also a type of nature-like fishway designed to simulate a steepened channel section similar to habitat elsewhere within the watershed (e.g., within Sespe and Santa Paula Creeks) including features such as natural roughness elements and variable flow paths and flow rates that mimic natural conditions while maintaining the principal hydraulics to facilitate safe, timely, and effective upstream and downstream passage. Strategic operational protocols will be implemented to help minimize alteration of natural flows that support unimpeded migration of adult and juvenile steelhead and lamprey (i.e., timing, frequency, duration, rate-of-change, and magnitude of flows) to and from the Santa Clara River estuary and the Freeman Diversion. See also Section 1.3 for more details on design criteria.

- *If the species are not listed under the ESA, please describe their status. For example, are they native species, game species, at-risk species, species of greatest conservation need, species of Tribal significance, or state listed?*

Pacific lamprey is a native anadromous fish species known to occur in the Santa Clara River

system. The Pacific lamprey is designated by the CDFW as a species of special concern and has possibility of listing by the USFWS in the future.

In 2003, 11 conservation groups formally petitioned the USFWS to list Pacific lamprey under ESA. The USFWS determined that listing lamprey was not warranted at that time, but did recognize the declining status of lamprey throughout much of its range along the west coast of the United States. To address the conservation needs of the species, the USFWS established the Pacific Lamprey Conservation Initiative. The USFWS plans to improve the status of lamprey by proactively engaging in a concerted, collaborative conservation effort that will facilitate opportunities to address threats, restore habitat, increase knowledge of lamprey, and improve their distribution and abundance. United has participated as a stakeholder since 2009, contributing to regional and local assessments as part of the conservation assessment process and providing information relevant to the status and biology of Pacific lamprey in the Santa Clara River and nearby basins.

The hardened ramp fish passage facility design features will create conditions to approximate unimpeded migration of Pacific lamprey from the estuary, through the affected reach, up to the Freeman Diversion. The new fish passage facility may also provide suitable conditions for the upstream and downstream passage of other native fish species including resident rainbow trout, arroyo chub, Santa Ana sucker, and partially armored threespine stickleback. Santa Ana sucker is not listed within the Santa Clara River watershed; however, the species is listed as threatened under the ESA elsewhere in southern California in the species native range. Arroyo chub is designated by the CDFW as a species of special concern.

1.4.1.2 Sub-criterion A.2.2: Quantification of Specific Project Benefits (Task B only)

Please respond to the following sub criteria by describing the estimated benefits of the restoration project you are implementing. Please only respond to questions that apply to your project. For each of your responses, provide documentation and support for how you calculated or estimated project benefits.

- ***Species and Habitat Benefits: Quantify and provide metrics for the extent to which the project will benefit the species and/or habitat, and provide support for your response:***
 - *To what extent will the project benefit species health and/or species populations? Quantify the benefits, including:*
 - *Any projected increases in species populations or species health projected to result from your project,*

In summarizing adult steelhead observations within the southern California DPS, the highest counts of observed adult steelhead in recent history (within the last 25 years) were reported in the Ventura River in 2008 (10 adults; CMWD 2008), and in the Santa Ynez River in 2008 (16 adults; Dagit et al. 2020). Assuming low detection-probability noted by Booth (2016) and a population in the future approaching and then exceeding (by double) the maximum counts observed in the Ventura River, United assumes that during the MSHCP permit term, counts will increase and then average slightly more than the maximum observed in the Santa Ynez within 20 years, and that up to 20 adults might migrate annually because of improvements to the fish passage facility at Freeman Diversion and other restoration efforts in the watershed (i.e., Harvey Diversion fish passage improvement and other barrier removal projects in the watershed). The assumed potential increase in adult abundance is an informed estimate. Predictions in abundance for the first 10 to 20 years are based on observations under existing conditions, and predictions further into the future are increasingly speculative. Based on these assumptions, a total of 550

adult steelhead would enter the Santa Clara River and attempt to migrate upstream during the permit term. Table 7-1 in the MSHCP (Chapter 7 – Effects Analysis) includes a summary of assumed adult steelhead population growth over the 50-year permit term. Please see MSHCP excerpt in Appendix D.

It is important to emphasize here that the proposed fish passage facility was selected and designed in close collaboration with NMFS and CDFW as the alternative that would provide the greatest species benefits.

- *To what extent will the project benefit a species listed under the ESA, or otherwise improve the status of listed species?*

NMFS has designated the Santa Clara watershed as a Core 1 watershed, meaning it has the ability or potential to support a viable southern California steelhead population and has the capacity to respond to recovery actions. Boughton et al. (2006) designated the Santa Clara River steelhead to be a “source” population, because they concluded it has the intrinsic potential to support a robust enough steelhead population to compensate for the occasional loss of anadromous production within other watersheds in the DPS. The recovery plan identifies the Santa Clara River Watershed as critical for the survival and recovery of endangered steelhead.

Currently, the Freeman Diversion, via the Denil fish ladder, provides an upstream migratory pathway for steelhead (as well as any other aquatic species that may pass through the facility), while also allowing for downstream passage through the facility or over the diversion crest. However, the existing structure limits migration above 500 cfs. The Project will address the NMFS objective of improving steelhead passage opportunity for all flows between 45 to 6,000 cfs. Specifically, the hardened ramp passage system is designed to operate between flows ranging from 45 cfs to more than 6,000 cfs and to convey the initial 1,200 cfs of instream flows entirely within the ramp. When attraction flow is at 100 percent, all the water passing downstream passes through the hardened ramp with no potential distraction flows over the crest of the diversion. As noted in the response above regarding projected increases in species population, the improved passage efficiency is anticipated to provide the conditions necessary for population increase and overall improvement. In summary, the new fish passage facility will be a greatly improved facility with safer and more efficient fish passage for both adult and juvenile fish. Further, the Project was selected as the alternative expected to have the greatest benefits to the listed species. Additional details can be found in the 2023 Northwest Hydraulic Consultants Inc. (NHC) Design Development Report, Section 5, Hardened Ramp.

The construction, operation and maintenance of the hardened ramp fish passage facility is one conservation measure identified in the MSHCP to achieve biological goals and objectives. In combination with the new fish passage facility, United will implement additional conservation measures, including strategic operational protocols, monitoring, habitat restoration after impacts from renovation, and invasive species removal. All of these activities will benefit steelhead by improving fish passage conditions and, when necessary, allowing an informed, science-based process to modify the conservation program through adaptive management. Among the activities United will be conducting in combination with the new fish passage facility, is to relocate downstream moving steelhead and lamprey at low flows (identified as Conservation Measure [CM] 1.2.5. in the MSHCP). It is estimated that this conservation measure would be a benefit to the species from rescue and relocation of up to 70 smolts per year (3,500 total).

Importantly, in association with this Project, and as outlined in the MSHCP, United would also

implement an extensive monitoring program which will benefit southern California steelhead by advancing the scientific information and literature used to make management decisions for southern California steelhead. A number of uncertainties exist for southern California steelhead life history and United would address several of these through the monitoring program. The results of the monitoring program would help address basic biological questions from the recovery plan, such as whether or not steelhead rear in the mainstem or estuary or whether lagoon anadromy occurs in the Santa Clara Watershed. Additional details can be found in the MSHCP Chapter 7, *Impact Assessment 12: Relocate Smolts Downstream during Low Flows*. Please see MSHCP excerpt in Appendix D for more details.

It is important to note that United will also implement measures to offset biological value temporarily lost or impacted from construction and maintenance activities. United proposes habitat restoration work following temporary disturbances from construction activities to reestablish any disturbed riparian or riverine habitat. The active restoration period is expected to last no more than 5 years and will occur within the fish passage and Freeman Diversion renovation footprint. The restoration area is anticipated to include approximately 18 acres of upland, riparian, and riverine habitat based on current estimates. Also, invasive plants such as giant reed and tamarisk would be prevented from growing into restoration areas. These plants are known to diminish surface water and groundwater through evapotranspiration, which could diminish water available to steelhead.

- *To what extent will the project improve habitat through restoration activities or improved fish passage? Quantify the benefits, including:*
 - *The number of acres of habitat to be restored or reconnected,*
 - *New spawning habitat created,*
 - *The quality and permeance of additional habitat,*
 - *Or other metrics demonstrating improved habitat or fish passage.*

Please see responses above and under Sub-criterion A.1.

- ***Watershed Benefits:*** *Quantify and provide metrics for the extent to which the project will provide watershed benefits, and provide support for your response:*
 - *To what extent will the project improve water quality? Quantify the benefits, including:*
 - *Any anticipated improvement of water quality (e.g., dissolved oxygen, nutrient pollution, improvement of temperature variations, eliminating violations to water quality standards, etc.).*

A new element of the conservation program is the incorporation of habitat flows into the overall bypass flow framework. The proposed habitat flows are intended to improve and support suitable habitat for fish, including steelhead and other native fish, downstream of the Freeman Diversion at all times of the year when flows are available in the river. Habitat flows would provide a minimum bypass flow based on seasonal rules to sustain in-channel habitat immediately downstream of the facility. The water released in the form of habitat flows would maintain the availability of wetted habitat and would provide water quality conditions similar to in-channel habitat immediately upstream of the facility. Regarding water resources, the Freeman Diversion is vital to United's groundwater recharge operations and mitigation of seawater intrusion into the aquifers of the Oxnard Plain, a primary water quality challenge in the region. Without a new fish

passage that addresses aquatic ecosystem concerns, in particular steelhead recovery, United is unable to operate the Freeman Diversion at full capacity.

- *To what extent will the project benefit ecological function? Quantify the benefits, including:*
 - *Information about reconnection of floodplains,*
 - *Improvement of sediment transport,*
 - *Wetland recovery or wetland/marsh creation.*

One of the primary goals of the hardened ramp engineering design and physical modeling process was to manage the extremely high levels of sediment, particularly bedload material, transported in the Santa Clara River as it interacts with the Freeman Diversion. The Project incorporates a bypass channel immediately upstream of the diversion intake, which enables the flushing of sediment past the diversion structure, and a desander internal to the diversion facility. Combined, these sediment management components allow for the more efficient transport of sediment past the facility, which benefits both the fish passage facility (i.e., improvements in both structural and operational sediment management elements) as well as the diversion facility (i.e., improved ability to divert at high flows/ high turbidity).

The sediment management abilities enabled with the Project will allow for sediment transport that mimics natural conditions and provides habitat for fish and other aquatic species, while also enabling efficient diversion operations. Given the natural state of the Santa Clara River this improved sediment management is a critical benefit to ecosystem function, and overall riparian habitat value.

Details are found in the NHC August 2023 *Freeman Diversion Hardened Ramp Design Hydraulic Plans*, specifically Section 7 Sediment Management. This report can be made available upon request.

- *To what extent will the project build ecosystem resiliency? Quantify the benefits, including:*
 - *The reduction of impacts of climate change,*

Studies examining probable climate change impacts to the Ventura County area predict effects of sea level rise, increased drought risks and wildfire risks, and changes in the frequency and magnitude of storm events, including increased frequency of extreme precipitation and runoff events, which can lead to intensified sediment mobilization and transport. Mobilization and transport of sediment is especially influential on the morphology of the Santa Clara River because the watershed has extremely high sediment production rates, which is driven by the episodic and intertwined effects of tectonic uplift, rainstorms, wildfires, earthquakes, and human and other disturbances (Stillwater Sciences 2023). In the Final Coastal Resilience Ventura Technical Report for Coastal Hazards Mapping, the authors found that the dominant discharge, or the discharge for which the majority of sediment transport occurs, corresponds to the largest flow on record. Traditionally, dominant discharge falls somewhere in the more frequently occurring flow range, often in the range of the 2-, to 5-year flood, which indicates that sediment delivery on the Santa Clara River is governed by the next largest flood event which may still be larger than the flood of record. Additionally, higher projected temperatures will lead to increased fire risk in this region which will increase watershed sediment production from burned land (ESA PWA 2013). These findings, supported by more recent climate change modeling

(California Energy Commission 2018), indicate that events mobilizing substantial volumes of sediment is likely to increase in the future, particularly during larger storms. These larger storms are projected to occur more frequently and their intensity is predicted to increase when they do occur (AghaKouchak et al. 2018). The operational flexibility of the rehabilitated fish passage facility and diversion headworks is key for water resource management and species protection in the face of uncertainty related to future climate at the regional and local level.

The Project improves conditions of the migratory corridor along the lower Santa Clara River by greatly expanding the range of river flows over which steelhead can presumably migrate, which will contribute to the protection and recovery of steelhead as well as other aquatic species that may pass through the Freeman Diversion. As noted above, the Project will contribute to increased abundance of adult steelhead and additional protection of smolt, among other benefits. By improving existing conditions for aquatic species and in particular increasing population numbers, the Project will contribute to the species' improved resiliency to climate change impacts. Additionally, the extensive adaptive management and monitoring program implemented as part of the MSHCP would contribute to both the understanding of species population status in the watershed as well as their behavior. With an improved fish passage facility and an enhanced understanding of steelhead, future decision-making within the watershed as well as elsewhere in the species range could lead to better management and increasingly robust populations and improved conditions that could help mitigate climate change impacts.

- *The reduction of impacts of development,*

The Project and MSHCP would provide suitable hydraulic conditions for passage of steelhead and lamprey at river discharges between 45 cfs and 6,000 cfs and may also provide suitable conditions for the upstream and downstream passage of other native fish species including resident rainbow trout, arroyo chub, Santa Ana sucker, and partially armored threespine stickleback. Additionally, the design of the hardened ramp and diversion intake, including the sediment management components will allow United to more efficiently operate both the fish passage facility by providing unimpeded migration over a wide range of flows as well as the diversion facility by improving diversion capabilities at very high flows and high turbidity rates. Taken together, these improvements contribute to the resiliency of both the migratory corridor for native fish and aquatic species as well as the water resource landscape in the region.

- *Removing invasive species, protection against invasive species, and restoration of native species,*

Among the activities United will be conducting in combination with the new fish passage facility, is to capture and relocate species as determined to be necessary (identified as CM 2.1.4. in the MSHCP). Under CM 2.1.4, non-native, invasive aquatic species will be euthanized or removed using standard practices (AFS 2014). 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*).

Additionally, invasive plants such as giant reed and tamarisk would be prevented from growing into restoration areas. These plants are known to diminish surface water and groundwater through evapotranspiration, which could diminish water available to steelhead.

- *Improvement of habitat fragmentation,*

The Project improves migratory corridor conditions, thereby specifically addressing habitat fragmentation, and CDFW and NMFS support this approach for providing a migration corridor. Further the NMFS Recovery Plan for steelhead includes specific recovery actions tied to the Freeman Diversion, and the Project specifically addresses Recovery Action SCR-SCS 4.1 with the construction of the hardened ramp, and the MSHCP addresses Recovery Action SCR-SCS 4.2 with the implementation of bypass flow operating criteria to provide a functional migratory corridor for steelhead and other native fish.

The Project will include replacing the existing off-channel Denil fish ladder, which NMFS considers to be ineffective for steelhead at total river discharge above 500 cfs. The new fish passage facility, consisting of an in-channel hardened ramp, will provide safe, timely, and effective upstream and downstream passage for migrating steelhead, and other aquatic species that may pass through the Freeman Diversion between a design flow range of 45-6,000 cfs, greatly expanding habitat connectivity for target species.

- *Or assistance in helping aquatic ecosystems recover from disturbances such as floods, wildfire, or drought.*

Floods, wildfires and droughts are all expected to occur with greater intensities and frequencies under climate change. The Project will help increase the resiliency of aquatic ecosystems in the Santa Clara River to these impacts. This means, they could also recover better and more quickly from such disturbances. Also see answer under “reduction of impacts of climate change.”

- ***Water Supply Benefits:** Quantify and provide metrics for the extent to which the project will increase water supply to an aquatic ecosystem, and provide support for your response:*

- *To what extent will the project make more water available, or make water available at a more advantageous time or location? Quantify the benefits, including:*

- *The estimated amount of water conserved (in acre-feet per year), N/A*
- *The total amount of new water made available for instream flow,*

The habitat flows element of the MSHCP conservation program represents a new water source for aquatic habitat downstream of the Freeman Diversion. Based on a hydrologic analysis of river flows over a 78-year record (1944-2022), the habitat flows would provide approximately 2,800 AF of new instream flows on an average annual basis for fish and other aquatic species. United derived these estimates for additional instream flow from United’s Hydraulic Operations Simulation System (HOSS) spreadsheet model, which calculates the potential diversions and bypass flows for a 78-year period of historical hydrology (1944 to 2022). The HOSS model utilizes average daily flow records to calculate diversion and bypass/ instream flow totals under user defined operational scenarios.

- *The relocation of water to optimize timing and quantity of water supplies for ecosystem health,*

Coupled with the MSHCP, the Project represents a substantial conservation effort focused on migration of steelhead and sustainability of aquatic habitat in a balance with the water resource needs of the region. The MSHCP conservation program includes a series of protocols designed, based on the best available science, to optimize instream flows with consideration of the overall function of the watershed and its many tributaries, provide functional migratory conditions for steelhead and lamprey. The biological goals and objectives of the MSHCP focus on steelhead, lamprey, and other covered species (e.g., least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, and southwestern pond turtle); however other native species, including native fish, are anticipated to benefit from the implementation of the Project and MSHCP through the improvements in connectivity and flow conditions within the river.

- *The extent of benefits to fish and wildlife, habitat, or other ecological benefits resulting from the improved water availability.*

One element of the MSHCP conservation program is the newly developed habitat flows component of conservation measure 1.2.1. The habitat flows element has been incorporated into the overall bypass flow framework to improve and support suitable habitat for fish, including steelhead and other native fish, downstream of the Freeman Diversion both during the steelhead primary migration season, as well as year-round; however, the flow rate would be dependent upon seasonal timing criteria. Within the steelhead adult primary migration season (January 1 to May 31), following the first upstream migration triggering event (i.e., Sespe Trigger met), if flows recede to below 160 cfs and a functional upstream migratory connection is no longer available, United would implement the release of 10 cfs of natural river flows for habitat flows until the next migration storm (i.e., next storm meeting the Sespe Trigger). Once initiated following the first migration triggering event, the 10 cfs habitat flow release would be implemented through the end of the adult and smolt primary migration season. During the smolt primary migration season (March 15 to May 31), 10 cfs habitat flow releases would be implemented if flows recede below 80 cfs and a functional downstream migratory connection is no longer available. Overall, the habitat flows element of the MSHCP conservation program would provide approximately 2,800 AF of additional bypass/ instream flows for fish and other aquatic species on an annual basis. United derived these estimates for additional instream flow from the HOSS model, which calculates the potential diversions and bypass flows for a 78-year period of historical hydrology (1944 to 2022). The HOSS model utilizes average daily flow records to calculate diversion and bypass/ instream flow totals under user defined operational scenarios. The habitat flows have only recently been incorporated into the operational framework associated with the Project and MSHCP and United continues to develop these and other bypass flow protocols along with other components of the MSHCP.

- ***Other Quantifiable Benefits:** Are there other quantifiable project benefits not addressed in the preceding questions? If so, what are these benefits? Provide support for your response, including citations to relevant studies or statistics, and other metrics. For example, will your project benefit:*
 - *Improvements in public safety (reduce/eliminate flood risk, dam breach, road damage) N/A*
 - *Reductions in long term management costs (culvert and dam maintenance) N/A*
 - *Job creation or economic opportunity (design or construction jobs, development of new recreation jobs, commercial fishing opportunities)*

The Project will contribute to the creation and maintenance of numerous job opportunities, including creation of construction jobs to implement the project (at peak construction approximately 60 workers are estimated to be on site at a given time), approximately 2 additional facilities maintenance (O&M) jobs, and approximately 2 additional jobs related to implementation of the MSHCP. A larger factor regarding job opportunities relates to the preservation of agricultural jobs through implementation of the Project. As noted in responses above, without the new fish passage proposed with this Project, United is unable to operate the Freeman Diversion at full capacity. The Freeman Diversion accounts for a significant portion of the sustainable groundwater yield within the Oxnard Plain, and as such, is critical to the maintenance of a multi-billion-dollar local agricultural industry and the jobs tied to this part of economy.

- *Improvements in safe access to nature or recreational opportunities*

The Freeman Diversion and recharge ponds provide recreational opportunities, such as for bird watching and nature photography. The Project will enable United to continue its operations at these sites and will thereby help sustain these recreational opportunities. Additionally, MSHCP activities may contribute to improved habitat and natural areas that are publicly accessible along the Santa Clara River and could thereby improve access to these opportunities.

Additionally, among the primary Project benefits is United's ability to continue operating the Freeman Diversion in order to continue recharging the underlying aquifers. This recharge is critical to contribute to the sustainability of the OPV basins and regional water supply reliability.

United's average annual diversion yield of 60,000 AF contributes substantially to the sustainable yield of the regional groundwater basins. Without the new fish passage proposed with this Project, United is unable to operate the Freeman Diversion at full capacity. The design of the hardened ramp and diversion intake, including the sediment management components will allow United to more efficiently operate both the fish passage facility by providing unimpeded migration over a wide range of flows as well as the diversion facility by improving diversion capabilities at very high flows and high turbidity rates. This Project will therefore, enable United to continue providing at least 60,000 AF on average for current and future sustainable use.

1.4.2 Evaluation Criterion B – Prior Restoration Planning and Stakeholder Involvement and Support

1.4.2.1 Sub-Criterion B2: Task B: Construction Stakeholder Support and Prior Restoration Planning

- *Prior Planning, Study, and Design: To be eligible for Task B: Construction, applicants must have conducted study and design activities resulting in a design package at a 60% design level. The following sub criteria request specific information about those prior planning efforts.*
 - *Describe the planning effort that supports your proposed project, i.e., planning that took place before you submitted your proposal.*

The Freeman Diversion has always been supported by collaborative planning and stakeholder engagement and the development of the hardened ramp fish passage project is no exception. Details on planning activities and resulting documents are detailed below.

- *Describe the specific planning, strategy, study, and design document(s) (plan(s)) that support your project. Explain when the plan was prepared*

and for what purpose.

The 60% design plans and specifications were finalized January 2024 and the 60% design package is available for Reclamation's review upon request. Many additional planning and design documents that support the Project include, but are not limited to, the following:

- 2010 Vern Freeman Dam Fish Passage Conceptual Design Report
- 2014 Sediment Transport Analysis Santa Clara River at Freeman Diversion
- 2016 Sediment Transport Analysis Addendum Santa Clara River at Freeman Diversion
- 2019 Hydraulic Basis of Design Draft Report Hardened Ramp Fish Passage Improvements
- 2019 Supplemental Geotechnical Investigation Freeman Diversion Fish Passage Hardened Ramp Alternative
- 2022 Physical Hydraulic Modeling of the Freeman Diversion Hardened Ramp Fish Passage Alternative
- 2023 Freeman Diversion Hardened Ramp Design Hydraulic Plans
- Freeman Diversion MSHCP – in progress
- Freeman Diversion California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) – in progress
- Freeman Diversion National Environmental Protection Act (NEPA) Environmental Impact Statement (EIS) – to be initiated by NMFS

This Project has been the focus of extensive planning and stakeholder involvement since listing of the Southern California steelhead in 1997. Following the listing, United pursued incidental take coverage under Section 7 of the ESA and also agreed to a process in which a panel of fish passage experts, including qualified fish passage engineers, hydrologists, and fish biologists, would evaluate fish passage at the Freeman Diversion. The panel determined that “the existing fishway was not an adequate fish passage system” and recommended that the Hardened Ramp and the Vertical Slot fish passage concepts be further considered as potential alternatives for a new passage facility. The panel's evaluation of alternatives to provide upstream fish passage at the Freeman Diversion is described in the 2010 *Vern Freeman Dam Fish Passage Conceptual Design Report*. With no federal nexus to resume Section 7 consultation, United began consultation with NMFS under Section 10 of the ESA, including the preparation of an MSHCP.

Since then, United has conducted design work and modeling activities in coordination with and in response to the agencies. In 2020, United contracted with the U.S. Bureau of Reclamation Technical Services Center to conduct physical modeling of the hardened ramp. The vertical slot was modeled at the IIHR Hydrosience and Engineering Lab in parallel. The physical modeling of both alternatives concluded in 2022. Results of the physical hydraulic modeling of the hardened ramp fish passage alternative were detailed in the *Physical Hydraulic Modeling of the Freeman Diversion Hardened Ramp Fish Passage Alternative*, completed in October 2022.

By August 2023, the *Freeman Diversion Hardened Ramp Design Hydraulic Plans* were completed which include the complete hydraulic design and associated plans for the hardened ramp system. This 2023 Report builds on earlier reports, including the Hardened Ramp 30% Design Report (NHC and GEI, 2019), the 2020 Design Development Report (NHC, 2020), and Design Memorandum (NHC, September 2021). Overall, the new fish passage facilities are designed to meet the criteria and guidance stated by NMFS (2001, 2011, 2022a, 2022b), CDFW (2002, 2009), and Reclamation (2007).

In addition, the Freeman Diversion MSHCP is being prepared as part of United's application for ITPs in relation to the rehabilitation of the Freeman Diversion fish passage facility and diversion headworks, and its operational framework. The MSHCP is currently in progress and scheduled for submission in early 2024.

- *Does the proposed project contribute to a regional or watershed scale fish passage or aquatic ecosystems strategy or priority restoration efforts (e.g., Federal, State, Tribal, or other association priority plan or designated critical habitat)? If so, name and briefly describe the strategy or effort.*

The Project contributes to the *Southern California Steelhead Recovery Plan* (NMFS 2012) which aims at preventing the extinction of Southern California steelhead and ensuring “the long-term persistence of viable, self-sustaining populations of steelhead distributed across the Southern California Distinct Population Segment.” The recovery plan identifies the Santa Clara River Watershed as critical for the survival and recovery of endangered steelhead and identifies two specific recovery actions regarding the Freeman Diversion in particular: (Recovery Action SCR-SCS 4.1) develop and implement plans to physically modify the diversion to allow natural rates of steelhead migration between the estuary and upstream habitats, and (Recovery Action SCR-SCS 4.2) develop and implement operating criteria to ensure the pattern and magnitude of water releases from the diversion provide the essential habitat functions to support the life-history and habitat requirements of adult and juvenile steelhead. The Project will contribute to implementing those specific recovery actions.

There is also critical habitat designated for steelhead in the Project area, for which NMFS developed PBFs which are considered essential for the conservation of steelhead. The Project benefits critical habitat by addressing these PBFs, in particular by providing an improved freshwater migration corridor free of obstruction. See also additional details under 4.1.1.

- *What was the scope of the planning effort that supports your project? Describe the geographic extent and types of issues (e.g., water quantity, water quality, and/or issues related to ecosystem health or the health of species and habitat within the watershed).*

The planning effort supporting this Project has focused on United's service boundary which encompasses nearly 213,000 acres in central and southern Ventura County. See Figure 2. The two primary issues addressed by the Project include: the need for improved fish passage in the lower Santa Clara River, particularly for the federally endangered steelhead; and water supply and groundwater sustainability concerns in the Oxnard Plain. The Santa Clara River Watershed has been identified as critical for the survival and recovery of endangered steelhead, and the existing Freeman Diversion facility has been found to create limitations to the migration of endangered steelhead. At the same time, United's Freeman Diversion operations are critical to enhance groundwater sustainability given existing conditions of overdraft and seawater intrusion in these basins, and to improve regional water supply reliability especially in the face of climate change.

Additional details on the issues are provided under Section 1.4.1.1.

- *Was the plan developed collaboratively?*
 - *What stakeholders were involved in preparing the plan and do they represent diverse interests (e.g., agricultural, municipal, tribal,*

environmental, recreational interests)? What process was used to solicit and incorporate stakeholder input?

As noted, the MSHCP and collaborative planning that has led to the selection of the hardened ramp fish passage facility has involved the engagement of numerous stakeholders including regulatory agencies with primary oversight over the target species including NMFS and CDFW; water interests including Reclamation; and tribal and environmental interests including the Wishtoyo Foundation, Ventura Coastkeeper, and Center for Biological Diversity. In addition, past stakeholder involvement included the participation of the panel of fish passage experts described in more detail in Section 1.3 (under the Project Need and Background heading), which culminated in the 2010 *Vern Freeman Dam Fish Passage Conceptual Design Report*.

As part of the CEQA process, United has held a total of three EIR Notice of Preparation scoping periods to solicit comments from responsible and trustee agencies as well as interested stakeholders. The EIR scoping periods were opened in 2014, 2019, and 2023, each consisting of a 30-day comment period. Several comments from agencies, non-governmental organizations, and public citizens have been received as part of the EIR scoping process, which will be considered in the EIR currently in development.

The diversity of stakeholders engaged with this Project is also documented by the letters of support included in Appendix B.

- *If the plan was prepared by an entity other than the applicant, explain why it is applicable.*

The MSHCP is being prepared by United.

- *Please describe the process for stakeholder involvement and comment on the planning and design effort supporting your project. Describe how comments were requested, the types of comments received, and how they were considered.*

Stakeholder involvement conducted as part of the design and review process included primarily pre-consultation technical assistance with NMFS fish passage engineers beginning around 2008 with the selection of the fish passage panel of experts. Participation by NMFS, and later with the addition of CDFW fish passage engineers, proceeded continuously through the alternative evaluation process. The hardened ramp and vertical slot underwent the most thorough design; however, a number of other fish passage design alternatives were evaluated including a gated notch structure and an infiltration gallery. These alternative designs were ultimately reviewed and vetted by the agencies through an open and transparent collaboration process.

Stakeholder comments were also solicited as part of the CEQA process. See response above. Stakeholder engagement is also documented with letters of support in Appendix B.

- *Describe how the plan provides support for your proposed project.*
 - *Does the proposed project address a goal or need identified in the plan?*

The MSHCP is being prepared to enable United to implement construction, maintenance and operation of the Project proposed herein, among other activities associated with the renovation of the fish passage facility and the Freeman Diversion headworks. The Project was selected based on the need for creating safe and efficient upstream and downstream passage at the Freeman Diversion. Chapter 5 – Conservation Program of the MSHCP describes NMFS' six fish passage

objectives to create those safe passage conditions. These objectives are among the numerous criteria being addressed with the Project which are summarized in the MSHCP and detailed in the 2023 Freeman Diversion Hardened Ramp Design Hydraulic Plans.

- *Describe how the proposed project is prioritized in the referenced plan.*

As described above, the selection of this Project is the result of a lengthy collaborative design and planning process. As described in Chapter 5 of the MSHCP, United and Wishtoyo, with support from the regulatory agencies, entered into a joint stipulation selecting the hardened ramp as the preferred fish passage alternative for the Freeman Diversion in July 2023. As such, the proposed hardened ramp fish passage is the preferred alternative being addressed with the MSHCP and is the primary component and top priority of the overall conservation program. Additional information on the alternatives evaluation process is provided below.

- *How did you select the proposed project from among other project alternatives?*
 - *Describe the process you used to compare alternatives*

In 2008, United proceeded with a process in which a panel of fish passage experts, including qualified fish passage engineers, hydrologists, and fish biologists, evaluated alternatives to provide upstream fish passage at the Freeman Diversion. The panel's evaluation of alternatives is described in the 2010 *Vern Freeman Dam Fish Passage Conceptual Design Report*. An initial list of ten possible fish passage improvements were developed for further consideration from based on brainstorming sessions conducted by the panel. At this initial stage, costs were not considered, but the technical aspects of fish passage and water delivery to United were taken into account. This list was narrowed down to five alternatives which were evaluated and compared by estimating how each alternative would achieve 19 identified desirable characteristics, including fish passage characteristics, operations and maintenance characteristics, and others. The alternatives were compared using a Pugh comparison matrix, which was used interactively and iteratively to develop consensus among the Panel members and to develop the best project alternatives possible. Subsequently four alternatives remained which were compared against each other based on estimated probable construction costs. Finally, the Panel recommended that the Hardened Ramp and the Vertical Slot fish passage concepts receive further consideration as potential alternatives for a new passage facility at the diversion.

Since then, United conducted design work and modeling activities in coordination with and in response to the agencies input. As noted above, extensive modeling, including computational fluid dynamics (CFD), two-dimensional, and physical modeling, took place between 2020 and 2023 focused on the hardened ramp and the vertical slot alternative. After completion of all modeling and advanced project design, and through multiple hearings between United, NMFS, CDFW, and Wishtoyo, the hardened ramp was selected as the preferred fish passage alternative for the Freeman Diversion in July 2023.

- *Did you compare the benefits of different project alternatives (e.g., through a decision matrix, triple-bottom-line analysis, or rapid benefit indicators)? Did you do a qualitative or quantitative comparison of project benefits? If so, please describe the process and the outcomes.*

The alternatives were compared using a Pugh comparison matrix as well as based on extensive modeling, as described in the previous response. The alternatives were compared qualitatively based on how well each alternative would achieve the desired benefits. The hardened ramp was

final selected as the preferred fish passage alternative upon conclusion of these analyses.

- ***Stakeholder Support for the Proposed Task B: Construction Project***

- *Is there widespread support for the project? Please provide specific details regarding any support and/or partners involved in the project. What is the extent of their involvement in the project?*

As noted above, the Project has been developed based on a lengthy and intensive collaborative stakeholder process. United has selected to proceed with the Project as a result of support for the Project and agreement among stakeholders that the hardened ramp fish passage alternative is the best alternative to facilitate unimpeded fish passage conditions at the Freeman Diversion. Project partners and engaged stakeholders have included: NMFS, CDFW, Reclamation, Wishtoyo/Ventura Coastkeeper, and Center for Biological Diversity. The Project has also garnered support from many outside stakeholders including CalTrout; The Nature Conservancy; U.S. Senator Laphonza Butler, California Senator Monique Limón, California Assemblymember Steve Bennett, the City of Ventura; Fox Canyon Groundwater Management Agency; Port Hueneme Water Agency; Pleasant Valley County Water District; Ventura County Coalition of Labor, Agriculture and Business; and Southland Sod. In total, 15 letters of support for the Project have been provided by stakeholders, all of which are provided in Appendix B.

- *Please attach any relevant supporting documents (e.g., letters of support or memorandum of understanding).*

Letters of support are included in Appendix B.

- *Are any stakeholders contributing to the project cost-share?*

No stakeholders will be contributing to the Project cost share.

- *Is there opposition to the proposed project effort? If so, describe the opposition and explain how it will be addressed. Opposition will not necessarily result in fewer points.*

No, there is no opposition to the proposed Project. The extensive collaborative stakeholder process that has guided development of the Project since initial planning began has brought parties together to find the best path forward and reach agreement on the preferred alternative, which is the proposed Project.

1.4.3 Evaluation Criterion C – Project Implementation and Readiness to Proceed

1.4.3.1 Sub-Criterion C2: Task B: Construction Readiness to Proceed

- *Describe the implementation plan for the proposed construction project. Please include an estimated project schedule that shows the stages and duration of the proposed construction work, including major tasks, milestones, and dates. This may include, but is not limited to, design, environmental and cultural resources compliance, permitting, and construction/installation.*

The following major tasks will be implemented to accomplish the proposed Project.

Task 1. Project Management

Project management is being and will continue to be provided by United staff to ensure

successful project implementation. Activities include project administrative oversight, managing contractors and consultants, and ensuring the project advances according to schedule. Upon grant award, United will also perform grant administration activities to ensure compliance with final grant agreement requirements.

Task 2. Project Design

60% design materials were completed in January 2024. Design activities will proceed with completion of plans and specifications at 90% and 100% design levels.

Task 3. Environmental and Cultural Compliance

Pursuant to CEQA, an EIR is currently in progress, which includes an impact analysis of biological and cultural resources associated with implementation of the Project. The EIR includes specific mitigation measures for biological and cultural resources impacts determined to be potentially significant including pre-activity surveys, resource avoidance, monitoring, and consultation for both biological and cultural resources. The EIR will form the basis of the NEPA document which will be prepared in coordination with Reclamation before any ground-disturbing activity begins.

Task 4. Permitting

United will work with its consultants and in coordination with its contractor to obtain all required permits. Permits and approvals anticipated to be needed and currently in progress, including the MSHCP and associated ITPs, are detailed below.

Task 5. Construction

Upon completion of final design, United will secure a contractor to complete construction. Award will be made to the lowest responsive, qualified, and responsible bidder in accordance with the Public Contract Code. A Notice to Proceed will be issued when all necessary permits and approvals have been obtained and environmental and cultural resources compliance is complete.

Following the Notice to Proceed, the Project will be constructed in accordance with final bid documents and will include the following major elements: hardened ramp; bypass channel approach/ training wall/ apron; bypass channel Obermeyer gate; bypass channel chute; canal facilities with: intake/ trash rack, intake crest gates, canal gates, canal fish screen bay [canal approach channel], canal fish screen, integrated fish collector and bypass system, fish monitoring station, and desander bays/ sluice gates.

The table below summarizes the estimated project schedule, including major tasks and anticipated timelines.

Table 1 Proposed Project Schedule

Milestone/Task/Activity	Planned Start Date	Planned Finish Date
Task 1. Project Management	November 2012	September 2029
Task 2. Project Design		
Preliminary to 60% design	November 2012	January 2024
90% design	January 2024	June 2024
100% design	June 2024	December 2024
Task 3. Environmental Compliance		
CEQA	January 2014	February 2024

Milestone/Task/Activity	Planned Start Date	Planned Finish Date
NEPA	TBD	TBD
Task 4. Permitting		
MSHCP	February 2009	February 2024
Permits	August 2023	September 2027
Task 5. Construction	January 2027	September 2029
Bidding	January 2027	September 2027
Construction	September 2027	September 2029

- *Proposals with a budget and budget narrative that provide a reasonable explanation of project costs will be prioritized.*

See Section 2 below and the budget narrative form for details on the proposed budget.

- *Describe any additional efforts planned to engage with regional stakeholders during the final planning and construction phase of your project.*

The NEPA public comment period will provide additional opportunities for public engagement and input. In addition, United will create a project-specific website to inform the public on project details, updates, and progress, with contact information for inquiries and feedback.

- *Identify and describe all engineering and design work that has been performed in support of the proposed project to date. If additional design work is required prior to construction, describe the planned process and timeline for completing the design work.*

60% design materials were completed in January 2024. Design activities will now proceed with a focus on 90% design, which is scheduled for completion by June 2024. 100% design is anticipated to be completed by December 2024.

The project design has been developed in collaboration with NMFS and CDFW with the United design team using a combination of physical modeling, numerical analysis, and engineering design. The detailed design basis for the Project is contained within the *Freeman Diversion Hardened Ramp Design Hydraulic Plans* (Design Development Report) completed by NHC in August 2023. The 2023 Design Development Report builds on earlier reports, including the Hardened Ramp 30% Design Report (NHC and GEI, 2019), the 2020 Design Development Report (NHC, 2020), and Design Memorandum (NHC, September 2021).

Physical modeling completed by the USBR (2022,2023) as part of the alternatives analysis also informed design. Results of the physical hydraulic modeling of the hardened ramp fish passage alternative were detailed in the *Physical Hydraulic Modeling of the Freeman Diversion Hardened Ramp Fish Passage Alternative*, completed in October 2022. Results of subsequent modeling on specific refinements to the hardened ramp design were detailed in the *Physical Hydraulic Modeling of Operational and Stress Testing of the Freeman Diversion Hardened Ramp Fish Passage Alternative*, completed in January 2023.

Proposals for a Task B: Construction project must include a list of all products in the design package for the project.

The 60% design package, which is available for Reclamation's review upon request, includes the following:

- 60% design drawings and specifications
- The 2023 Design Development Report which entails the detailed design basis
- Geotechnical investigations
- Hydraulic modeling
- Physical modeling
- Aquatic resources delineation (wetland evaluation)
- Construction materials and cost estimate
- A summary of permit applications in progress and expected to be obtained
- A copy of the MSHCP, which includes a discussion on potential project impacts, a background on the alternatives analysis, and background on stakeholder involvement, among other information
- A copy of the draft EIR
- A summary of outreach activities
- *Describe any permits and agency approvals that will be required, along with the process and timeframe for obtaining such permits or approvals.*

The following table summarizes permits and approvals that may be required from local, state and federal agencies to implement the Project. Work is currently ongoing to acquire permits and United will work with its consultants and contractors to obtain all required permits.

Table 2 Anticipated Project Permits

Permits	Permitting Agency	Status
ESA ITP	NMFS and USFWS	In progress. Submission expected in early 2024.
Clean Water Act (CWA) 404 Dredge and Fill	U.S. Army Corps of Engineers (USACE)	In progress. Submission expected in early 2024.
CWA 401 Water Quality Certification	State Water Resources Control Board (SWRCB)	In progress. Submission expected in early 2024.
CDFW Lake and Streambed Alteration Agreement	CDFW	In progress. Submission expected in 2024.
CWA 402 NPDES (construction dewatering)	Los Angeles Regional Water Quality Control Board (LA RWQCB)	To be obtained by contractor prior to construction.
NPDES Construction Stormwater General Permit	LA RWQCB	To be obtained by contractor prior to construction.
CDFW CESA ITP	CDFW	Submission expected in late 2024.
Watercourse Permit	Ventura County Watershed Protection District	Submission expected in late 2024
Santa Paula Basin temporary groundwater pumping allocation (construction dewatering)	Santa Paula Basin Pumpers Association	To be obtained by contractor prior to construction.
Air Quality Permit	Ventura County Air Pollution Control District	To be obtained by contractor prior to construction.

Grading Permit	Ventura County Public Works Agency	To be obtained by contractor prior to construction.
Water Rights Amendment/ New Water Right for 750 cfs diversions	SWRCB	To be obtained prior to implementation.

In addition to the permits listed above, United is nearing completion of the Freeman Diversion MSHCP. United has prepared the MSHCP as part of its application for ITPs under Section 10(a)(1)(B) of the federal ESA. United is seeking ITPs for incidental take of covered species that may result from activities involved in the renovation, maintenance, and operation of the Freeman Diversion, including the new fish passage facility. The MSHCP is being submitted to the USFWS and NMFS who have the joint authority to issue an ITP if the MSHCP is determined to meet the issuance criteria.

The MSHCP provides documentation and analysis to support decisions by federal resources agencies on the issuance of ITPs. Importantly, United expects that the MSHCP will work in parallel with future regulatory reviews and approvals for this project, helping to make discussions with the regulatory agencies more efficient and facilitate expeditious review and approval of permits. For example, the MSHCP will streamline consultation under ESA Section 7 and CWA Section 404 permit consultations with USACE, USFWS, and NMFS related to activities occurring within the channel that may affect covered species. In addition, this MSHCP addresses all mitigation needs of the covered species that will be outlined in CEQA documents and some of the measures for covered species that will be required for a Lake and Streambed Alteration Agreement. Finally, this MSHCP is intended to inform consultation with the CDFW related to state-listed species under CESA, in pursuit of a consistency determination or state ITP under section 2080.1 or 2081(b) of the Fish & Game Code, respectively, as well as consultation with CDFW and SWRCB related to potential impacts to Waters of the State and associated species and their habitat. It is United's intention that no additional measures or analysis would be needed for associated federal environmental review or permits other than what is provided in the MSHCP.

- If applicable, describe the projects impact on any contractual water or power supply obligations, Indian trust responsibilities, or water rights settlements. Describe any regional water quality control board, state, and/or local requirements with the potential to affect implementation of the project.*

N/A

- If project construction requires access to the land or water source where the project is located, please include a description of and a timeframe for obtaining any required easements or permits.*

See response below.

- Does the applicant have access to the land or water source where the project is located? Has the applicant obtained any easements that are required for the project? If so, please provide documentation. If the applicant does not yet have permission to access the project location, please describe the process and timeframe for obtaining such permission.*

The majority of the Project falls within properties owned by United. However, a portion of the

temporary construction area, as well as a portion of the permanent facility footprint, falls within adjoining properties and will require an easement. United has a longstanding relationship with the adjoining property owner and is slated to begin property access discussions in the first quarter of 2024.

- *Identify whether the applicant has contacted the local Reclamation office to discuss the potential environmental and cultural resource compliance requirements for the project and the associated costs. Has a line item been included in the budget for costs associated with compliance? If a contractor will need to complete some of the compliance activities, separate line items should be included in the budget for Reclamation's costs and the contractor's costs.*

United has not discussed compliance requirements or related costs with Reclamation. As a result, a specific line item has not yet been included in the budget for associated Reclamation costs.

- *Describe any unresolved issues associated with implementing the proposed aquatic ecosystem restoration project, how and when such issues will be resolved, and how the project would be affected if such issues are not resolved.*

There are no unresolved issues, however, United is currently in the process of finalizing key environmental review materials and permit applications as summarized in Table 2 above. Following these submittals, United's proposed timeline incorporates application preparation and review periods for all other project approvals necessary prior to the start of construction in 2027.

1.4.4 Evaluation Criterion D – Presidential and DOI Priorities

- *Climate Change*
 - *If applicable, describe how the project addresses climate change and increases resiliency. For example, does the project help communities respond to or recover from drought or reduce flood risk?*

The 2019 Report *Projected Changes in Ventura County Climate* (Oakley et al.) indicates the Ventura County region, similar to the rest of California, can expect more extreme weather events under climate change. In particular, climate change is projected to result in more frequent, prolonged, and severe droughts on the one hand and more intense rainfall events with increased flood risks on the other hand. The Project will help address both extremes by enhancing the operational flexibility of diversions while improving fish passage under a greater range of flows. Additionally, the groundwater recharge component of the project allows for increasing groundwater storage to provide improved resiliency during periods of drought.

Drought risks are anticipated to create the greatest vulnerabilities to water supplies and demands, with reductions in groundwater recharge, reduced runoff and surface water flows, and reduced local and imported water supply reliability. Improved fish passage capabilities provided by the Project, coupled with the improved diversion flexibility, will enhance United's ability to recharge the groundwater basins while protecting aquatic resources the greatest extent possible. As noted previously, United's recharge operations provide a vital source of water supply to water users in the Oxnard Plain and are critical to contributing to the long-term sustainability of the OPV basins. The enhanced sustainability and reliability of these supplies will become increasingly important for meeting regional water supply needs in the face of growing drought risks and limitations on imported water.

At the same time, the Project will optimize United's diversion operations during peak flows. Improvements to the Freeman Diversion will facilitate greater sediment management capability to expand diversions capacity even with high total suspended solid levels following more intense storm events on the Santa Clara River.

Therefore, the Project will increase resiliency to climate change impacts by helping to ensure that water supplies for the region remain reliable into the future, while providing enhanced fish passage even under more extreme conditions that are projected for the region.

Importantly, the new fish passage facilities are designed to meet the criteria and guidance included in the *NOAA Fisheries West Coast Region Guidance to Improve the Resilience of Fish Passage Facilities to Climate Change* (2022b). As such the Project design specifically incorporates the effects of climate change into the fish passage facility design.

- *How will the project build long-term resilience to drought? How many years will the project continue to provide benefits? Please estimate the extent to which the project will build resilience to drought and provide support for your estimate.*

The Project will build long-term drought resilience by enabling United to enhance its Freeman Diversion and groundwater recharge operations which are critical to ensuring that water supplies for the region remain reliable, even in the face of increasing drought risks. United's average annual diversion yield of 60,000 AF contributes substantially to the sustainable yield of the regional groundwater basins and the Project will help United maintain and expand its diversion and recharge capacity. The Project will have an estimated useful life of at least 50 years and is expected to continue to provide benefits over that timeframe.

- *Will the proposed project reduce greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation? Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution? Does the proposed project contribute to climate change resiliency in other ways not described above?*

The Project will contribute to climate change resiliency in two additional distinct ways. Sea level rise is among the projected climate change impacts in the region. This impact has the potential to exacerbate sea water intrusion which has historically impacted the reliability of the local groundwater basins. The Freeman Diversion has been a critical component in the regional effort to reduce seawater intrusion. The Project will enhance United's diversion and recharge operations and thereby reduce the region's vulnerability to increased seawater intrusion resulting from sea level rise.

Secondly, climate change impacts may increase vulnerabilities to species in the Santa Clara River, including fish species which may be adversely impacted by higher water temperatures and reduced flows on the one hand and flashier flows with higher turbidity on the other hand. With the new fish passage facility, the Project will contribute to the protection and recovery of steelhead thereby also increasing their resiliency to climate change impacts.

- ***Disadvantaged or Underserved Communities***

- *Please use the Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool, available online at [Explore the map - Climate & Economic Justice Screening Tool](https://www.eplanning.energy.gov/explore-the-map) ([geoplatform.gov](https://www.geoplatform.gov)) to identify any disadvantaged communities that will benefit from your project.*

As documented by the Climate and Economic Justice Screening Tool (see Appendix C), there are multiple census tracts categorized as disadvantaged within United's service area, particularly in the Cities of Oxnard, Port Hueneme, Santa Paula, and Ventura and the Community of Piru.

- *If applicable, describe how the project benefits those disadvantaged or underserved communities identified using the tool. For example, does the project improve water quality, provide economic growth opportunities, improve or expand public access to nature, or provide other benefits in a disadvantaged or underserved community?*

The Project will benefit economically disadvantaged communities in that it will enable United to continue providing a cost-effective water supply source for agriculture, businesses and residents within the United service area, regardless of economic status. Surface water diverted by United at the Freeman Diversion is the lowest cost water available to the region, therefore, these local water supplies are critical to the overall sustainability of the Oxnard Plain groundwater basins, as well as to the disadvantaged communities that United serves. Under the existing regulatory framework with SGMA, the region is already faced with pumping reductions of approximately 40% to reach sustainability requirements. Without the Project, the region would likely face significant additional mandatory cutbacks in groundwater use in the Oxnard and Pleasant Valley basins. These groundwater use reductions would significantly impact agriculture thereby disproportionately impacting local disadvantaged communities who make up a large portion of the agricultural workforce. Overall, without the project, the region would be faced with increased risks of reduced water quality, increased water prices, and decreased agricultural jobs.

- ***Tribal Benefits***

- *If applicable, describe how the project directly serves and/or benefits a Tribe, supports Tribally led conservation and restoration priorities, and/or if the project incorporates or benefits Indigenous Traditional Knowledge and practices.*

The Project was developed in coordination with the Wishtoyo Foundation, a local Chumash organization. The Project is considered to contribute to the Wishtoyo Foundation's mission to preserve, protect and restore Chumash culture, the culture and history of the coastal communities, cultural resources and the environment.

- *Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?*

N/A

1.4.5 Evaluation Criterion E – Performance Measures (Task B Only)

Example performance measures could include the monitoring and improvement of various biotic and physical ecological indicators, including water quality and chemical composition, or observable changes in the presence or composition of vegetation or wildlife.

- *What are the desired conditions that this project contributes to and how will outcome objectives and project success be measured?*

The overarching Project goal is to improve fish passage by providing conditions that approximate an unimpeded steelhead and lamprey migratory corridor in the lower Santa Clara River. These conditions would result in safe, timely, and effective upstream and downstream passage for migrating steelhead, lamprey, and other species including native fish species.

Project success would be measured with a combination of flow metrics (i.e., depth and velocities meeting design standards) as well as through implementation of effectiveness monitoring measures (EMMs) that have been developed as part of the MSHCP. Additionally, the MSHCP includes an adaptive management element to utilize information gathered during implementation of the MSHCP (including results of EMMs) to adjust the operations over the life of the permit to optimize for beneficial environmental and water resource outcomes. The following effectiveness monitoring measures are selected to evaluate success of the proposed Project and are described in more detail below:

- EMM-01: Discharge versus width and depth criteria in critical reach.
 - EMM-05: Steelhead smolt passage through the facility.
 - EMM 06: Smolt migration within the affected reach.
- *Describe the performance measures that will be used to quantitatively or qualitatively define actual project benefits upon completion of the project. Include support for why the specific performance measures were chosen.*

EMM-01: Discharge versus width and depth criteria in critical reach. This measure will evaluate the effectiveness of the instream flow conservation measures at providing the target width and depth conditions aimed at supporting unimpeded migration of anadromous fish.

Rationale for the use of this specific performance measure: The lower Santa Clara River downstream of the Freeman Diversion includes a critical reach containing several shallow riffles (critical riffles) that migrating anadromous fish must pass. This measure will help assess whether the Project is helping to meet depth and width criteria required for steelhead migration and will be subject to adaptive management.

EMM-05: Steelhead smolt passage through the facility. This measure will evaluate the effectiveness of Project implementation in allowing smolts to pass the Freeman Diversion in a safe and timely manner. United will evaluate downstream migration timing and pathways of downstream migrants at the Freeman Diversion using radio telemetry under varying flows.

Rationale for the use of this specific performance measure: The hardened ramp fish passage facility will be designed and operated with the intent to provide safe and timely passage of downstream migrants at the Freeman Diversion. It is therefore important to evaluate the effectiveness of the passage system including effectiveness of the bypasses for directing fish into the fish trap and how flow influences interactions and pathways smolts use to pass the Freeman Diversion and will be subject to adaptive management.

EMM 06: Smolt migration within the affected reach. This measure assesses actual success of smolts migrating during low flows and will evaluate whether 80 cfs is the lower limit for successful smolt downstream passage at the critical riffle. United will conduct fine-scale tracking of individual smolt movement at the Freeman Diversion and in the affected reach using radio telemetry. This effectiveness monitoring measure will be used to evaluate downstream migrant behavior and habitat usage, with special focus on migration rate, habitat features that limit or delay migration, the use of holding/rearing habitat, and probability of survival in the lower river and estuary.

Rationale for the use of this performance measure: United recognizes that providing a functioning, freshwater migration corridor in the lower Santa Clara River is a critical element in

conservation of southern California steelhead, and has developed this Project along with other MSHCP conservation measures directed toward providing such a migration corridor. Maximizing the proportion of successful migrating smolts to the extent practicable is essential to providing adult steelhead returns.

The results obtained via EMM-06 will provide information useful for assessing the effectiveness of instream flow and timing of trapping protocols. The results will also expand the knowledge base relevant to protection, mitigation, and recovery actions beneficial to the southern California steelhead DPS.

- *All applicants are required to include information about plans to monitor improved streamflow, aquatic habit, or other expected project benefits. Please describe the plan to monitor the benefits over a five-year period once the project has been completed. Provide detail on the steps to be taken to carry out the plan.*

The effectiveness measures (performance measures) described above will be part of the monitoring and adaptive management program that United will implement as part of the MSHCP. The effectiveness monitoring will evaluate whether conservation measures are meeting measurable performance objectives. Results of the effectiveness monitoring will be summarized in annual reports and reviewed in coordination with USFWS and NMFS (Services). Results will be reviewed and evaluated to determine if progress is being made towards meeting performance measures and discuss any potential changes in management actions. Conservation measures found to be ineffective at meeting the associated objective will be modified according to the adaptive management framework of the MSHCP. If the Services find that a conservation measure is effective at meeting the resource objective, then that conservation measure will continue to be implemented as described.

United may need to alter the monitoring program or develop new monitoring measures in consultation with the Services and through the adaptive management framework. The monitoring program may be altered in consultation with the Services include changed or unforeseen circumstances, unexpected results revealed in monitoring data, the conclusion that a proposed monitoring method has proven ineffective or technologically infeasible, or in response to other opportunities for improvement.

Details of United's monitoring and adaptive management program, including specific methods of monitoring, reporting and decision-making, are outlined in Chapter 6 of the MSHCP.

Section 2: Project Budget

The total proposed Project Cost is \$39,812,089. The following table summarizes funding sources.

Table 3. Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. United Water Conservation District	\$19,812,089
2.	
3.	
Non-Federal Subtotal	\$19,812,089
REQUESTED RECLAMATION FUNDING	\$20,000,000

The Budget Detail and Narrative are provided separately in Grants.gov using the Budget Detail Attachment Form.

Section 3: Environmental and Cultural Resources Compliance

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.*

In the long-term, the Project will have a net benefit on the surrounding environment by improving passage conditions for aquatic species. However, construction and earth disturbing work generally have the potential to temporarily impact the surrounding environment, but mitigation measures will be implemented to avoid and/or minimize potential impacts and are described in more detail in the Project EIR.

Earth-disturbing activities will primarily include, but are not limited to:

- Demolition of existing facilities, including the existing fish ladder structure and canal structures
- Excavation and grading for installation of new facility components
- Access road improvements, including grading and compacting
- In-channel work requiring temporary water diversions

Air: Clearing, grading, excavation, earth moving, demolition, and construction traffic, among other activities may create dust which has the potential to result in short-term air quality impacts. The use of heavy equipment required for certain construction activities can result in short-term emissions, including fugitive dust, nitrogen oxides (NOX) and reactive organic compounds (ROC).

Construction traffic would be cyclical with an estimated standard baseline of 30 roundtrips per day. These round trips would consist of delivery trucks (flatbed and semi), passenger cars, and pickup trucks. When excavation takes place, there may be up to 80 additional roundtrips above the standard baseline per day by a semi-truck and trailer. On days when concrete is poured, there may be an additional 40 roundtrips per day above the standard baseline consisting of concrete trucks, concrete pumpers, and work trucks. Equipment used for excavation and grading would include excavators, graders, crane, front loaders, dump trucks, and water trucks.

Mitigation measures would be implemented to minimize the generation of potential air pollutants during construction activities and measures to control emissions from heavy equipment, such as maintaining equipment engines in good condition and minimizing idling time.

Water (quality and quantity): Construction activities would take place directly in and immediately adjacent to the river channel. Installation of temporary water diversions would be required to protect these portions of the construction site from inundation and to minimize environmental impacts within the river channel. Pumped water would be discharged either downstream or into United's canal in accordance with water quality permit requirements and prescribed instream flow discharges.

Additionally, in general, earth-disturbing work during construction has the potential to impact water quality through the transport of sediments and pollutants in stormwater to receiving waters. Best management practices (BMPs) would be implemented prior to demolition and construction and would be maintained throughout the duration of the facility renovation. BMPs would include erosion control (e.g., dust suppression) and sediment control materials (e.g., silt fence) to isolate the demolition and construction area, reduce impacts to riparian habitat, minimize the potential for take of covered species, and prevent contact between construction site pollutants and stormwater for the duration of the project. Light-duty trucks will be required on the access roads, and hand tools and light equipment will be used at the project site for BMP installation. Plans describing the BMPs in detail, including a Stormwater Pollution Prevention Plan (SWPPP), will be completed prior to project initiation. The SWPPP will be submitted to the Los Angeles Regional Water Quality Control Board in accordance with the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) 2009-0009-DWQ National Pollutant Discharge Elimination System No. CAS000002 (as amended).

With respect to water quantity impact, the Project will overall have positive impacts. The Project will enhance United's ability to divert and recharge surface water in order to recharge local groundwater aquifers to help address existing issues of overdraft and seawater intrusion and to improve regional water supply reliability.

Animal Habitat: Project construction activities have the potential for impacts on sensitive species and/or their habitat. However, mitigation measures including conservation measures and best management practices outlined in the Freeman Diversion MSHCP will be implemented to minimize potential impacts. The MSHCP has been prepared to address potential Project impacts to covered species and outlines a conservation program intended to minimize and mitigate potential impacts. Additionally, it is important to note the Project will be implemented with the primary goal to provide benefits to animal habitat, in particular for aquatic habitat through improved conditions for migratory fish passage.

The total footprint for the facility renovation including staging areas will be approximately 38 acres based on current estimates, which includes approximately 17 acres of existing operational and previously disturbed areas (2.9 acres of permanent impacts and 14.1 acres of temporary impacts), and approximately 21 acres of existing undeveloped areas (2.9 acres of permanent impacts and 18.1 acres of temporary impacts), consisting of both upland, riverine, and riparian habitat. The aquatic and riparian habitat in and around the construction and staging area provide

habitat for covered species to migrate, forage, shelter, breed, and nest. Renovation activities implemented as part of this Project are anticipated to potentially affect this habitat.

The construction and staging areas are part of a migration corridor for lamprey and steelhead, and construction activities may contribute to temporary passage delay during the migration season. Capture and relocation efforts may be implemented to reduce risk of harm from migration delay. Impacts to western pond turtles could occur as a result of construction activities, including through removal of habitat, vehicle strikes, and crushing of nests, among other impacts. Potential impacts to covered birds may occur as a result of temporary habitat loss resulting from construction activities. Conservation measures were developed as part of the MSHCP with the goal of minimizing impacts of renovation of the Freeman Diversion to riparian and riverine habitat for the covered species and to individuals of the covered species.

Among the conservation measures identified, timing and scheduling BMPs will help reduce risks to covered species. For example, to avoid or minimize impacts to steelhead and riparian habitat, covered activities involving the use of heavy equipment (e.g., excavation, grading, and contouring) in the Santa Clara River channel will be limited to the period between July 1 to October 31 of each year (dry season) to the extent practicable. Covered activities may begin prior to the dry season if the stream channel has been dry for a minimum of 30 days prior to initiating work. Facility renovation covered activities, including initial flow rerouting, dewatering system installation, coffer dam and stability berm installation would begin as soon as river flows are low enough during the first construction season to allow the initiation of work, likely in April or early May. Once the renovation site is protected and isolated from the river channel, construction would commence year-round. However, in general, covered activities within the river channel will be limited to periods of low rainfall (less than 0.5 inch per 24-hour period and less than 40 percent chance of rain). Any work conducted within the river channel outside of the dry season will be subject to approval by NMFS, USFWS, and CDFW prior to performing the activity. Construction activities within the river channel will cease 24 hours prior to a 40 percent or greater forecast of rain from the National Weather Service. Construction may continue 24 hours after the rain ceases and there is no precipitation in the 24-hour forecast. Additionally, to avoid or minimize impacts to nesting birds, covered activities involving the use of heavy equipment (e.g., clearing and grubbing, excavation, grading, and contouring) around riparian habitat occupied by covered species will be limited to the period between September 1 and January 31 (non-nesting season) to the extent practicable. Covered activities may be conducted within or near riparian habitat during the nesting season (February 1 through August 31) if pre-activity surveys have shown no nesting activity is occurring.

- *Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?*

There are numerous special status species found in the Project area and MSHCP plan area. An extensive list of these species is provided in the EIR and the MSHCP. Within the plan area there are seven plant species and 18 animal species listed under the CESA or ESA. The following table lists special status species, and associated habitat, for which United is seeking coverage under ITPs.

Table 4. MSHCP Covered Species

Species	Federal Status	State Status	Critical Habitat in MSHCP Plan Area	United Applying for ITP
Fish				
Southern California steelhead (<i>Oncorhynchus mykiss</i>)	E	None	Yes	Federal
Pacific lamprey (<i>Entosphenus tridentatus</i>)	None	None	No	Federal
Tidewater goby (<i>Eucyclogobius newberryi</i>)	E	None	Yes	Federal
Reptiles				
Southwestern pond turtle (<i>Actinemys pallida</i>)	PT	SSC	No	Federal
Birds				
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	E	E	No	Federal & State
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	E	E	Yes	Federal & State
Yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	T	E	No	Federal & State

E = endangered, T = threatened, PT = Proposed Threatened, SSC = California Species of Special Concern

The Project has the potential to impact special status species and/or their critical habitat, including the potential to result in take of federally protected species. For this reason, United is applying for ITPs. The MSHCP has been prepared as part of the application for ITPs and to address potential Project impacts to covered species. The MSHCP outlines a conservation program intended to minimize and mitigate potential impacts to covered species with two specific goals: Goal 1: Provide conditions that approximate an unimpeded steelhead and lamprey migratory corridor in the lower Santa Clara River; and Goal 2: Maintain or improve habitat for least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, and southwestern pond turtle in the Santa Clara River.

Additionally, it is important to note the Project will be implemented with the primary purpose to provide improved migratory fish passage for the protection of steelhead.

- *Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States”? If so, please describe and estimate any impacts the proposed project may have.*

Project construction activities will take place directly in and immediately adjacent to the Santa Clara River channel, at the site of the existing Freeman Diversion. In-water work anticipated for the project would occur during implementation of dewatering and flow rerouting activities (i.e., initial cofferdam construction and subsequent cofferdam reconfiguration).

Full isolation of the left (south) bank work area will occur as part of renovation activities utilizing a cofferdam and dewatering system, with the intent to minimize the time required within the river channel. Pumped water would be discharged either downstream or into United’s canal in accordance with water quality permit requirements and prescribed instream flow discharges.

During the construction period fish will not have access to the existing fish ladder at the Freeman Diversion. To support fish passage during the construction period a “trap and truck” program will be implemented to allow adult fish to access river reaches upstream of the grade control structure. A temporary collection area will be created just downstream of the grade control structure in a location that conveys the majority of the river flows and avoids disturbance of riparian vegetation. A full spanning fish fence/ weir will be installed across the channel of the river to direct upstream migrating fish to a trap. Operation of the fish fence/ weir will depend on total river discharge, and it is presumed that discharge above approximately 300 cfs would be unsafe to install and operate the temporary fish passage system. Accordingly, United would plan to install the fish fence/ weir following a storm when flows have receded to approximately 300 cfs and would remove the apparatus when a storm resulting in discharge in excess of 300 cfs is anticipated. When in operation, adult fish will be collected from the trap and moved to a location upstream of the grade control structure agreed to by the resources agencies. No additional downstream passage facilities are anticipated during construction. Juvenile fish moving downstream would travel with river flows over the grade control structure, similar to existing conditions.

Access and construction of the diversion refacing is anticipated to be staged and conducted during low flow periods (June-October or potentially December if weather conditions are dry enough). Gravel access points would be developed from the right (north) abutment above and below the diversion structure. Riverbed material would be used to grade temporary roadways. The contractor would be directed to plan and sequence its work in limited sections of 50 feet to 100 feet. Sandbags, concrete blocks, or aggregate filled supersacks would be deployed to divert water around exposed incomplete work and crews. As each section is cast and completed the work area would be moved to the north along with the sandbags. Access roads would be reclaimed as the work progresses to completion.

Project construction activities will be conducted in a manner to minimize impacts to the River and will be implemented in accordance with water quality permit requirements. Mitigation

measures to avoid and minimize potential impacts are detailed in the MSHCP and Project EIR.

- *When was the water delivery system constructed?*

United's water supply system, the Oxnard-Hueneme System was constructed in 1954, the Pleasant Valley pipeline was constructed in 1958, and the Pumping Trough Pipeline system was constructed in 1985.

- *Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.*

No, the Project will not result in any modification of or effects to an irrigation system.

- *Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?*

A records search completed at the South-Central Coastal Information Center (SCCIC) revealed that 21 historic features have been previously recorded within the MSHCP plan and permit area. Historic features within the area consist of ranches, houses, a park, levee, river crossings and bridges. Of these historic features, 19 have been evaluated for California Register of Historical Resources (CRHR), National Register of Historic Places (NRHP), California Landmark, or local significance, as shown in table below.

Table 5. Historic Features within the MSHCP Plan Area

Primary Number	Historic Feature	Historic Status
P-56-151768	Rancho Camulos – Del Valle Ranch	NRHP - listed
P-56-151794	Southern Pacific Railroad Bridge, Piru Railroad Bridge	Not evaluated
P-56-152320	Warring Park	California Historical Landmark
P-56-152738	McGrath House	Not evaluated
P-56-152833	Telegraph Road Bridge	Recommended not eligible
P-56-152882	Santa Clara Valley District	NRHP - eligible
P-56-152902	Newhall Land & Farming Co.	NRHP - eligible
P-56-158930	Santa Clara Walnut Co., C A Storke Ranch	NRHP - eligible
P-56-152935	Miles Balcom Ranch	NRHP - eligible
P-56-152936	C W Petit Ranch	NRHP - eligible
P-56-152971	Fleisher Ranch Workers Houses	NRHP - eligible
P-56-153064	SCE Transmission Tower M2-T2 Mandalay	Recommended not eligible
P-56-153146	SCR-1; Santa Clara River Levee	Recommended not eligible

Primary Number	Historic Feature	Historic Status
P-56-150882	Padelford Residence, Cochran Residence	Recommended not eligible
P-56-150883	Walter Warring Residence	Locally significant
P-56-150853	Employee Bungalow	NRHP – eligible
P-56-150864	Shower House	NRHP - eligible
P-56-150863	Ranch Hands Residence	NRHP – eligible
*Not listed	N.J. Sheehan Oil Tool Company	Locally significant
*Not listed	Unknown	Recommended not eligible
P-56-001520	McGrath State Beach	Recommended not eligible

Five of these features are entirely located within the MSHCP plan area, however only one is a resource under CEQA:

- Southern Pacific Railroad Bridge, Piru Railroad Bridge (not a resource),
- McGrath House (not a resource),
- Telegraph Road Bridge (not a resource),
- SCE Transmission Towers M2-T2 Mandalay (not a resource), and
- N.J. Sheehan Oil Tool Company (resource).

- *Are there any known archeological sites in the proposed project area?*

A records search of the MSHCP plan and permit areas was completed at the SCCIC, at California State University, Fullerton. The architectural records search was completed on September 11, 2019, and the archaeological records search was completed on April 20, 2020.

The SCCIC records search revealed three archaeological sites have been previously recorded within the MSHCP plan and permit area. The two prehistoric sites consist of a bedrock mortar and a fused shale flake and are considered isolates. These isolates are not considered associated with an archaeological site and are generally not eligible for listing in the CRHR or (NRHP) and, therefore, were not evaluated for significance.

The historic-era archaeological site consists of the remains of a ranch and includes building foundations and trash scatters. This site has been recommended eligible for listing in the NRHP.

- *Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?*

The Project will not have a disproportionately high or adverse effect on low income or minority populations. In fact, the Project will benefit economically disadvantaged communities in that it will enable United to continue providing a cost-effective water supply source for agriculture, businesses and residents within the United service area, regardless of economic status.

- *Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or*

result in other impacts on tribal lands?

The Project is not expected to limit access to or ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

Under AB 52, PRC Section 21080.3.1, a CEQA lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the project if the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe. At the time the proposed plan was initiated, no tribes that are traditionally or culturally affiliated with Ventura County, including the plan area, had formally requested to be informed of proposed projects undertaken by United. Therefore, there is no trigger to begin consultation under AB 52, and no tribal cultural resources have been identified.

While no resources have been identified that meet the criteria for a tribal cultural resource under PRC Section 21074, tribes may request notification within the future, and, through the consultation process, tribal cultural resources could be identified if any exist in the plan area.

- *Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?*

No. United will implement best management practices aimed at preventing the introduction, transfer, and spread of invasive species, including plants, animals, and microbes. Best management practices to be implemented include removal of all visible soil/mud, plant materials, and animal remnants from all vehicles, tools, boots, and equipment, and ensuring all vehicles, equipment, tools, and sediment and erosion control activities are free of invasive plant and animal species. All soils, seed mix (e.g., for habitat restoration), or other material will be certified free of invasive species before being imported or exported to or from the permit area. Invasive species management protocols will be implemented for all renovation related activities that occur within the Santa Clara River channel, riparian, and riverine habitat.

Hand weeding will be employed throughout the 5-year active restoration period to control invasive non-native plants in the restoration area, after both fish passage renovation and maintenance activities. If determined necessary by the restoration biologist, mechanical weeding may be employed for large outbreaks of invasive species (e.g., arundo, tamarisk). In this circumstance, relevant conservation measures for species and habitat protection (e.g., monitoring, BMPs) will be employed.

Section 4: Other Application Components

4.1 Required Permits or Approvals

See details under Subcriterion B, including Table 2, regarding anticipated permits and approvals needed.

4.2 Overlap or Duplication of Effort Statement

Applicants should provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review. Applicants should also state if the proposal submitted for consideration under this program does or does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal. If such a circumstance exists, applicants must detail when the other duplicative proposal(s) were submitted, to whom (Agency name and Financial Assistance program), and when funding decisions are expected to be announced. If at any time a proposal is awarded funds that would be duplicative of the funding requested from Reclamation, applicants must notify the NOFO point of contact or the Program Coordinator immediately.

There is no overlap or duplication of effort related to the proposed Project. No proposals for funding consideration have been submitted to any Federal or non-Federal agencies in relation to the Project.

4.3 Conflict of Interest Disclosure Statement

Applicants should state in the application if any actual or potential conflict of interest exists at the time of submission. Submission of a conflict-of-interest disclosure or certification statement is mandatory prior to issue of an award.

There are no actual or potential conflicts of interests at the time of submission.

4.4 Uniform Audit Reporting Statement

All U.S. states, local governments, federally recognized Indian Tribal governments, and non-profit organizations expending \$750,000 USD or more in Federal award funds in the applicant's fiscal year must submit a Single Audit report for that year through the Federal Audit Clearinghouse's Internet Data Entry System. U.S. state, local government, federally recognized Indian Tribal governments, and non-profit applicants must state if your organization was or was not required to submit a Single Audit report for the most recently closed fiscal year. If your organization was required to submit a Single Audit report for the most recently closed fiscal year, provide the Employer Identification Number (EIN) associated with that report and state if it is available through the Federal Audit Clearinghouse website.

United Water Conservation District was required to submit a Single Audit Report for fiscal year

2021-2022 in accordance with 2 CFR §200 subpart F. Western's Employer Identification Number (EIN) is 95-6000807. The report was submitted on March 30, 2023 and is available through the Federal Audit Clearinghouse website.

4.5 Letters of Support

Letters of Support are provided in Appendix B and were provided by the following:

- California Assemblymember Steve Bennett
- California Department of Fish and Wildlife
- California Senator Monique Limon
- California Trout
- Center for Biological Diversity
- City of Ventura
- Fox Canyon Groundwater Management Agency
- National Marine Fisheries Service
- Pleasant Valley County Water District
- Port Hueneme Water Agency
- Southland Sod
- The Nature Conservancy
- U.S. Senator Laphonza Butler
- Ventura County Coalition of Labor, Agriculture and Business
- Wishtoyo Foundation

4.6 Letters of Funding Commitment

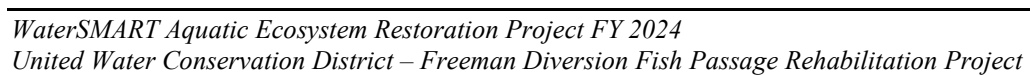
N/A

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Fish Passage Design Figure



Appendix B: Letters of Support

Letters from the following entities are provided herein:

- California Assemblymember Steve Bennett
- California Department of Fish and Wildlife
- California Senator Monique Limon
- California Trout
- Center for Biological Diversity
- City of Ventura
- Fox Canyon Groundwater Management Agency
- National Marine Fisheries Service
- Pleasant Valley County Water District
- Port Hueneme Water Agency
- Southland Sod
- The Nature Conservancy
- U.S. Senator Laphonza Butler
- Ventura County Coalition of Labor, Agriculture and Business
- Wishtoyo Foundation

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January 4, 2024

M. Camille Calimlim Touton
Commissioner
Bureau of Reclamation
Via email

Subject: Letter of Support for United Water Conservation District Application for the Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Touton:

This letter is to provide strong support for the United Water Conservation District's ("United") application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. United has my full support for their application for funding requested for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead, Pacific lamprey, and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan1, as well as other native species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction of the hardened ramp is in alignment with the Biden administration's goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

If you have any questions or require additional information, please do not hesitate to contact my staff, Candace Cotton at 916-319-2038.

Sincerely,

A handwritten signature in black ink that reads 'Steve Bennett'. The signature is written in a cursive, flowing style.

Assemblymember Steve Bennett



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

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



January 12, 2024

Via U.S. Mail

Avra Morgan
U.S. Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007
aomorgan@do.usbr.gov

**SUBJECT: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE LETTER OF
SUPPORT FOR UNITED WATER CONSERVATION DISTRICT APPLICATION FOR THE
UNITED STATES BUREAU OF RECLAMATION WATERSMART AQUATIC ECOSYSTEM
RESTORATION PROJECTS FOR FISCAL YEAR 2023 PROGRAM**

Dear Avra Morgan:

The California Department of Fish and Wildlife (CDFW) South Coast Region writes in support of United Water Conservation District's (United) application for funding from the WaterSMART Aquatic Ecosystem Restoration Projects program (fiscal year 2023). If awarded, the funding would be used to complete final design and construction of the Hardened Ramp Fish Passage Facility (Hardened Ramp or Project) at the Vern Freeman Diversion (VFD) on the Santa Clara River in Ventura County, California. For the past ten years, CDFW has provided feedback on the development of United's Multi Species Habitat Conservation Plan (MSHCP) and associated design reports and modeling work plans. United recently selected the Hardened Ramp as its preferred fish passage design for the MSHCP in coordination with CDFW and the National Marine Fisheries Service (NMFS). Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide support for this important Project. The Hardened Ramp is a fish barrier modification that has been collaboratively developed, includes widespread regional benefits, and would result in the improvement of the health of fisheries, wildlife, and aquatic habitat.

Issues with the Existing Fish Passage Facility

The design, operation, and maintenance of the existing fish ladder and ancillary facilities at the VFD present obstacles to safe and effective passage for southern California steelhead (steelhead or *Oncorhynchus mykiss*, a species listed as endangered under the federal Endangered Species Act [ESA] and a candidate for listing as endangered

Conserving California's Wildlife Since 1870

Avra Morgan
U.S. Bureau of Reclamation
January 12, 2024
Page 2 of 3

under the California Endangered Species Act [CESA]), and other native fish, such as Pacific lamprey (a regional Species of Special Concern [SSC]), Santa Ana sucker (*Catostomus santaanae*; SSC); ESA listed species), arroyo chub (*Gila orcutti*; SSC), and partially-armored stickleback (*Gasterosteus aculeatus microcephalus*).

Benefits of the Proposed Hardened Ramp Fish Passage Facility

The Hardened Ramp can provide substantial benefits to listed and non-listed species. The Hardened Ramp will be designed and located to improve volitional fish passage, both up and downstream of the facility, over a large range of flows and can function independent of diversion operations. The Hardened Ramp can be operated in a manner more consistent with the natural life history and habitat requirements of steelhead, Pacific lamprey, Santa Ana sucker, arroyo chub, and stickleback. The degree of these benefits will be dependent on the Project's final design, operation, and maintenance.

The Santa Clara River and its tributaries provide breeding and foraging habitat for local fish and wildlife resources. Sensitive riparian habitat adjacent to and downstream of the VFD include southern willow scrub, arroyo willow thickets, mulefat thickets, riverwash herbaceous habitat, and support several CESA- and ESA-listed avian species, such as southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*) and western, yellow-billed cuckoo (*Coccyzus americanus*). Other sensitive (non-listed) bird species include yellow warbler (*Setophaga petechia*), and yellow breasted chat (*Icteria virens*). There are also several known least Bell's vireo breeding territories within the immediate vicinity of the Project as well and these species would benefit from the construction and operation of the Hardened Ramp. The Hardened Ramp has the potential to increase bypass flows for native fish species and is expected to generate beneficial hydrologic conditions for the lower Santa Clara River watershed for a range of wildlife species.

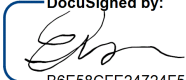
Conclusion

If designed, constructed, operated, and maintained in a manner consistent with the needs of steelhead and other native fish, the Project is expected to yield long-term and tangible benefits to steelhead and other sensitive species and represent a significant improvement over the existing fish passage facility. CDFW looks forward to working with United to provide further support and guidance to ensure that the Project's design, construction, and operation will improve fish passage and migration at this keystone barrier in the Santa Clara River. We respectfully request that you join in support of United's Hardened Ramp fish passage structure with due consideration of WaterSMART funding for this Project.

Avra Morgan
U.S. Bureau of Reclamation
January 12, 2024
Page 3 of 3

If you have any questions regarding this letter, please contact Baron Barrera, Senior Environmental Scientist (Supervisory), at (858) 354-4114 or by email at Baron.Barrera@wildlife.ca.gov.

Sincerely,

DocuSigned by:

B6E58CFE24724F5...

Erinn Wilson-Olgin
Regional Manager
South Coast Region

ec: **California Department of Fish and Wildlife**

Rich Burg, Environmental Program Manager

Randy Rodriguez, Acting Environmental Program Manager

Steve Gibson, Senior Environmental Scientist (Supervisory)

Baron Barrera, Senior Environmental Scientist (Supervisory)

Kyle Evans, Senior Environmental Scientist (Supervisory)

Mary Ngo, Senior Environmental Scientist (Specialist)

Susan Howell, Staff Services Analyst

National Oceanic Atmospheric Administration (NOAA)

Rick Bush, Fisheries Biologist, West Coast Region
Rick.Bush@noaa.gov

Anthony Spina, Branch Chief, West Coast Region
Anthony.Spina@noaa.gov

United Water Conservation District

Mauricio Guardado
MauricioG@UnitedWater.org

CAPITOL OFFICE
STATE CAPITOL, RM. 3092
SACRAMENTO, CA 95814
TEL (916) 651-4019

SANTA BARBARA DISTRICT OFFICE
222 E. CARRILLO ST., STE. 309
SANTA BARBARA, CA 93101
TEL (805) 965-0862
FAX (805) 965-0701

OXNARD DISTRICT OFFICE
300 E. ESPLANADE DR., STE. 430
OXNARD, CA 93036
TEL (805) 988-1940
FAX (805) 988-1945

WWW.SENATE.CA.GOV/LIMON
SENATOR.LIMON@SENATE.CA.GOV

California State Senate

SENATOR
MONIQUE LIMÓN
NINETEENTH SENATE DISTRICT



COMMITTEES

BANKING & FINANCIAL INSTITUTIONS
CHAIR

HEALTH

NATURAL RESOURCES & WATER

SPECIAL COMMITTEE ON
PANDEMIC EMERGENCY RESPONSE

JOINT LEGISLATIVE COMMITTEE ON
EMERGENCY MANAGEMENT

SELECT COMMITTEE
ON THE NONPROFIT SECTOR
CHAIR

January 12, 2024

M. Camille Calimlim Touton, Commissioner
Bureau of Reclamation
1849 C Street NW
Washington, D.C. 20240

Subject: Letter of Support for United Water Conservation District Application for the Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Touton:

I am writing to express my support for the application submitted by the United Water Conservation District for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. The program funding would go toward the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes, and led to the selection of the hardened ramp as the preferred fish passage design.

This improved fish passage facility will provide safe and efficient passage to multiple species of endangered and native fish, including the southern California steelhead and Pacific lamprey. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan, as well as other native species of fish within the watershed. This potential funding for design and construction of the hardened ramp is in alignment with Biden administration goals for habitat improvements within the watershed and would ensure that this crucial project is one step closer to implementation.

I therefore request full and fair consideration of this application as funding will provide key support to an important project with multiple benefits to listed as well as non-listed species, and the watershed as a whole. Thank you for your consideration. Please do not hesitate to reach out with any questions.

Sincerely,

MONIQUE LIMÓN
Senator, 19th District



January 19, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Re: Support for the United Water Conservation District's Application for the
WaterSMART Aquatic Ecosystem Restoration Projects Program

Dear Ms. Morgan:

California Trout writes in support of the United Water Conservation District's application for the WaterSMART Aquatic Ecosystem Restoration Projects program. California Trout is a not-for-profit 501c3 organization who works to promote healthy fisheries statewide, and in particular works to support recovery of Southern steelhead - an iconic species that is listed as federally endangered, and is currently covered under CA ESA protection.

United's application requests funding for the design and construction of a hardened ramp fish passage facility at the Freeman Diversion operated by United on the Santa Clara River in Ventura County, California. The hardened ramp facility, which is designed to provide effective fish passage at flows between 45 and 6,000 cubic feet per second, would significantly improve fish passage at the Freeman Diversion in comparison to existing conditions. Improved fish passage will benefit several native fish species found in the Santa Clara River watershed, including southern California steelhead and Pacific lamprey. In particular, improved fish passage will benefit endangered southern California steelhead by enabling greater access to high quality spawning and rearing habitat in the upper Santa Clara River watershed. Improved fish passage will also contribute to the recovery of steelhead in the watershed; the provision of fish passage around dams and diversions, including the Freeman Diversion, is specifically identified as a recovery action for the mainstem Santa Clara River (see Recovery Action SCR-SCS-4.1, 2012 Southern California Steelhead Recovery Plan).

The National Marine Fisheries Service and California Department of Fish and Wildlife have been closely involved in the design and modeling of fish passage for the Freeman Diversion. These agencies identified the hardened ramp design as the preferred fish passage alternative. The Center fully supports funding for further design and construction of this vitally important project through the WaterSMART Aquatic Ecosystem Restoration Program.

California Trout 435 Pacific Avenue, Suite 200, San Francisco, California 94133

California Trout is committed to promoting the conservation and recovery of southern California steelhead, and construction of the Freeman Diversion hardened ramp fish passage as a critical conservation action for the watershed, for southern California steelhead as a whole, and for other species that will benefit from the project.

Sincerely,

A handwritten signature in black ink, appearing to read "Curtis Knight", with a stylized flourish at the end.

Curtis Knight
Executive Director
California Trout



CENTER *for* BIOLOGICAL DIVERSITY &

December 27, 2023

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Re: ! Support for the United Water Conservation District's Application for the FY 2023 WaterSMART Aquatic Ecosystem Restoration Projects Program

Dear Ms. Morgan:

On behalf of the Center for Biological Diversity, I write in support of the United Water Conservation District's application for the FY 2023 WaterSMART Aquatic Ecosystem Restoration Projects program. The Center is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law.

United's application seeks funding for the design and construction of a hardened ramp fish passage facility at the Freeman Diversion operated by United on the Santa Clara River in Ventura County, California. The hardened ramp facility, which is designed to provide effective fish passage at flows between 45 and 6,000 cubic feet per second, would significantly improve fish passage at the Freeman Diversion in comparison to existing conditions. Improved fish passage will benefit several native fish species found in the Santa Clara River watershed, including southern California steelhead and Pacific lamprey. In particular, improved fish passage will benefit endangered southern California steelhead by enabling greater access to high quality spawning and rearing habitat in the upper Santa Clara River watershed. Improved fish passage will also contribute to the recovery of steelhead in the watershed; the provision of fish passage around dams and diversions, including the Freeman Diversion, is specifically identified as a recovery action for the mainstem Santa Clara River (see Recovery Action SCR-SCS-4.1, 2012 Southern California Steelhead Recovery Plan).

Both the National Marine Fisheries Service and the California Department of Fish and Wildlife have been closely involved in the design and modeling of fish passage for the Freeman Diversion. These agencies have identified the hardened ramp design as the preferred fish passage alternative. The Center fully supports funding for further design and construction of this vitally important project through the WaterSMART Aquatic Ecosystem

Arizona • California • Colorado • Florida • Minnesota • Nevada • New Mexico • North Carolina • Oregon • Washington • Washington, DC

John Buse, Senior Counsel • 1212 Broadway, Suite 800 • Oakland, CA 94612 !
Phone: 323-533-4416 • Fax: 510-844-7150 • jbuse@biologicaldiversity.org !

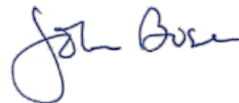
Support for the United Water Conservation District's Application—FY 2023 WaterSMART
Aquatic Ecosystem Restoration Projects Program

December 27, 2023

Page 2

Restoration Projects program. The Center is committed to promoting the conservation and recovery of southern California steelhead, and construction of the Freeman Diversion hardened ramp fish passage is one of the most critical conservation actions for the watershed, for southern California steelhead as a whole, and for other species that will benefit from the project.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Buse".

John Buse
Senior Attorney
Center for Biological Diversity

January 11, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

**Subject: The City of Ventura Letter of Support for United Water Conservation District
Application for the United States Bureau of Reclamation WaterSMART Aquatic
Ecosystem Restoration Projects for FY 2023 Program**

Dear Ms. Morgan:

This letter is provided in support of the United Water Conservation District (“United”) application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. The City of Ventura provides full support of the application for funding requested by United for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

United is undertaking the renovation of the fish passage facility at the Freeman Diversion. The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead (*Oncorhynchus mykiss*, steelhead), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan¹, as well as other native species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction

¹ NMFS. 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

**From the Office of
City Manager Bill Ayub**

bayub@cityofventura.ca.gov • (805) 654-7740



of the hardened ramp is in alignment with The City of Ventura's goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

If you have any questions or require additional information, please do not hesitate to contact me at City Manager's Office, 805-654-7740.

Sincerely,

A handwritten signature in blue ink, appearing to read "W. Ayub", written over a light blue circular stamp.

Bill Ayub
City Manager

cc: Gina Dorrington, General Manager
Jennifer Tribo, Assistant Manager

enclosures

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

A STATE OF CALIFORNIA WATER AGENCY



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EXECUTIVE OFFICER

Jeff Pratt, P.E.

January 19, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Subject: Fox Canyon Groundwater Management Agency Letter of Support for United Water Conservation District Application for the United States Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Morgan:

This letter is provided in support of the United Water Conservation District ("United") application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. Fox Canyon Groundwater Management Agency provides full support of the application for funding requested by United for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

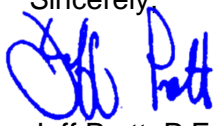
United is undertaking the renovation of the fish passage facility at the Freeman Diversion. The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead (*Oncorhynchus mykiss*, steelhead), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan¹, as well as other native species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction of the hardened ramp is in alignment with Fox Canyon Groundwater Management Agency's goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

¹ NMFS. 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

Ms. Avra Morgan
January 19, 2024
Page 2 of 2

If you have any questions or require additional information, please do not hesitate to contact me at (805) 654-2073.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeff Pratt", is positioned above the printed name.

Jeff Pratt, P.E.
Executive Officer

-



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404-4731

January 8, 2024

Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, Colorado 80225-0007

Subject: Support for United Water Conservation District's Grant Application for the Design and Construction of a Hardened Ramp at the Vern Freeman Diversion Dam

Dear Ms. Morgan:

NOAA's National Marine Fisheries Service (NMFS) is pleased to support United Water Conservation District's (United) grant application to the Bureau of Reclamation's WaterSMART Aquatic Ecosystem Restoration Program.

We understand that this grant, if awarded, is intended to advance the design and construction of the hardened ramp passage facility for endangered steelhead (*Oncorhynchus mykiss*). The ramp is an important foundational element of United's draft Multispecies Habitat Conservation Plan (HCP), which concerns operation and maintenance of the Freeman Diversion Dam (Dam) on the lower Santa Clara River in southern California.

The existing Dam impedes passage of this highly imperiled species and impacts the species' designated critical habitat. When designed, constructed, and operated consistent with the habitat and life history requirements of adult and juvenile steelhead, the hardened ramp is anticipated to provide volitional migration of this species to historical spawning and rearing habitats in the upper watershed. Among other necessary improvements and modifications to the Dam, restoring volitional migration at the Dam is essential for recovering endangered steelhead in southern California.¹ Accordingly, we support United's design, construction, and operation of the hardened ramp.

Planning for the HCP continues to involve evaluation and consideration of substantive environmental issues, ultimately to properly inform a meaningful conservation program for endangered steelhead. If awarded, we expect the grant would support the effort to appropriately design and construct the hardened ramp, consistent with the needs of endangered steelhead and native non-game fishes of the lower Santa Clara River.

¹<https://www.fisheries.noaa.gov/resource/document/southern-california-steelhead-recovery-plan>



We appreciate this opportunity to lend our support to United's grant application. Please contact me if you have questions or if you would like additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Alecia Van Atta', with a stylized flourish at the end.

Alecia Van Atta
Assistant Regional Administrator
California Coastal Office

cc: Erinn Wilson-Olgin, CDFW
Baron Barrera, CDFW
e-file ARN 151422SWR2008PR00506

DIRECTORS

Peter W. Hansen

Craig R. Kaihara

Thomas P. Vujovich, Jr.

John S. Broome

John D. Menne



PLEASANT VALLEY COUNTY WATER DISTRICT

PIONEER IN FOX CANYON AQUIFER CONSERVATION
SERVING AGRICULTURE SINCE 1956

154 S. LAS POSAS ROAD, CAMARILLO, CA 93010-8570
Phone: 805-482-2119

STAFF

Jared L. Bouchard
General Manager

General Counsel
Arnold, Bleuel,
LaRochelle,
Mathews & Zirbel,
LLP

January 9, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Subject: Pleasant Valley County Water District Letter of Support for United Water Conservation District Application for the United States Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Morgan:

This letter is provided in support of the United Water Conservation District ("United") application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. Pleasant Valley County Water District provides full support of the application for funding requested by United for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

United is undertaking the renovation of the fish passage facility at the Freeman Diversion. The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead (*Oncorhynchus mykiss*, steelhead), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan¹, as well as other native

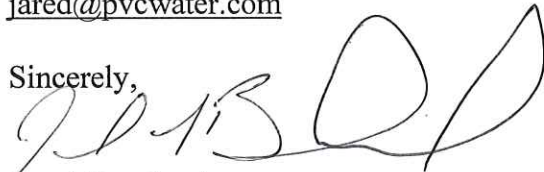
¹ NMFS. 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction of the hardened ramp is in alignment with Pleasant Valley County Water District's goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

If you have any questions or require additional information, please do not hesitate to contact me at

Pleasant Valley County Water District
154 S. Las Posas Road
Camarillo, CA 93010
805-482-2119
jared@pvcwater.com

Sincerely,

A handwritten signature in black ink, appearing to read 'Jared Bouchard', written over a horizontal line.

Jared Bouchard
General Manager

cc: Mauricio Guardado, United Water Conservation District

1/10/2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Subject: Port Hueneme Water Agency Letter of Support for United Water Conservation District Application for the United States Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Morgan:

This letter is provided in support of the United Water Conservation District ("United") application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. Port Hueneme Water Agency provides full support of the application for funding requested by United for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

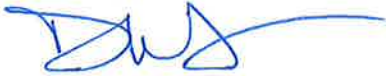
United is undertaking the renovation of the fish passage facility at the Freeman Diversion. The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead (*Oncorhynchus mykiss*, steelhead), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan¹, as well as other native species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction of the hardened ramp is in alignment with Port Hueneme Water Agency's goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

¹ NMFS. 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

If you have any questions or require additional information, please do not hesitate to contact me at

Port Hueneme Water Agency
805-986-6566

Sincerely,



Dennis Martinez
Water General Manager
Port Hueneme Water Agency
City of Port Hueneme

cc:

enclosures



SOD FARMS

Exclusive Growers of Genuine Marathon

January 11, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Subject: Marathon Land, Inc. / Southland Sod Farms, Letter of Support for United Water Conservation District Application for the United States Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Morgan:

This letter is provided in support of the United Water Conservation District ("United") application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023.

Marathon Land, Inc is among the many farms on the 30,000 acre Oxnard Plain dependent on United's groundwater recharge and surface water deliveries. United's diversions from the Santa Clara River supply seventy-five 75% of the area's water. Without United's water supply Ventura County's \$2.1 billion agricultural industry would be devastated. Urban water supplies would be similarly impacted. It is imperative that United be able to continue its operations.

Marathon provides full support of the application for funding requested by United for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

United is undertaking the renovation of the fish passage facility at the Freeman Diversion. The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead (*Oncorhynchus mykiss*, steelhead), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Additionally, through an exhaustive design and modeling process, the hardened ramp met each of the specific design criteria detailed by the NMFS for the project. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS

Recovery Plan¹, as well as other native species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction of the hardened ramp is in alignment with Marathon Land's goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

If you have any questions or require additional information, please do not hesitate to contact me at Marathon Land / Southland Sod Farms, 805-488-3585.

Sincerely,



Jurgen Gramckow
President

¹ NMFS. 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

January 17, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Re: Support for the United Water Conservation District's Application for the FY
2023 WaterSMART Aquatic Ecosystem Restoration Projects Program

Dear Ms. Morgan:

I write in support of the United Water Conservation District's application for the FY 2023 WaterSMART Aquatic Ecosystem Restoration Projects program. The Nature Conservancy is a nonprofit organization with the mission to conserve the lands and waters on which all life depends.

United's application seeks funding for the design and construction of a hardened ramp fish passage facility at the Freeman Diversion operated by United on the Santa Clara River in Ventura County, California. The hardened ramp facility, which is designed to provide effective fish passage at flows between 45 and 6,000 cubic feet per second, would significantly improve fish passage at the Freeman Diversion in comparison to existing conditions. Improved fish passage will benefit several native fish species found in the Santa Clara River watershed, including southern California steelhead and Pacific lamprey. In particular, improved fish passage will benefit endangered southern California steelhead by enabling greater access to high quality spawning and rearing habitat in the upper Santa Clara River watershed. Improved fish passage will also contribute to the recovery of steelhead in the watershed; the provision of fish passage around dams and diversions, including the Freeman Diversion, is specifically identified as a recovery action for the mainstem Santa Clara River (see Recovery Action SCR-SCS-4.1, 2012 Southern California Steelhead Recovery Plan).

Both the National Marine Fisheries Service and the California Department of Fish and Wildlife have been integrally involved in the design and modeling of fish passage for the Freeman Diversion. These agencies have identified the hardened ramp design as the preferred fish passage alternative.

The Nature Conservancy is committed to promoting the conservation and recovery of southern California steelhead, and construction of the Freeman Diversion hardened ramp fish passage is one of the most critical conservation actions for the watershed, for southern California steelhead as a whole, and for other species that will benefit from the project.

Sincerely,

A handwritten signature in dark ink, appearing to read "E. J. Remson", with a long, sweeping horizontal flourish extending to the right.

E.J. Remson
Senior Project Director

United States Senate

WASHINGTON, DC 20510

January 18, 2024

The Honorable Camille Touton
Commissioner
Bureau of Reclamation
1849 C Street, N.W.
Washington, D.C. 20240

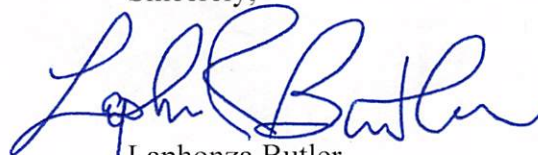
Dear Commissioner Touton,

I write in support of the United Water Conservation District's (United) application for funding from the WaterSMART Aquatic Ecosystem Restoration Program, administered by the Bureau of Reclamation, U.S. Department of Interior.

The United Water Conservation District is requesting funding for the design and construction of a hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River. As the managing agency overseeing the water resources of the Santa Clara River, its tributaries, and aquifers in Ventura County, California, United shares the responsibility of protecting the habitats within the watershed. In collaboration with the National Marine Fisheries Services (NMFS) and the California Department of Fish and Wildlife, United has selected to replace the existing fish passage facility with a hardened ramp in compliance with NMFS regulations, thereby improving its capacity. If implemented, this improved facility would support habitat improvement efforts and provide safe and efficient passage to several species of native fish, including some that are classified as endangered.

I urge you to give the United Water Conservation District's application every consideration. Please keep my office informed of the status of this request, and if I can be of further assistance, please do not hesitate to contact my Los Angeles office at (310) 914-7300.

Sincerely,



Laphonza Butler
United States Senator

LB/gm/kc

January 17, 2024

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Director

Lisa Woodburn, Jensen Design and Survey
Director

Avra Morgan
Water Resources and Planning Office
Bureau of Reclamation
Mail Code 86-63000
P.O. Box 25007
Denver, Colorado 80225-0007

**RE: Letter of Support for United Water Conservation District's
Application for the U.S. Bureau of Reclamation WaterSMART Aquatic
Ecosystem Restoration Projects for FY2023 Program**

Dear Ms. Morgan:

The Ventura County Coalition of Labor, Agriculture and Business (VC CoLAB) is writing to express our strong support for United Water Conservation District's (United Water) grant application for the Bureau's WaterSMART Aquatic Ecosystem Restoration Project Program.

VC CoLAB is a non-profit agricultural advocacy organization representing 550 members throughout Ventura County and Southern California. Our diverse membership includes farmers, ranchers, agricultural support services, local water district representatives, and residents who support our efforts to support a regulatory environment that supports a strong and vibrant economy in Ventura County and California.

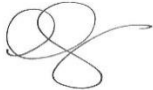
United Water is undertaking renovation of the fish passage facility at the Freeman Diversion. The Freeman Diversion structure is a critical component of Ventura County's water supply infrastructure, ensuring water supply and availability for hundreds of thousands of our County's residents and the Oxnard Plain, one of the most productive and important agricultural regions in the nation.

The primary component of United Water's renovation plan is the construction of a hardened ramp to provide safe and efficient passage for the federally listed southern California steelhead trout (*Oncorhynchus mykiss*), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. United Water's project meets the specific design criteria detailed by the National Marine Fisheries Service (NMFS) in the agency's southern California steelhead trout recovery plan. The project will provide significant benefit to the species that will support NMFS in achieving the goals of the steelhead recovery plan. Funding through the Bureau's

WaterSMART program will provide key support to this important project, benefiting listed and non-listed species and their habitats in the watershed.

Thank you for the opportunity to express our strong support for United Water's fish ramp hardening project. We urge the Bureau to recognize the critical need for and importance of this project and approve United Water's grant request.

Sincerely,

A handwritten signature in black ink, consisting of a series of loops and a trailing line, representing Louise Lampara.

Louise Lampara
Executive Director

January 8, 2024

Ms. Avra Morgan
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Subject: Wishtoyo Chumash Foundation Letter of Support for United Water Conservation District Application for the United States Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects for FY 2023 Program

Dear Ms. Morgan:

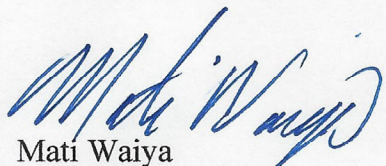
This letter is provided in support of the United Water Conservation District (“United”) application for the WaterSMART Aquatic Ecosystem Restoration Projects program for FY 2023. The Wishtoyo Chumash Foundation (“Wishtoyo”) supports the application for funding requested by United for the design and construction of the hardened ramp fish passage facility at the Freeman Diversion on the Santa Clara River in Ventura County, California. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife, the two agencies with oversight on the project, participated extensively in the design and modeling processes. The hardened ramp was selected as the preferred fish passage design in coordination with these regulatory agencies. This improved fish passage facility will provide benefits to multiple species of endangered and native fish.

United is undertaking the renovation of the fish passage facility at the Freeman Diversion. The primary component is the construction of a hardened ramp, which will provide safe and efficient passage for southern California steelhead (*Oncorhynchus mykiss*, steelhead), Pacific lamprey (*Entosphenus tridentatus*), and other native fish. The hardened ramp is designed to provide suitable passage conditions between 45-6,000 cubic feet per second, representing a significant improvement over the existing fish passage facility. Wishtoyo strongly believes that the construction and operation of the hardened ramp fish passage structure at the Vern Freeman Diversion will improve conditions for the migration of southern California steelhead and will be a vital step in the recovery of the distinct population segment. Overall, the hardened ramp provides a substantial benefit to steelhead, including achieving Recovery Action 4.1 of the NMFS Recovery Plan¹, as well as other native species of fish within the watershed. Funding through the WaterSMART Aquatic Ecosystem Restoration Projects program will provide key support to an important project with multiple benefits to listed as well as non-listed species. This potential funding for design and construction of the hardened ramp is in alignment with Wishtoyo’s goals for habitat improvements within the watershed and will ensure that this crucial project is one step closer to implementation.

¹ NMFS. 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

If you have any questions or require additional information, please do not hesitate to contact me and Tevin Schmitt, a staff member at Wishtoyo at matiwaiya@wishtoyo.org and tschmitt@wishtoyo.org. You may also contact Wishtoyo's counsel Christopher Sproul at csproul@enviroadvocates.com.

Sincerely,



Mati Waiya
President, Wishtoyo Foundation

cc: John Buse, Center for Biological Diversity
Mauricio Guardado, United Water Conservation District