Clean Water • Healthy Environment • Flood Protection

Continued Implementation of Two Long-term Management Plans for the Rancho Cañada de Pala Preserve

Final ~~Draft~~ Initial Study and Mitigated Negative Declaration

Project No. 62184001

May 12, 2021

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APPENDICES

List of Acronyms

AB	Assembly Bill
AMM	Avoidance and Minimization Measure
AP Act	Alquist-Priolo Earthquake Fault Zoning Act
ATV	All-terrain Vehicle
AU	Animal Units
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CRLF	California Red-legged Frog
CTS	California Tiger Salamander
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2E	Carbon Dioxide Equivalents
dBA	Decibels on the A-weighted Scale
EIR	Environmental Impact Report
EO	Executive Order
FYLF	Foothill Yellow-legged Frog
General Plan	Santa Clara County General Plan
GHG	Green House Gases
IS	Initial Study
lbs	Pounds
L_{eq}	Equivalent Continuous Sound Level
LSAA	Lake and Streambed Alteration Agreement
LTMP	Long-term Management Plan
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
NAHC	Native American Heritage Commission
N_2O	Nitrous Oxide
NO_x	Nitrogen Oxides
Preserve	Rancho Cañada de Pala Preserve
Project	Continued Implementation of two Long-term Management Plans for the Rancho Cañada de Pala Preserve
PM	Particulate Matter
ROG	Reactive Organic Gases
RWQCB	San Francisco Bay Regional Water Quality Control Board
RDM	Residual Dry Matter
SB	Senate Bill
Scoping Plan	Climate Change Scoping Plan

SMP	Multi-year Stream Maintenance Program
S&WPP	Stream and Watershed Protection Program
TNC	The Nature Conservancy
TPRO	Santa Clara Tree Preservation and Removal Ordinance
UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
Valley Water	Santa Clara Valley Water District (or Valley Water)
VHP	Santa Clara Valley Habitat Plan
WDR	Waste Discharge Requirements
WPT	Western Pond Turtle

Key Terminology

Avoidance and Minimization Measure:
Project-specific measures incorporated into the Project for the avoidance or minimization of potential adverse environmental effects.

Best Management Practices:
Measures derived from standardized Valley Water operating procedures. These practices have been identified as methods, activities, procedures, or other management practices for the avoidance or minimization of potential adverse environmental effects. They have been designed for routine incorporation into project designs and represent the "state of the art" impact prevention practices.

Less Than Significant Impact:
This is indicated in the Initial Study checklist where the impact does not reach the significance criteria set for that factor and the Project would therefore cause no substantial change in the environment (no mitigation needed).

Less Than Significant Impact with Mitigation*:*
This is indicated in the Initial Study checklist where the impact is determined to exceed the applicable significance criteria, but for which feasible mitigation measure(s) are available to reduce the impact to a level of less than significant.

Mitigation Measures:
Mitigation includes: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments.[1]

No Impact:
This is indicated in the Initial Study where, based on the environmental setting or the Project, the stated environmental factor does not apply to the Project.

Project:
Continued implementation of two Long-term Management Plans for the Rancho Cañada de Pala Preserve.

Significance Criteria:
A set of criteria used by the lead agency to determine whether an impact would be considered significant. Valley Water relied upon the significance criteria suggested by the CEQA Guidelines and criteria based on the regulatory standards of local, state and federal agencies.

[1] CEQA Guidelines § 15370.

Section 1: Introduction

Organization of this Document

This document is organized to assist the reader in understanding the potential impacts that the Project may have on the environment and to fulfill the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 *et seq.*). Section 1 indicates the Initial Study purpose under CEQA, sets forth the public participation process, and summarizes applicable local, state, and federal regulatory requirements. Section 2 describes the location and features of the Project, and Section 3 describes the environmental setting. Section 4 evaluates the potential impacts through the application of the CEQA Initial Study Checklist questions to Project implementation. Section 5 lists the contributors, and Section 6 supplies the references used in its preparation.

Purpose of the Initial Study

The Santa Clara Valley Water District (Valley Water), acting as the lead agency under CEQA, prepared this Initial Study (IS) and final ~~draft~~ Mitigated Negative Declaration (MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed continued implementation of two Long-term Management Plans for the Rancho Cañada de Pala Preserve (Project).

This Initial Study was prepared consistent with CEQA, the CEQA Guidelines (Title 14, California Code of Regulations § 15000 *et seq.*), and Valley Water procedures for implementation of CEQA (Environmental Management System - Environmental Planning Q520D01).

Intent to Prepare a Mitigated Negative Declaration for this Project

The IS (Section 4) for continued implementation of the Rancho Cañada de Pala Preserve Long-term Management Plans (LTMPs) identifies potentially significant effects on biological resources as a result of the Project. Mitigation measures have been proposed for the Project that clearly reduce such effects to less than significant levels; therefore, the proposed MND complies with CEQA Guidelines §15070(b), which indicates that an MND is appropriate when:

The Project IS identifies potentially significant effects, but:

a. Revisions to the Project were made that would avoid, or reduce the effects to a point where clearly no significant effects would occur, and
b. There is no substantial evidence that the Project, as revised, may have a significant effect on the environment.

Public Review Process

This draft MND was ~~will be~~ circulated to the State Clearinghouse, local and State agencies, interested organizations, and individuals who may wish to review and provide comments on the description, the proposed mitigation measures or other aspects of the report. The availability of the draft MND and opportunity for public comment was announced in advertisements published in two newspapers of general circulations. The publication commenced ~~will commence~~ the - ~~30~~ 30 day public review period per CEQA Guidelines Section 15105(b) ~~beginning~~ which began on February 17, 2021 and ended ~~ending~~ on March 19, 2021.

Due to the on-going COVID-19 pandemic, physical copies of the draft MND and supporting documents were ~~will~~ not ~~be~~ available for public review. However, Valley Water ~~will make~~ made electronic copies of the draft MND available for review online at:

- Valley Water website: https://www.valleywater.org/public-review-documents
- State Clearinghouse CEQAnet Web Portal: https://ceqanet.opr.ca.gov

Written comments or questions regarding the draft IS/MND were ~~should be~~ mailed or emailed to the name and address indicated below.

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~~The proposed IS/MND along with any comments will be considered by Valley Water prior to a decision on the Project.~~

No letters or emails commenting on the draft MND during the public review period were received.

The final IS/MND includes minor revisions initiated by Valley Water. None of these revisions are considered substantial under Section 15073.5 of the CEQA Guidelines and the new information added merely clarifies, amplifies, or makes insignificant modifications to the draft MND.

Interagency Coordination and Regulatory Review

The CEQA review process is intended to provide both trustee and responsible agencies with an opportunity to provide input into the Project. Trustee agencies are state agencies that have authority by law for the protection of natural resources held in trust for the public. Responsible agencies are those that have some responsibility or authority for carrying out or approving a Project; in many instances these public agencies must make a discretionary decision to issue a local permit; provide right-of-way, funding, or resources that are critical to the Project's proceeding. In this instance the Santa Clara Valley Habitat Agency, California Department of Fish and Wildlife (CDFW), and San Francisco Bay Regional Water Quality Control Board (RWQCB) are considered responsible agencies. Valley Water has ~~will~~ provided the draft IS/MND to these responsible agencies for their review and comment. No comments on the draft IS/MND from the responsible agencies were received.

This IS/MND is intended to assist federal, state, and local agencies to carry out their responsibilities for permit review or approval authority over various aspects of the Project. The Project would likely require project-specific permitting or approval as summarized in Table 1-1 below.

Table 1-1: Summary of Applicable Regulatory Requirements

Agency	Permit/Review Required
United States Army Corps of Engineers	Clean Water Act §404 (33 U.S.C. 1344)
Santa Clara Valley Habitat Agency	Santa Clara Valley Habitat Plan Permit (VHP; Federal & State Endangered Species Permits)
California Department of Fish and Wildlife	Fish and Game Code Section §1602 Lake and Streambed Alteration Agreement (LSAA)
San Francisco Bay Regional Water Quality Control Board	Clean Water Act Section §401 Water Quality Certification Waste Discharge Requirements (WDR; Discharges to Waters of the State)

Source: Valley Water, 2020.

Section 2: Project Description

Background

In December 2015, Valley Water purchased the Rancho Cañada de Pala Preserve (Preserve) from The Nature Conservancy (TNC) in part to provide mitigation in perpetuity for impacts associated with Valley Water's 2002 Multi-Year Stream Maintenance Program (SMP) under the Stream and Watershed Protection Program (S&WPP) (Valley Water 2015; Valley Water 2016a). The Preserve may also provide mitigation for other Valley Water projects to be identified in the future, pending agency approval. The permitting agencies that required mitigation associated with the 2002 S&WPP are the CDFW, USACE, and RWQCB.

As described in the LTMPs, the Preserve is divided into three Areas defined as Areas 1, 2, and 3, that collectively total 1,758 acres (Figure 1). Areas 1 and 2 are subject to the Preserve's Areas 1 and 2 Long-term Management Plan (LTMP) (See Appendix A). Area 3 is subject to the Preserve's Area 3 LTMP (See Appendix B). A separate LTMP was prepared for Area 3, which encompasses 320 acres, because Area 3 is subject to a conservation easement that was recorded in December 2015 and is held by TNC. In order to receive mitigation credit for the 320-acre conservation easement on Area 3, the Area 3 LTMP had to first be approved by the S&WPP permitting agencies. For the remainder of this document, unless specifically stated, the term "LTMPs", will refer to both the LTMP for Areas 1 and 2, and the LTMP for Area 3.

The Project calls for continued implementation of the management plans, with some modifications for new proposed and foreseeable site improvements. The purpose of the LTMPs is to ensure the Preserve is monitored, maintained, and managed in a manner that preserves its conservation values.

The conservation values of the Preserve are as follows (Valley Water 2015; Valley Water 2016a):

- Over 28.4 miles of seasonal and intermittent stream, 1.2 miles of perennial stream, and 10 ponds (four seasonal and six perennial)
- A mosaic of open rangeland and varied vegetation types that provide habitat for a wide variety of birds, mammals, reptiles, amphibians, and invertebrates, including blue and valley oak woodland, valley oak savanna, mixed oak forest, California annual grassland, foothill pine/oak woodland, northern mixed/chamise chaparral, mixed riparian forest, and wetland
- Potential breeding and upland dispersal habitat for federally threatened California red-legged frog (CRLF; *Rana draytonii*), also a state species of special concern; potential breeding and upland dispersal habitat for federally and state threatened California tiger salamander (CTS; *Ambystoma californiense*), potential breeding and foraging habitat for the western pond turtle (WPT; *Actinemys marmorata*) and American badger *(Taxidea taxus*), both state species of special concern; and foraging and potential breeding habitat for the foothill yellow-legged frog (FYLF; *Rana boylii*), a state endangered species
- Ecological connectivity to surrounding open space and watershed land network

Existing Conditions

The Preserve is comprised of 1,758 acres and was a part of a 2,000-acre ranch owned by the Kammerer family. The property was historically used for cattle grazing, as well as wildlife related uses including hunting and fishing. Grazing at the Preserve was relatively conservative.

The Preserve supports large tracts of forests and woodlands, savannahs, grasslands, and small patches of chaparral habitats. Steeply sloped hillsides are bisected by ephemeral and intermittent drainages that flow down the south and west-facing slopes into Upper Penitencia Creek, and down the east-facing slopes and eventually to Arroyo Hondo. Ten perennial and seasonal ponds are associated with these drainages, and several wetlands occur along the stream channels and

around the edges of ponds. These ephemeral and intermittent streams lack much distinctive riparian tree development; however, mixed riparian forest occurs in a narrow corridor along Arroyo Hondo, the only perennial stream on the Preserve (Figures 2 and 3) (Valley Water 2015; Valley Water 2016a).

Surrounding Land Uses

The majority of the properties in the Project vicinity are undeveloped and have been used for long-term cattle grazing; however, not all properties in the vicinity continue to implement cattle grazing. To the north, northwest, and east sides, the Preserve is surrounded by private ranches. South of the Preserve is Blue Oak Ranch Reserve, which is a part of the University of California Natural Reserve System. Southwest of the Preserve is Valley Water's Upper Penitencia Creek Property, a mitigation site managed in perpetuity for its conservation values. In the larger surrounding area, the Preserve is surrounded by private ranch lands and a growing increasingly contiguous swath of open space and conservation lands in the Mount Hamilton region (Figure 1).

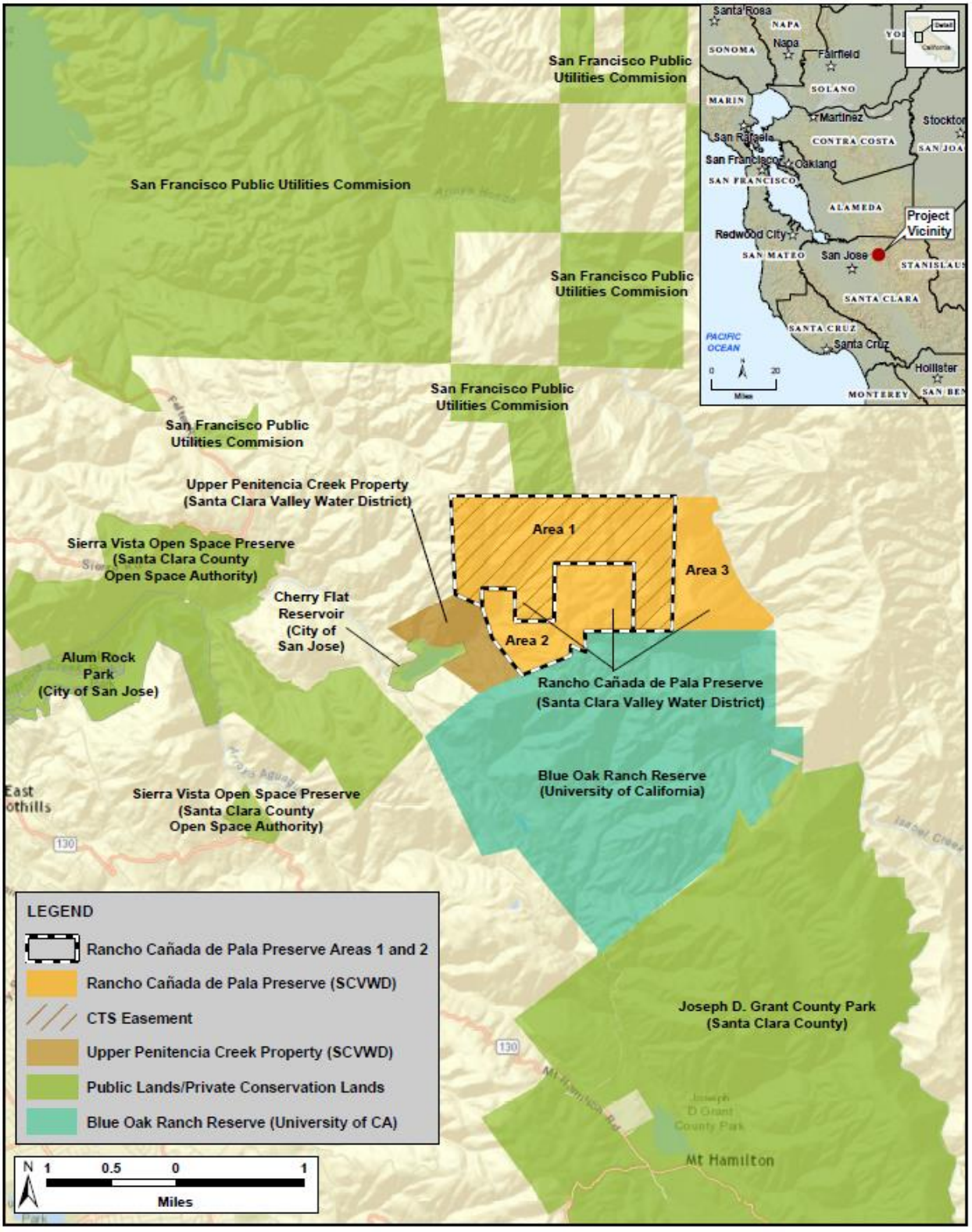

Figure 1: Vicinity Map

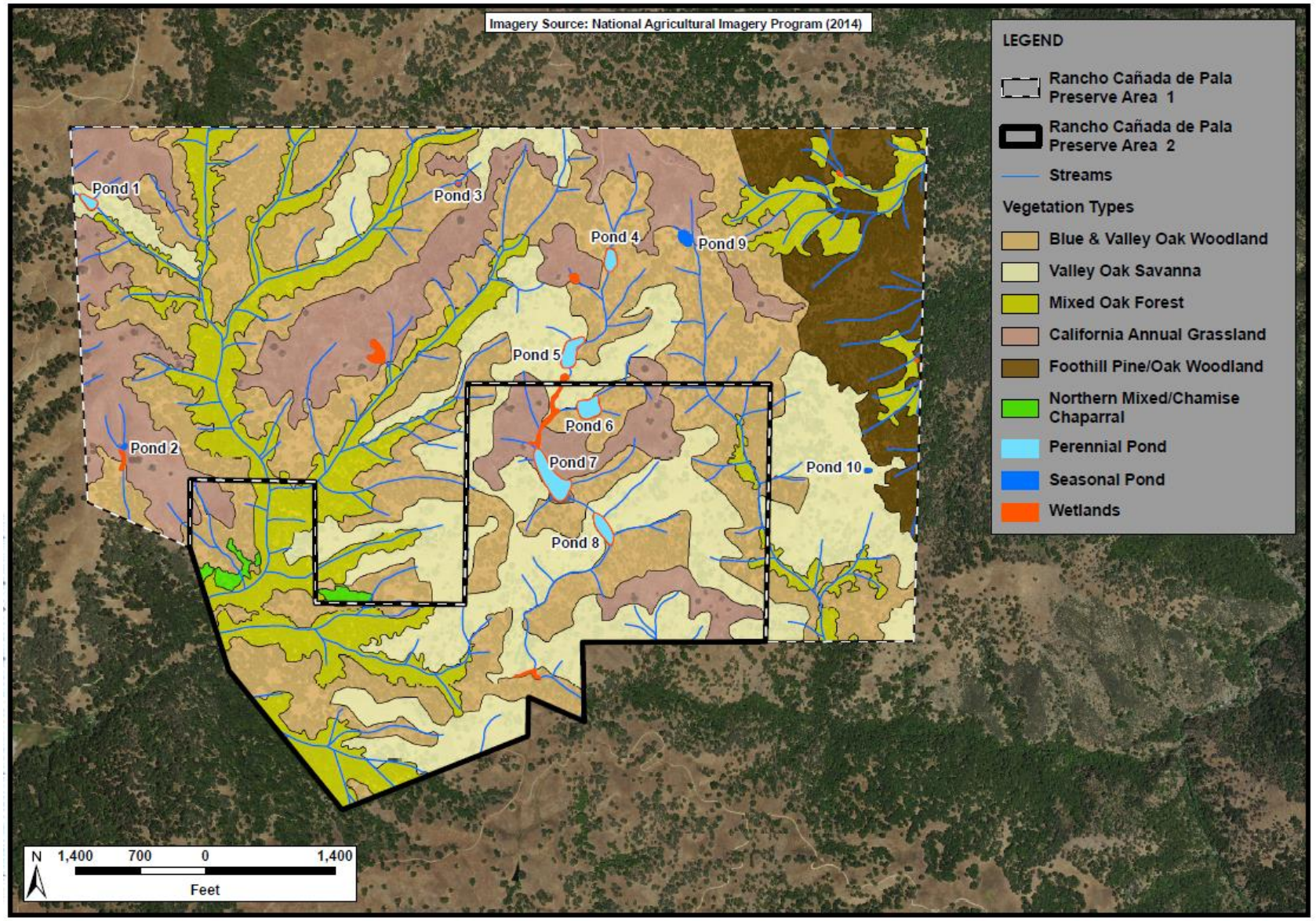

Figure 2: Rancho Cañada de Pala Preserve Areas 1 and 2 Vegetation Map

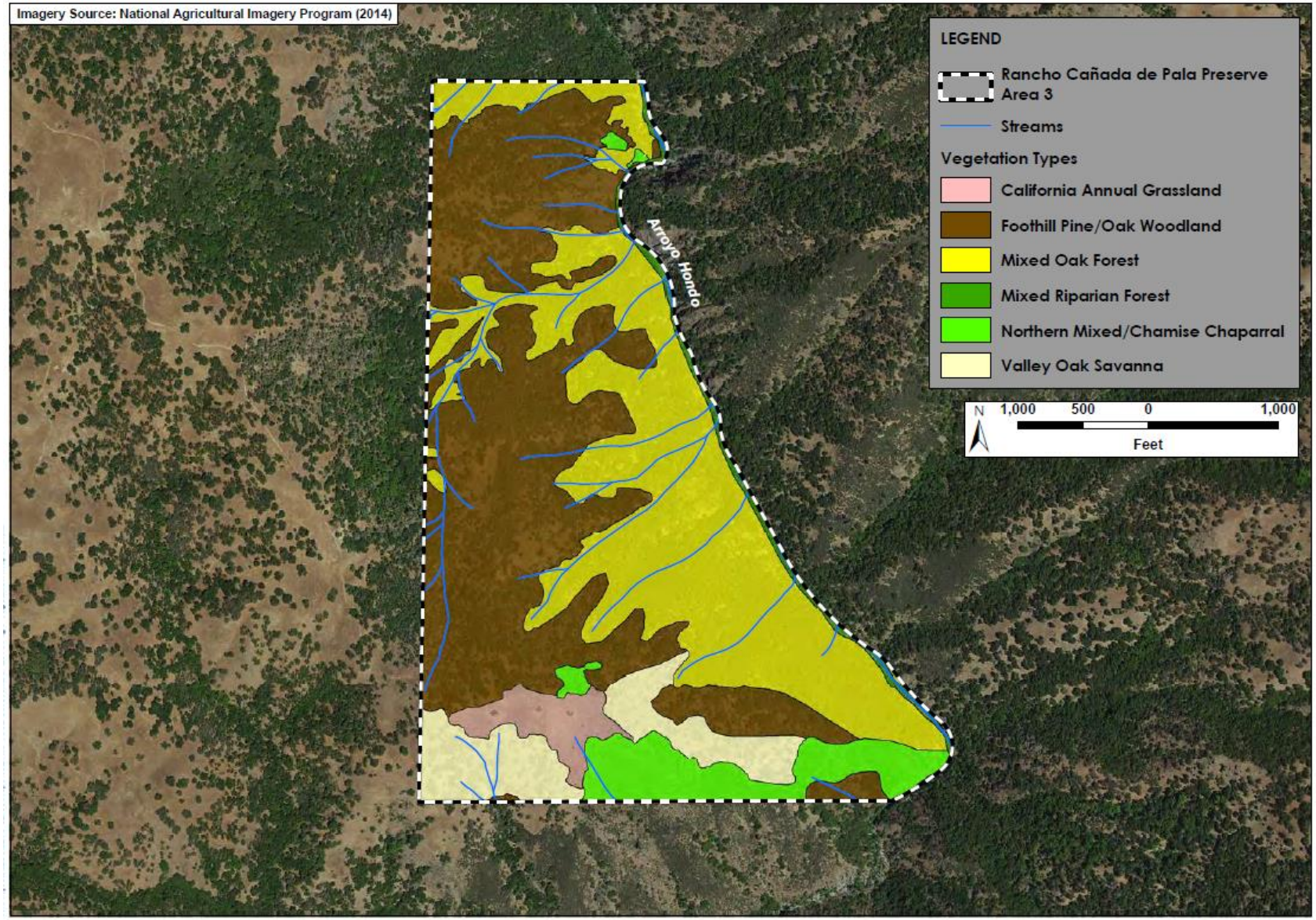

Figure 3: Rancho Cañada de Pala Preserve Area 3 Vegetation Map

Organization of the LTMPs

As described in the *Background* section above, there are two separate LTMPs for the Preserve because Area 3 is subject to a conservation easement recorded in 2015. Both LTMPs share a component that identifies the elements of the "Long-term Management and Monitoring Plan (Appendix A: Chapter II, Section 4.0 & Appendix B: Chapter III, Section 5.0). The LTMP for Area 3 contains a second component that identifies "Initial Site Improvements (Appendix B: Chapter II, Section 4.0)". At the time the LTMP for Areas 1 and 2 was prepared, no specific initial site improvements were identified.

Long-term Management and Monitoring of the Preserve

The LTMPs establish objectives, priorities, and tasks to monitor, manage, maintain, and report on aquatic, wetland, and riparian habitats under the jurisdiction of the USACE, CDFW, and RWQCB, as well as the overall conservation values within the Preserve.

The goals of the LTMPs are to:

- Meet the compensatory mitigation requirements of the Valley Water's 2002 SMP (Area 3)
- Preserve and allow the improvement of the conservation values of the Preserve
- Provide coordinated, unified management for the Preserve
- Provide feasible and effective conservation guidelines, standards, and priorities for resource management, monitoring, and adaptive management
- Be compatible with and promote cooperation among the various land owners/managers within the upper ends of the Upper Penitencia Creek and Alameda Creek watersheds (e.g., with respect to grazing regimes and invasive species control) and help ensure the survival of viable populations of sensitive species and healthy biotic communities in the area as a whole
- Provide flexibility as needed to adapt management practices in response to monitoring and field observations, and to meet revised or newly established mitigation goals for the Preserve over time

The major proposed management actions for the Preserve include continuing cattle grazing, similar to, but refined from past practices; road maintenance; supplemental invasive weed control and monitoring; and protection measures, as needed, for streams, springs, and wetlands. Other actions include improvements to infrastructure and facilities, security and safety improvements, and reporting on the progress and outcomes of the proposed management practices. These actions are expected to support all conservation values of the Preserve.

Elements of LTMPs

There are four major elements to the long-term management and monitoring of the Preserve identified in the LTMPs. Each major element includes sub-elements with supporting objectives. All major elements, sub-elements, and objectives are consistent with the overall goals of the LTMPs stated above. Table 2-1 summarizes the major elements and sub-elements of the LTMPs. Specific details of the elements and objectives are described in sections 5.0, 6.0, 7.0, 8.0, of the Areas 1 and 2 LTMP (Appendix A) and sections 6.0, 7.0, 8.0, and 9.0 of the Area 3 LTMP (Appendix B).

Table 2-1: **Elements and Sub-Elements of the LTMPs**

LTMP Element	Sub–Element
1. Biological Resource Management and Monitoring	Streams, Springs, and Ponds – Stream and pond condition monitoring and adaptive management actions
	Livestock Grazing Management – Grazing implementation monitoring, grazing intensity (reference plot & status) monitoring, and grazing adaptive management actions
	Non-native Invasive Plant Species Management – Invasive plant monitoring and invasive weed control activities
	CTS – Incidental CTS observations
	CRLF – Incidental CRLF observations
	Other Sensitive Species – Document observations of other sensitive species within the Preserve
2. Infrastructure and Facilities	Grazing Infrastructure: Fencing, Gates, Troughs –Annual monitoring and adaptive management actions
	Roads – Annual road monitoring, road maintenance, and minor woody vegetation removal
	Pipelines and Spring Boxes – Annual monitoring
	Existing Ranch House – Annual monitoring and adaptive management actions
3. Security, Safety and Public Access:	Public Access – Optional
	Trash and Trespass – Monthly monitoring of trash and/or trespass and annually remove or rectify problems.
4. Reporting	Prepare Annual Report – Preparation of an annual report for submittal to the resource agencies.
Note: For specific description of the elements and sub–elements, see Chapter II (Areas 1 and 2 LTMP), Section 4.0-9.0 and Chapter III (Area 3 LTMP), Section 5.0-10.0.	

Specific activities and requirements of the elements and sub-elements as noted in Table 2-1 are described in the LTMPs based on information currently known to Valley Water. All future activities associated with implementation of the elements and sub-elements covered under the LTMPs are subject to the requirements outlined in the elements and sub-elements. Future management activities are planned to be consistent with the plans as described. Additionally, these future activities may be identified through the adaptive management process outlined in the LTMPs and discussed below. See Appendix A and Appendix B of this document for the specific descriptions and requirements associated with the implementation of the LTMPs.

Description of Management and Monitoring Activities

The goals of the LTMPs would be met through routine monitoring and management of the conditions that support the Preserve's biological resources, by maintaining existing infrastructure, and by providing security and public safety. Details about each of these activities are provided in Appendices A and B.

Biological Resource Management and Monitoring

The Preserve currently supports sensitive habitats (i.e., streams and ponds) and provides habitat for a number of plant and animal species including special-status species. As a result, the Project proposes several actions to manage and monitor biological resources on the Preserve. These

actions include the following: streams, springs, and ponds management, livestock grazing management, non-native invasive plant species management, and habitat improvements for CTS, CRLF, and other special-status species.

Streams, Springs, and Ponds

Ephemeral, intermittent, and perennial streams are present within the Preserve. Seasonal and perennial ponds located in Area 1 and 2 support substantial wetland vegetation. Despite the history of moderate grazing in the Preserve, these streams and ponds are relatively undisturbed and provide habitat for a variety of plants and animals. Upper Penitencia Creek and Arroyo Hondo are relatively inaccessible to both humans and livestock, and thus, the drainage and the associated riparian corridor are in good conditions.

The majority of the ephemeral and intermittent streams show little to no evidence of excessive trampling, inappropriate livestock grazing, or other adverse conditions related to livestock grazing. The LTMPs identify four manageable sources of potential impacts on the streams, ponds, and springs within the Preserve. The four manageable sources are: (1) inappropriate livestock use of the watershed, which could lead to increased runoff and erosion; (2) intrusion by cattle into sensitive areas; (3) sediment input into streams from road erosion; and (4) trespassing impacts such as trampling of vegetation. To protect, manage, and enhance stream conditions within the Preserve, the LTMPs would monitor and maintain residual dry matter (RDM)[2], implement a grazing strategy, conduct annual monitoring in sensitive areas, implement additional measures to support the Preserve's conservation values, rehabilitate one existing road in Area 3, and institute a regular road maintenance program throughout the Preserve.

Annual qualitative monitoring would be conducted to assess the conditions of streams, springs, ponds, and associated wetlands within the Preserve. Annual monitoring would be conducted late spring (May – June) at the stream and pond monitoring stations. These stations were established in 2016 at which time baseline conditions (including photo points) were recorded. Annual monitoring efforts would be conducted using the Aquatic Habitat Monitoring Checklist. This checklist, as well as photo points monitoring, would qualitatively compare annual monitoring results with conditions from the baseline and subsequent years to determine whether habitat conditions were being maintained, improving, or degrading at each station. In areas where habitat conditions are documented to be degrading, adaptive management activities would be triggered. These adaptive management activities would depend on several factors, including the nature of the problem itself (e.g., erosion, proliferation of invasive species), the cause of the problem (e.g., whether the problem is due to trespassers), the severity of the problem (e.g., whether the problem warrants an immediate change in management or more frequent monitoring to determine whether the problem would be corrected naturally), and whether the problem is within Valley Water's management control.

In addition, the General Site Monitoring Checklist contains entries designed to facilitate the recording of observations regarding potential problems related to aquatic resources anywhere on the Preserve. Because of the geographic breadth of the various monitoring activities proposed on the Preserve, incidental monitoring using the General Site Monitoring Checklist will allow for issues outside of the monitoring stations to be adequately detected and addressed.

[2] RDM is old herbaceous plant material left standing or on the ground at the beginning of a new growing season.

Livestock Grazing Management

As part of the LTMPs, a livestock grazing strategy would be implemented to maintain and potentially improve the conservation values that currently exist within the Preserve. Grazing management prescriptions would be applied throughout the entire Preserve. The livestock grazing strategy for the Preserve is to allow up to 50 Animal Units (AU) to graze year-round. The animal kind and class to be utilized are cow/calf pairs.

In California's oak woodlands and annual grasslands, grazing intensity is typically measured by RDM that exists in the fall (September–October) prior to fall rains (Bartolome et al. 2006). Due to factors such as variations in topography, soils, rainfall, and patchy forage use, a variety of RDM values are expected, but in general the RDM goal for the Preserve will be 1,000–1,500 pounds per acre (lbs/acre). This RDM goal is approximately twice the recommended minimum RDM level for regions of California with climate and vegetation similar to Areas 1 and 2 (Bartolome et al. 2006) and corresponds to Conservative Stocking (see Barry et al. 2011), which is thought to positively contribute to a variety of rangeland ecosystem services.

Two types of grazing monitoring will be conducted. First, implementation monitoring will be conducted to determine if the grazing prescriptions are being implemented as presented in the LTMPs (number of AUs and animal kind and class). Second, grazing intensity (RDM) monitoring will be conducted to determine if RDM goals are being achieved. Monitoring activities would be conducted by a technician, biologist, or operator trained in such monitoring.

Implementation monitoring will be conducted to confirm that the grazing strategy prescribed by the LTMPs is being followed. A grazing log will be maintained and will record quarterly visual inspections regarding the presence of cattle and qualitative status of range conditions.

The log, which will be maintained in a spreadsheet to facilitate use, will include:

1. The number of AUs known/observed on the Preserve (based on records provided from the grazing lessee, if available and based on incidental observations of livestock in favored grazing conditions).

2. The quarterly and annual weather conditions (i.e., rainfall).

3. A checklist for the general phenology and productivity of key forage plants (i.e., annual grasses), including the onset of the germinating rains, the date when 1 inch of new growth was observed, and senescence of the forage plants.

4. The approximate amount of forage growth and remaining RDM to aid in proactively reducing the permitted grazing period and/or number of grazing animals to meet the RDM target.

Grazing intensity monitoring with be conducted via RDM reference plot monitoring. As detailed in the LTMPs, information will be collected at the RDM reference plots, which serve as reference points to validate visual RDM estimates collected throughout the Preserve. Thirteen RDM reference plots are located in areas expected to receive preferential livestock use (e.g., relatively flat areas of annual grassland or valley oak savannah with adequate water), and reflect the general conditions of the area in which it is located. The thirteen sites are representative of the general grazing areas throughout the Preserve. If the conditions of the Preserve's grazing areas change, the number of RDM reference plots may be adapted in the future. At each established RDM reference plot, the following will occur:

1. Confirm that the location is representative of the general area that year. If not, relocate to a nearby suitable location. GPS any modified location.

2. Take overview photographs in all four cardinal directions from the sample point from approximately 5' above the ground. This is intended to both record vegetation characteristics in the vicinity of site and to provide overview scenes of the Preserve at standardized locations over time.

3. Photograph the RDM plot using "second step" (Robel pole monitoring) as described in the LTMPs.

4. Clip and collect all herbage within a 13.25-inch diameter circular or 12-inch square frame plot. Weigh the herbage in grams and convert to lbs/acre using the following formulas (Wildland Solutions 2008):

   Circular 13.25-inch diameter hoop plot:
   (grams clipped) x 100 = lbs/acre of RDM

   Square 12-inch frame plot
   (grams clipped) x 96 = lbs/acre of RDM

5. Note the estimated amount of herbage remaining on ground after the plot is clipped.

6. Note the general botanical composition of sample (annual or perennial grasses, forbs, weeds).

7. Air dry any wet or green samples 2–3 days prior to weighing.

Based on RDM monitoring results, if less than 80 percent of the Preserve meets the 1,000-1,500 lbs/acre RDM goal, a qualitative assessment would be performed to determine whether the RDM levels are the problem (i.e., whether the density of the vegetation is preventing the site from achieving management goals). If site conditions are favorable despite high or low RDM levels, the Land Manager (Valley Water) may choose to continue to monitor the RDM levels without implementing further adaptive management actions. However, if the vegetation density is preventing the site from achieving management goals, adaptive management actions may be implemented. The Land Manager may increase or decrease grazing intensity depending on the RDM levels. If RDM levels consistently or significantly deviate from the management objectives, the Land Manager may install temporary electric fencing or permanent barbed wire fencing to allow for independent management of Areas 1, 2, and/or 3. Valley Water may also implement additional measures, such as the installation of livestock exclusion fencing to allow for the recruitment of valley oak seedlings in conformance with the LTMPs.

Pre-existing water sources for cattle on the Preserve include ten stock ponds, six of which are perennial, as well as seven cattle troughs. All of these water sources are spring-fed and/or rain-fed. Due to the minimal number of cattle allowed on the Preserve (a maximum of 50 AU spread over 1700+ acres) compared to the number of water sources available for cattle, and because water is available for cattle year-round, these water sources have been sufficient to meet the water demands for cattle during normal, dry, and multiple dry years. If a severe drought occurred and the water sources for cattle were determined to be insufficient, the number of cattle on the Preserve would be reduced.

Non-Native Invasive Plants Species Management

Implementation of the LTMPs would include invasive weed control activities and invasive plant monitoring to minimize the spread of non-native invasive plants throughout the Preserve. Integrated Pest Management techniques (biological, mechanical, chemical, combination, etc.) would be used to ensure the most effective control method is utilized for each invasive plant species while providing the greatest amount of protection to the natural resources within the Preserve. Management of invasive species would be prioritized based on their potential to cause harm to natural resources in the Preserve as well as the ability to effectively control the species. Non-native invasive plant species would be managed using goat or sheep grazing, livestock grazing, mechanical methods such as mowing, whipping, or discing, and/or herbicides.

Livestock grazing has been used effectively to help minimize invasive plants on conservation properties but may not be adequate to address all issues. Where cattle grazing is not sufficient, the next preferred line of defense will be the use of non-herbicide methods. In select areas, herbicides may be used where the type of species, size of population or terrain makes the use of other techniques either hazardous or ineffective. For example, in rocky areas whipping and mowing may damage resources and equipment, and hand pulling can be a safety risk because of uneven, steep ground.

Use of herbicides will only be permitted on the Preserve if all of the following standards are met:

- Use occurs specifically for control of invasive, non-native plant species.
- Herbicide use shall be guided by label restrictions and any advisories published by the California Department of Pesticide Regulation or the County Agricultural Commission.
- Only herbicides and surfactants registered for aquatic use by the United States Environmental Protection Agency (USEPA) shall be applied within 20 feet of any waterway.
- All non-target plant species will be avoided.
- Herbicide drift will be minimized by complying with all label restrictions.
- Application will be avoided if significant rainfall is predicted in the subsequent 48-hour period.
- The lowest recommended and efficacious rate of herbicide will be used.
- The USEPA pesticide injunction for use of pesticides in CRLF habitat (USEPA 2007) will be followed, as applicable.
- Unless specifically justified for a particular species, application will occur between June 15th and October 15th. Application will be made by or under the direct supervision of a state-certified applicator with a minimum of a Qualified Applicator Certificate license that is under the direction of a licensed pest control advisor with a Pesticide Recommendation for the Preserve.

Use will be in accordance with all guidelines and requirements from the Department of Pesticide Regulation.

Environmental risks of herbicide use would be minimized through implementation of insecticide and herbicide Best Management Practices (BMPs) listed in Table 2-1, and additional protection measures described in Appendix A (Section 5.3.1) and Appendix B (Section 6.3.1).

Invasive plant surveys would be conducted every 5 years to identify invasive plant occurrences. Surveys would be conducted once during the survey year, in late June or early July. The surveys would focus on those areas known to account for the majority of invasive plant introductions and

infestations on wildlands sites including along roads, trails, and other known impact areas (e.g., cattle troughs, cattle bedding areas).

California Tiger Salamander, California Red-Legged Frog, and Other Sensitive Species

In the course of all the proposed monitoring, surveyors would look for CTS, CRLF, and other sensitive species through passive observation. Any sightings of CTS, CRLF, and other sensitive species would be documented and reported to CNDDB. Surveyors would be qualified biologists or other qualified professionals with training and ability to identify sensitive amphibians in their various life stages.

Infrastructure and Facilities

The LTMPs include maintenance and management of the Preserve's infrastructure and facilities. Implementation of the LTMPs would include maintenance and management grazing infrastructure and roads throughout the Preserve as well as the pipelines, spring boxes, and an existing ranch house in Areas 1 and 2.

The Preserve's grazing infrastructure includes fencing, gates, and troughs. The condition of fences, gates, and troughs would be monitored to ensure they are maintained to facilitate the grazing regime and management, prevent unauthorized public access, and allow necessary access for quarterly patrols and management of the Preserve. The quarterly patrols involve visiting the Preserve at least once during each quarter (quarter 1: January-March; quarter 2: April-June; quarter 3: July-September; and quarter 4: October-December), as weather allows, and completing the General Site Monitoring Checklist. Filling out the General Site Monitoring Checklist includes noting any problems observed with gates, fences, troughs, pipelines, etc. as well as any repair or management activities undertaken or recommended. The LTMPs would allow for future installation of new, modification of, or removal of existing fencing, gates, troughs, other grazing-related infrastructure if needed for adaptive management of grazing or other resource-related purpose. Temporary electric fencing may be installed for short-term cattle exclusion or inclusion needs. Fences would be maintained as necessary by replacing posts and/or wires. All replaced or additional fencing would adhere to current wildlife-friendly fencing standards. Signage would be installed at potential access points to indicate Preserve boundaries and/or areas closed to the public. Equipment used for grazing infrastructure maintenance would include low ground pressure four-wheel all-terrain vehicles (ATVs). ATVs would be used in only upland areas during the dry seasons. ATVs would not be permitted in sensitive areas such as ponds, springs, streams, and wetlands.

Annual monitoring would be conducted to evaluate the conditions of the fences and troughs. Adaptive management actions such as new fencing, gates, troughs, or other grazing-related infrastructure (e.g., weather stations) may be installed as needed.

Roads

As part of the LTMPs objectives, routine maintenance and monitoring would be performed on existing roads. The roads would be annually inspected each May to determine the condition of the road surfaces and stream crossings. Existing drivable and abandoned roads would be maintained to a good condition. The roads are expected to be mowed approximately once every five years. To maintain the surface, the upper few inches of the roads would be disced, tilled, or otherwise loosened prior to grading, and the loosened materials would be graded back into the road. Roads would be out-sloped where appropriate or otherwise graded to facilitate sheet flow into adjacent vegetation and minimize the concentration of water and formation of rills and gullies. Road segments may be rocked or otherwise armored to reduce the potential for erosion. As

needed, minor vegetation removal activities may be conducted to maintain road access. Road maintenance activities would occur approximately once every 5 years and more often as needed.

Other Infrastructure Maintenance

Annual monitoring would be conducted to assess the condition of the pipelines, spring boxes, and existing ranch house. Locations, and types of repair requirements would be documented to ensure the infrastructure conditions are consistent with the conservation easement. Adaptive management actions may be applied to the ranch house depending on the condition of the structure.

Public Access

Another goal of the LTMPs is to allow public recreation and scientific study consistent with the terms of the conservation easement for the Preserve and resource management objectives of the LTMPs. While no public access is planned for the Preserve at this time, Valley Water may allow limited, guided public access to these areas in the future. Public access would occur only on existing roads, trails, and uplands areas, and would provide recreational opportunities for the public and educational outreach activities on biodiversity and conservation. Potential future trail locations would consist of approximately 7.5 miles of existing, drivable ranch road within the Preserve. Construction of new trails in undisturbed areas is not proposed.

Trash and Trespass

As part of the LTMPs monitoring, ongoing patrol monitoring would be conducted quarterly within the Preserve. During each site visit, trash would be removed, and evidence of trash or trespass would be recorded. The data would be used to develop adaptive management actions or recommendations to avoid, minimize, or rectify impacts from unauthorized human uses.

Adaptive Management and Identification of Future Activities

The varied management objectives and approaches described in detail in the LTMPs have been established based on existing information on the condition and resources within Preserve, the effects of past management activities, and the experience of natural resource professionals in designing resource management approaches. Up until 2016, the Preserve's management focused on cattle ranching. The Project will shift the management focus from cattle ranching to sensitive habitats management. It is anticipated the LTMPs will improve the Preserve's biological resources. There is some uncertainty involved in prescribing a management approach as specific details about some future activities undertaken to meet the LTMPs objectives are unknown. As a result, the management approach described in the LTMPs will be adapted as necessary to maintain and improve biological resource values based on monitoring results. Additionally, as future specific activities associated with implementation of the LTMPs not included in this Project description are defined over time, additional environmental review may be required.

Site Improvements

The LTMPs for the Preserve propose specific initial site improvements to further improve the existing conditions and facilitate the long-term management of the Preserve. These site improvements are discretionary and voluntary to repair minor erosion issues. At the time the LTMP for Areas 1 and 2 was prepared, no specific initial site improvements were identified. However, since the Preserve will be managed in perpetuity, additional site improvements have been identified and may continue to be identified throughout the Preserve as site conditions change overtime, especially following heavy winter rains. Site improvements are intended to ensure the long-term function of the infrastructure and facilitate land management of the Preserve.

Although it is not anticipated that major additional management actions will be needed, an objective of the LTMPs is to identify any issues that arise and use an adaptive management approach to determine what follow-up actions may be appropriate to continue to support the Preserve's conservation values. This IS/MND will assess environmental impacts for the whole Preserve, including proposed specific site repairs and a range of potential site improvements that are currently not specifically identified. Some site improvements may require specific permits or approvals from RWQCB, USACE, and the wildlife resource agencies.

Proposed and Foreseeable Site Improvements for the Preserve

As described above, the Area 3 initial site improvements were identified during the development of the LTMPs. Since the development of the LTMP for Areas 1 and 2, additional site improvements for Areas 1 and 2 have been identified during the annual monitoring. The following site-specific improvements for the Preserve are proposed (locations of stream crossings are shown in Figures 4 and 5):

- Address erosion issues observed at stream crossing 4 (Area 3)
- Repair minor headcut located downstream of stream crossing 5 (Area 3)
- Retaining wall rehabilitation at stream crossing 6 (Areas 1 and 2)
- Address erosion issues observed at stream crossing 12 (Areas 1 and 2)

The four identified site improvements are currently in the conceptual design phase. For each location, the erosion issue, conceptual remedial action, and conservative estimate of impacts, are described below. After the designs, plans, and specifications, have been completed for each location, jurisdictional delineations and impact analyses will be performed in support of the biological resource permits required to perform the work.

Stream Crossing 4 (Area 3)

Stream crossing 4 exhibits erosion and potential maintenance issues (Photo 2 and 3 in Appendix B). In this location, the drainage has eroded into the roadbed, which was previously stabilized by a wooden retaining wall that has collapsed. Although these issues are minor, placement of appropriate structural materials (e.g., small amounts of 6 to 12-inch rock) just downstream from the stream crossing, and rock within the roadbed, would allow continued use of the road and limit further erosion. Additional repairs at this location are not anticipated, but the stability of the repair would be monitored as part of the routine road condition monitoring. Road rehabilitation would occur in the dry season when there is no water in the stream. Temporary impacts to the stream and surrounding habitat at this location were conservatively estimated to be 800 square feet (0.018 acres) in area, of which, a smaller portion would be permanent.

Stream Crossing 5 (Area 3)

A minor erosion issue has been identified downstream of stream crossing 5. This headcut is just beginning to form, but it may create a small amount of erosion within the stream. Although this issue is minor, placement of appropriate structural materials (e.g., a few 12 to 24-inch boulders) at this location would buffer the flow of the water and prevent further erosion of the headcut. Routine monitoring and management of streams would be conducted. Temporary impacts to the stream and surrounding habitat at this location were conservatively estimated to be 275 square feet (0.006 acres) in area, of which, a smaller portion would be permanent.

Stream Crossing 6 (Areas 1 and 2)

A small wooden retaining wall supported by rebar located downstream of the stream crossing is damaged. This retaining wall is preventing the road from washing away during periods when the stream is flowing. This retaining wall would require repair to ensure that erosion of the road does not occur, and the road remains passable. This work would involve the removal of the damaged wall, minor excavation of material behind the wall, the addition of gravel and/or fill dirt to stabilize the slope and promote drainage, and the reinstallation of structural materials. Temporary impacts to the stream and surrounding habitat at this location were conservatively estimated to be 675 square feet (0.015 acres) in area, of which, a smaller portion would be permanent.

Stream Crossing 12 (Areas 1 and 2)

A wooden beam reinforcing the downstream bank at the stream crossing has failed and a headcut has formed downstream. To maintain road function and stream channel stability, and prevent further erosion, these issues would be addressed. This work would involve replacement of the wooden beam with appropriate materials, such as wooden beam(s), rebar, rock, or preformed concrete, and placement of a small amount of rock at that headcut. Temporary impacts to the stream and surrounding habitat at this location were conservatively estimated to be 675 square feet (0.015 acres) in area, of which, a smaller portion would be permanent.

Foreseeable Site Improvements

It is anticipated that additional erosion issues will be encountered in the Preserve over time. Areas with erosion are often associated with existing roads, especially at stream crossings or along steep slopes. The roads within the Preserve cross ephemeral and intermittent streams at 21 locations. Culverts convey flows beneath the road at two locations and retaining walls have been constructed on the downstream sides of three crossings, but otherwise these stream crossings are not associated with any infrastructure. Erosion issues typically result from concentrated drainage along roadways. These issues include the formation of gullies, headcuts, slumps, and slides, which over time can negatively impact water quality and stream channel stability and make roads impassable.

If additional erosion issues are identified in the future that are more involved than typical road maintenance, they would likely be identified as needing a site improvement and remediation to maintain or restore site conditions and facilitate the long-term management of the Preserve. Remediation could involve placement of rock for slope and scour protection, re-grading, re-sloping, and backfilling of the problem area to reduce concreted drainage; installation or removal of small berms; repair, replacement, and installation of new culverts or ford crossings; and repair, replacement, and installation of new retaining walls. As future improvements are proposed, additional environmental review may be required.

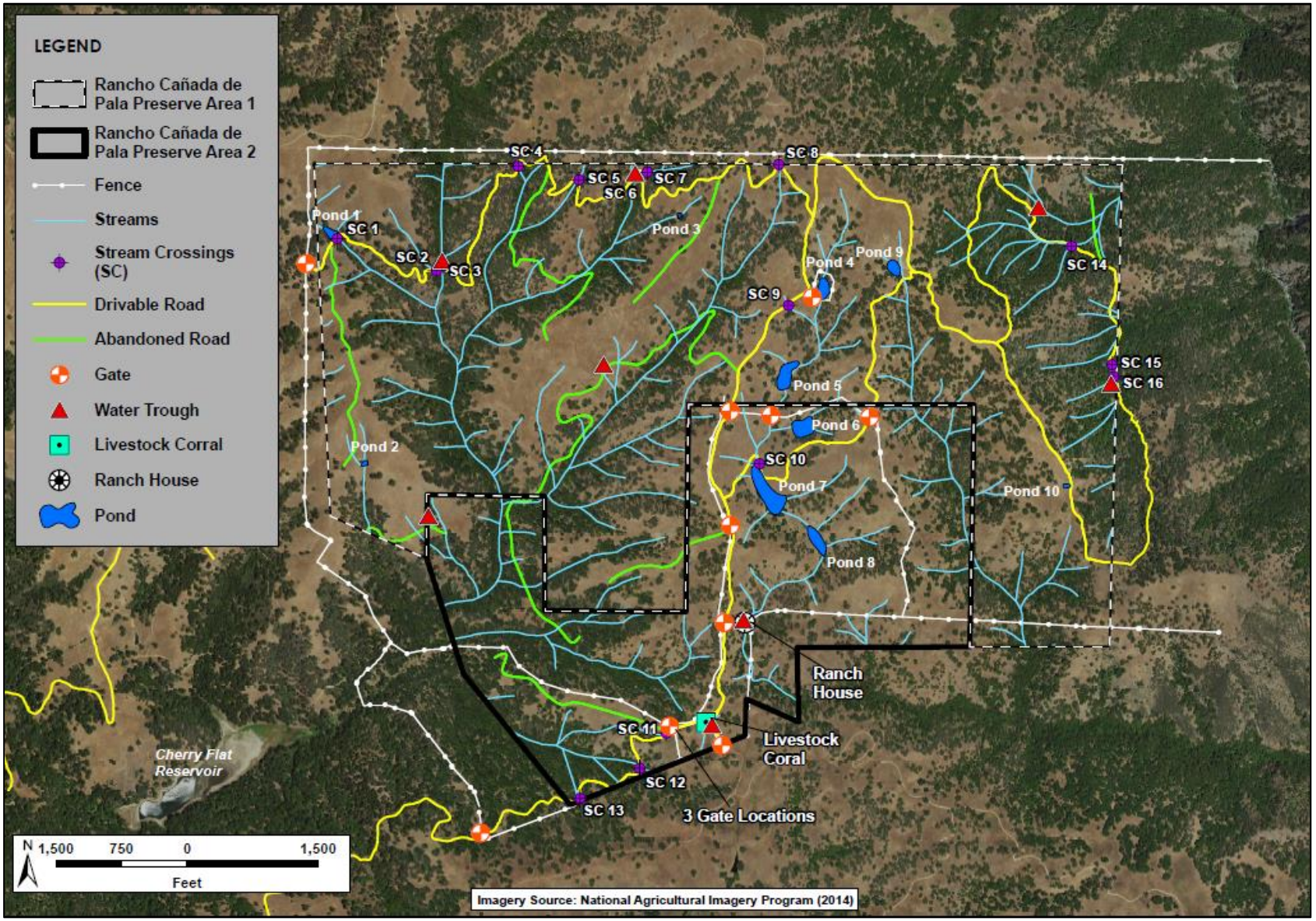

Figure 4: Rancho Cañada de Pala Preserve Areas 1 and 2 Existing Infrastructure Map

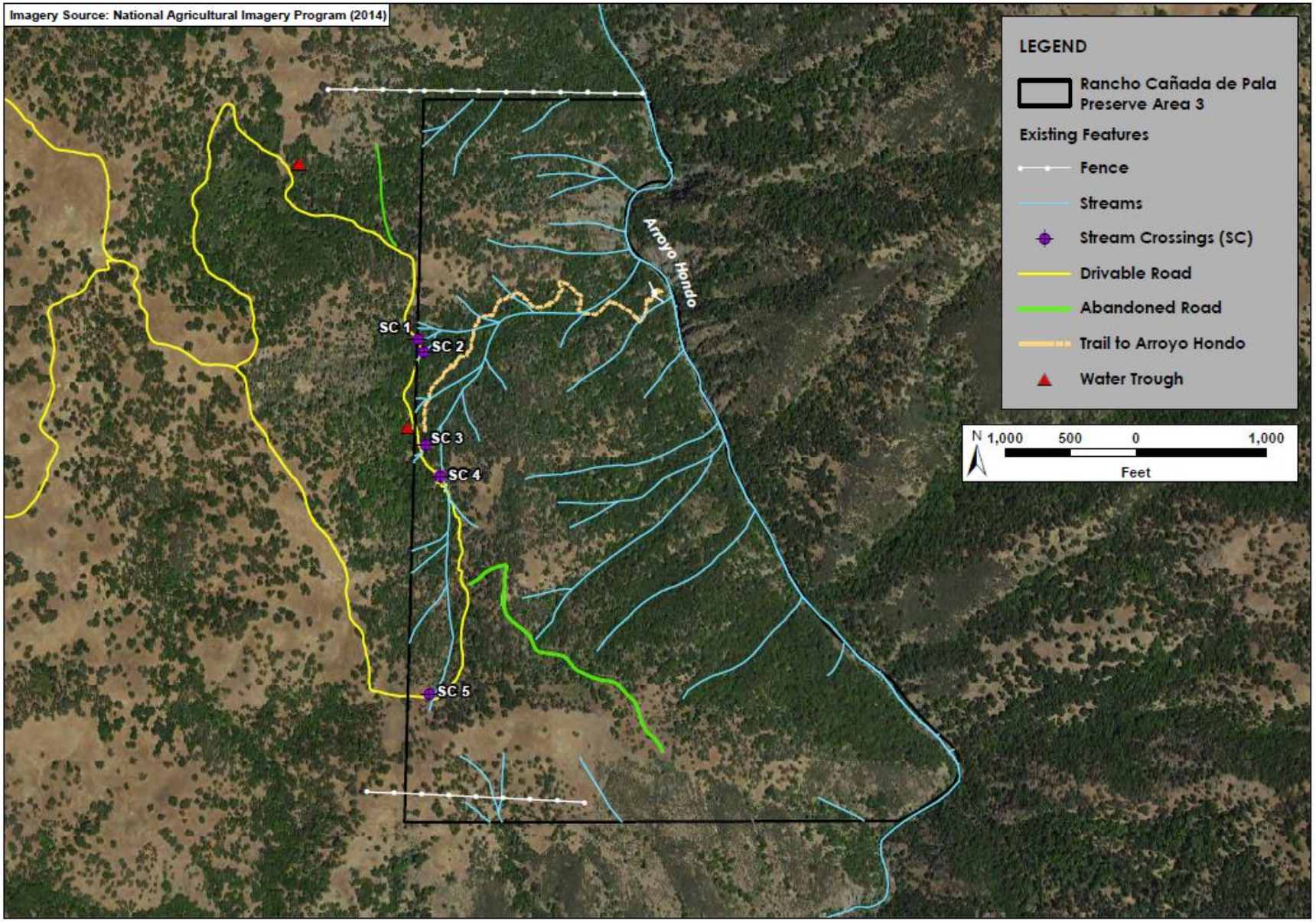

Figure 5: Rancho Cañada de Pala Preserve Area 3 Existing Infrastructure Map

Consistency with Santa Clara Valley Habitat Plan (VHP)

A portion of the Preserve is located within the boundaries of the VHP, but Valley Water will follow VHP requirements for the entire Preserve because it would be more efficient to manage the entire Preserve consistently. Valley Water is a co-permittee for the VHP and will negotiate with the Santa Clara Valley Habitat Agency to include all applicable Preserve management as a covered activity under the VHP. All the LTMPs' activities, including construction associated with the site improvements will be implemented consistent with requirements outlined in the VHP. Implementation of the Project falls within the category of Conservation Strategy Implementation identified in Chapter 5 of the VHP, (i.e., activities within the lands managed, enhanced, restored, and monitored to conserve the natural resources targeted by the VHP). The VHP is a joint Habitat Conservation Plan and Natural Communities Conservation Plan developed to serve as the basis for issuance of incidental take permits and authorizations pursuant to Section 10 of the federal Endangered Species Act and California Natural Community Conservation Planning Act. Chapter 6 of the VHP describes conditions on covered activities that help meet avoidance and minimization goals at a regional level. Regional avoidance and minimization measures reduce the need for new project-specific measures to avoid and minimize impacts and allows streamlining of regulatory requirements. Consistent with the VHP, implementation of the Project would adhere to the following conditions:

- **Condition 1. Avoid Direct Impacts on Legally Protected Plant and Wildlife Species.** Compliance with this measure on the Preserve would necessitate avoiding take of legally protected species that are not covered species under the VHP with take authorization.

- **Condition 3. Maintain Hydrologic Conditions and Protect Water Quality.** Compliance with this measure necessitates implementing the measures listed in Chapter 6 of the VHP (http://scv-habitatagency.org/178/Final-Habitat-Plan); these measures are BMPs to protect water quality and avoid other adverse effects, and many of them overlap or are similar to the Valley Water's BMPs.

- **Condition 4. Avoidance and Minimization for In-Stream Projects.** Like Condition 3, compliance with this measure necessitates implementing the measures listed in Table 6-2 of the VHP; these measures are BMPs to protect water quality and avoid other adverse effects, and many of them overlap or are similar to the Valley Water's BMPs.

- **Condition 5. Avoidance and Minimization Measures for In-Stream Operations and Maintenance.** Like Condition 3, compliance with this measure necessitates implementing the measures listed in Table 6-2 of the VHP; these measures are BMPs to protect water quality and avoid other adverse effects, and many of them overlap or are similar to the Valley Water's BMPs.

- **Condition 8. Implement Avoidance and Minimization Measures for Rural Road Operations and Maintenance.** Compliance with this measure necessitates implementing the measures listed in Table 6-4 of the VHP; these measures are BMPs to protect water quality and avoid other adverse effects, and many of them overlap or are similar to the Valley Water's BMPs.

- **Condition 12. Wetland and Pond Avoidance and Minimization.** Compliance with this measure includes implementation of design, construction, and site restoration guidelines that are already incorporated into the proposed road repairs and/or the District's standard BMPs.

- **Condition 14. Valley Oak Woodland and Blue Oak Woodland Avoidance and Minimization.** Compliance with this measure includes employing measures during management activities to avoid and minimize impacts to Valley Oak and Blue Oak Woodland in areas mapped by the VHP as containing one of these land cover types.

Best Management Practices

BMPs are practices that prevent, avoid, or minimize potentially adverse effects associated with the Project. Valley Water routinely incorporates a wide range of BMPs into project design as described in detail in its *Best Management Practices Handbook* (Valley Water 2014). Those BMPs from the handbook that are applicable to and would be implemented during Project activities are listed in **Table 2-2**.

Table 2-2: Best Management Practices Incorporated into the Project

Number	Title	Description
Air Quality		
AQ-1	Use Dust Control Measures	The following Bay Area Air Quality Management District (BAAQMD) Dust Control Measures will be implemented: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered; 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited; 4. Water used to wash the various exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, etc.) will not be allowed to enter waterways; 5. All vehicle speeds on unpaved roads shall be limited to 15 mph; 6. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used; 7. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations), and this requirement shall be clearly communicated to construction workers (such as verbiage in contracts and clear signage at all access points); 8. All construction equipment shall be maintained and properly tuned in accordance with manufacturer‘s specifications, and all equipment shall be checked by a certified visible emissions evaluator; 9. Correct tire inflation shall be maintained in accordance with manufacturer‘s specifications on wheeled equipment and vehicles to prevent excessive rolling resistance; and, 10. Post a publicly visible sign with a telephone number and contact person at the lead agency to address dust complaints; any complaints shall be responded to and take corrective action within 48 hours. In addition, a BAAQMD telephone number with any applicable regulations will be included.
AQ-2	Avoid Stockpiling Odorous Materials	Materials with decaying organic material, or other potentially odorous materials, will be handled in a manner that avoids impacting residential areas and other sensitive receptors, including: 1. Avoid stockpiling potentially odorous materials within 1,000 feet of residential areas or other odor sensitive land uses; and 2. Odorous stockpiles will be disposed of at an appropriate landfill.
Biological Resources		

BI-1	Avoid and Minimize Impacts on Native Aquatic Vertebrates	Native aquatic vertebrates (fish, amphibians and reptiles) are important components of stream ecosystems. Native aquatic vertebrates may or may not be able to rapidly re-colonize a stream reach if the population is eliminated from that stream reach. If native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, an evaluation of the stream and the native aquatic vertebrates will be conducted by a qualified biologist. The qualified biologist will consider: 1. Which native aquatic species are present; 2. The ability of the species to naturally re-colonize the stream reach; 3. The life stages of the native aquatic vertebrates present; 4. The flow, depth, topography, substrate, chemistry and temperature of the stream reach; 5. The feasibility of relocating the aquatic species present; and 6. The likelihood the stream reach will naturally dry up during the work season. Based on consideration of these factors the qualified biologist may make a decision to relocate native aquatic vertebrates. The qualified biologist will document in writing the reasons to relocate native aquatic species, or not to relocate native aquatic species, prior to installation of cofferdams, water bypass structures or silt barriers. If the decision is made to relocate the native aquatic species, then the operation will be based on Valley Water's Fish Relocation Guidelines.
BI-2	Remove Temporary Fill	Temporary fill materials, such as for diversion structures or cofferdams, will be removed upon finishing the work or as appropriate. The creek channels and banks will be re-contoured to match pre-construction conditions to the extent possible. Low-flow channels within non-tidal streams will be contoured to facilitate fish passage and will emulate the preconstruction conditions as closely as possible, within the finished channel topography.
BI-3	Minimize Adverse Effects of Pesticides on Non-target Species	"Pesticides" refers to any herbicide, insecticide, rodenticide, algaecide, fungicide, or any combination of substances intended to prevent, destroy, or repel any pest. Pesticides will be handled, stored, transported, and used in compliance with any established directions and in a manner that minimizes negative environmental effects on non-target species and sensitive habitats. The Project plan for handling, storing, transporting and using pesticides must be reviewed and approved by <u>both</u> of the following subject matter experts: 1. Valley Water's Pest Control Advisor (a State-certified Qualified Applicator) – the plan will be reviewed, and modified as deemed appropriate, for compliance with: Valley Water policy, label restrictions and any advisories published by the California Department of Pesticide Regulation, the Santa Clara County Division of Agriculture, and the U.S. EPA bulletin *Protecting Endangered Species, Interim Measures for Use of Pesticides in Santa Clara County* (USEPA 2000). 2. Qualified Valley Water Biologist (as defined in EMAP-30264) – the plan will be reviewed, and modified as deemed appropriate, for compliance with: Valley Water policy, approved environmental review documents, project permits, and avoidance of all known listed (Threatened or Endangered) and sensitive species. Information sources for determination of all known locations of species that may be harmed by pesticides include Valley Water's GIS system and California Natural Diversity Database (CNDDB). Either Valley Water's Pest Control Advisor or the Qualified Valley Water Biologist may modify the proposed pesticide plan, such as establishing buffer areas or prohibiting the use of pesticides outright, based on site-specific data, current regulatory requirements, and Valley Water policy. The purchase of all pesticides must be approved by Valley Water's Pest Control Advisor to ensure compliance with Valley Water's Control and

		Oversight of Pesticide Use policy and appropriate regulatory agency reporting requirements.
BI-4	Choose Local Ecotypes of Native Plants and Appropriate Erosion-Control Seed Mixes	Whenever native species are prescribed for installation the following steps will be taken by a qualified biologist or vegetation specialist: 1. Evaluate whether the plant species currently grows wild in Santa Clara County; and, 2. If so, the qualified biologist or vegetation specialist will determine if any need to be local natives, i.e. grown from propagules collected in the same or adjacent watershed, and as close to the Project site as feasible. Also, consult a qualified biologist or vegetation specialist to determine which seeding option is ecologically appropriate and effective, specifically: 1. For areas that are disturbed, an erosion control seed mix may be used consistent with the Valley Water Guidelines and Standards *for Land Use Near Streams, Design Guide 5, 'Temporary Erosion Control Options.*' 2. In areas with remnant native plants, the qualified biologist or vegetation specialist may choose an abiotic application instead, such as an erosion control blanket or seedless hydro-mulch and tackifier to facilitate passive revegetation of local native species. 3. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable. 4. If a gravel or wood mulch has been used to prevent soil compaction per BI-11, this material may be left in place [if ecologically appropriate] instead of seeding. Seed selection shall be ecologically appropriate as determined by a qualified biologist, per *Guidelines and Standards for Land Use Near Streams, Design Guide 2: Use of Local Native Species*.
BI-5	Avoid Animal Entry and Entrapment	All pipes, hoses, or similar structures less than 12 inches diameter will be closed or covered to prevent animal entry. All construction pipes, culverts, or similar structures, greater than 2-inches diameter, stored at a construction site overnight, will be inspected thoroughly for wildlife by a qualified biologist or properly trained construction personnel before the pipe is buried, capped, used, or moved. If inspection indicates presence of sensitive or state- or federally-listed species inside stored materials or equipment, work on those materials will cease until a qualified biologist determines the appropriate course of action. To prevent entrapment of animals, all excavations, steep-walled holes or trenches more than 6-inches deep will be secured against animal entry at the close of each day. Any of the following measures may be employed, depending on the size of the hole and method feasibility: 1. Hole to be securely covered (no gaps) with plywood, or similar materials, at the close of each working day, or any time the opening will be left unattended for more than one hour; or 2. In the absence of covers, the excavation will be provided with escape ramps constructed of earth or untreated wood, sloped no steeper than 2:1, and located no farther than 15 feet apart; or In situations where escape ramps are infeasible, the hole or trench will be surrounded by filter fabric fencing or a similar barrier with the bottom edge buried to prevent entry.
BI-6	Minimize Predator-Attraction	Remove trash daily from the worksite to avoid attracting potential predators to the site.
Hazards and Hazardous Materials		
HM-1	Comply with All Pesticide Application Restrictions and Policies	Pesticide products are to be used only after an assessment has been made regarding environmental, economic, and public health aspects of each of the alternatives by Valley Water's Pest Control Advisor (PCA). All pesticide use will be consistent with approved product specifications. Applications will be made by, or under the direct supervision of, State Certified applicators under

		the direction of, or in a manner approved by the PCA. Refer to Q751D02, Control and Oversight of Pesticide Use.
HM-2	Minimize use of Pesticides	In all cases, where some form of pest control is deemed necessary by the PCA; evaluate alternative pest control methods and pesticides. Refer to Q751D02: *Control and Oversight of Pesticide Use*.
HM-3	Post Areas Where Pesticides Will Be Used	Posting of areas where pesticides are to be used shall be performed in compliance with Q751D02: *Control and Oversight of Pesticide Use*. Posting shall be performed in compliance with the label requirements of the product being applied. In addition, Valley Water shall provide posting for any products applied in areas used by the public for recreational purposes, and areas readily accessible to the public, regardless of whether the label requires such notification (the posting method may be modified to avoid destruction of bait stations or scattering of rodenticide), including: 1. Sign postings shall notify staff and the general public of the date and time of application; the product's active ingredients, and common name; and, the time of allowable re-entry into the treated area. 2. A Valley Water staff contact phone number shall be posted on the sign. 3. Signs shall not be removed until after the end of the specified re-entry interval. 4. Right-to-know literature on the product shall be made available upon request to anyone in the area. 5. Notification will take into account neighbors with specific needs prior to treatment of an adjacent area to ensure such needs are met. Such requests are maintained by Valley Water under Q751D02.
HM-4	Comply with All Pesticide Usage Requirements	All projects that propose ongoing use of pesticides will comply with all provisions of Q751D02: Control and Oversight of Pesticide Use, including, but not necessarily limited to the following: 1. All pest control methods will be performed only after a written Pest Control Recommendation for use has been prepared by Valley Water's PCA in accordance with requirements of the California Food and Agricultural Code. 2. F751D01 – Pest Control Recommendation & Spray Operators Report will be completed for each pesticide application.
HM-5	Comply with Restrictions on Herbicide Use in Upland Areas	Consistent with provisions of Q751D02: Control and Oversight of Pesticide Use, application of pre-emergence (residual) herbicides to upland areas will not be made within 72 hours of predicted significant rainfall. Predicted significant rainfall for the purposes of this BMP will be described as local rainfall greater than 0.5 inch in a 24-hour period with greater than a 50% probability of precipitation according to the National Weather Service.
HM-6	Comply with Restrictions on Herbicide Use in Aquatic Areas	Consistent with provisions of Q751D02: Control and Oversight of Pesticide Use, only herbicides and surfactants registered for aquatic use will be applied within the banks of channels within 20 feet of any water present. Furthermore, aquatic herbicide use will be limited to June 15th through October 31st with an extension through December 31 or until the first occurrence of any of the following conditions; whichever happens first: 1. local rainfall greater than 0.5 inches is forecasted within a 24-hour period from planned application events according to the National Weather Service; or 2. when steelhead begin upmigrating and spawning in the 14 steelhead creeks, as determined by a qualified biologist (typically in November/December). If rain is forecast then application of aquatic herbicide will be rescheduled.
HM-7	Restrict Vehicle and Equipment Cleaning to Appropriate Locations	Vehicles and equipment may be washed only at approved areas. No washing of vehicles or equipment will occur at job sites.

HM-8	Ensure Proper Vehicle and Equipment Fueling and Maintenance	No fueling or servicing will be done in a waterway or immediate flood plain, unless equipment stationed in these locations is not readily relocated (i.e., pumps, generators). 1. For stationary equipment that must be fueled or serviced on-site, containment will be provided in such a manner that any accidental spill will not be able to come in direct contact with soil, surface water, or the storm drainage system. 2. All fueling or servicing done at the job site will provide containment to the degree that any spill will be unable to enter any waterway or damage riparian vegetation. 3. All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will be prevented. 4. All equipment used in the creek channel will be inspected for leaks each day prior to initiation of work. Maintenance, repairs, or other necessary actions will be taken to prevent or repair leaks, prior to use. 5. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location will be done in channel or flood plain.
HM-9	Ensure Proper Hazardous Materials Management	Measures will be implemented to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means. 1. Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered. 2. Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage. 3. Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and not be allowed to enter surface waters or the storm drainage system. 4. All toxic materials, including waste disposal containers, will be covered when they are not in use, and located as far away as possible from a direct connection to the storm drainage system or surface water. 5. Quantities of toxic materials, such as equipment fuels and lubricants, will be stored with secondary containment that is capable of containing 110% of the primary container(s). 6. The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations will be conducted in accordance with applicable State and federal regulations. 7. In the event of any hazardous material emergencies or spills, personnel will call the Chemical Emergencies/Spills Hotline at 1-800-510-5151.
HM-10	Utilize Spill Prevention Measures	Prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water following these measures: 1. Field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills; 2. Equipment and materials for cleanup of spills will be available on site, and spills and leaks will be cleaned up immediately and disposed of according to applicable regulatory requirements; 3. Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means; 4. Spill prevention kits will always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations), and all field personnel will be advised of these locations; and, 5. The work site will be routinely inspected to verify that spill prevention and response measures are properly implemented and maintained.
HM-11	Incorporate Fire Prevention Measures	1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.

		2. During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site. 3. An extinguisher shall be available at the Project site at all times when welding or other repair activities that can generate sparks (such as metal grinding) is occurring. 4. Smoking shall be prohibited except in designated staging areas and at least 20 feet from any combustible chemicals or vegetation.
Hydrology and Water Quality		
WQ-1	Conduct Work from Top of Bank	For work activities that will occur in the channel, work will be conducted from the top of the bank if access is available and there are flows in the channel.
WQ-2	Evaluate Use of Wheel and Track Mounted Vehicles in Stream Bottoms	Field personnel will use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately tired vehicles, either tracked or wheeled, will be used depending on the situation. Tracked vehicles (bulldozers, loaders) may cause scarification. Wheeled vehicles may cause compaction. Heavy equipment will not operate in the live stream.
WQ-3	Limit Impacts from Staging and Stockpiling Materials	1. To protect on-site vegetation and water quality, staging areas should occur on access roads, surface streets, or other disturbed areas that are already compacted and only support ruderal vegetation. Similarly, all equipment and materials (e.g., road rock and project spoil) will be contained within the existing service roads, paved roads, or other pre-determined staging areas. 2. Building materials and other project-related materials, including chemicals and sediment, will not be stockpiled or stored where they could spill into water bodies or storm drains. 3. No runoff from the staging areas may be allowed to enter water ways, including the creek channel or storm drains, without being subjected to adequate filtration (e.g., vegetated buffer, swale, hay wattles or bales, silt screens). 4. The discharge of decant water to water ways from any on-site temporary sediment stockpile or storage areas is prohibited. 5. During the wet season, no stockpiled soils will remain exposed, unless surrounded by properly installed and maintained silt fencing or other means of erosion control. During the dry season; exposed, dry stockpiles will be watered, enclosed, covered, or sprayed with non-toxic soil stabilizers.
WQ-4	Stabilize Construction Entrances and Exits	Measures will be implemented to minimize soil from being tracked onto streets near work sites: 1. Methods used to prevent mud from being tracked out of work sites onto roadways include installing a layer of geotextile mat, followed by a 4-inch thick layer of 1 to 3-inch diameter gravel on unsurfaced access roads. 2. Access will be provided as close to the work area as possible, using existing ramps where available and planning work site access so as to minimize disturbance to the water body bed and banks, and the surrounding land uses.
WQ-5	Use Seeding for Erosion Control, Weed Suppression, and Site Improvement	Disturbed areas shall be seeded with native seed as soon as is appropriate after activities are complete. An erosion control seed mix will be applied to exposed soils down to the ordinary high water mark in streams. 1. The seed mix should consist of California native grasses, (for example *Hordeum brachyantherum*; *Elymus glaucus*; and annual *Vulpia microstachyes*) or annual, sterile hybrid seed mix (e.g., Regreen™, a wheat x wheatgrass hybrid). 2. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable, or have other appropriate erosion control measures in place.

WQ-6	Prevent Scour Downstream of Sediment Removal	After sediment removal, the channel will be graded so that the transition between the existing channel both upstream and downstream of the work area is smooth, and continuous between the maintained and non-maintained areas, and does not present a sudden vertical transition (wall of sediment) or other blockage that could erode once flows are restored to the channel.
WQ-7	Maintain Clean Conditions at Work Sites	The work site, areas adjacent to the work site, and access roads will be maintained in an orderly condition, free and clear from debris and discarded materials on a daily basis. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways. For activities that last more than one day, materials or equipment left on the site overnight will be stored as inconspicuously as possible, and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the work site.
WQ-8	Prevent Water Pollution	Oily, greasy, or sediment laden substances or other material that originate from the project operations and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway. The project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows: 1. where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases will not exceed 5 percent; 2. where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent; 3. where the receiving water body is a dry creek bed or storm drain, waters in excess of 50 NTU will not be discharged from the project. Water turbidity changes will be monitored. The discharge water measurements will be made at the point where the discharge water exits the water control system for tidal sites and 100 feet downstream of the discharge point for non-tidal sites. Natural watercourse turbidity measurements will be made in the receiving water 100 feet upstream of the discharge site. Natural watercourse turbidity measurements will be made prior to initiation of project discharges, preferably at least 2 days prior to commencement of operations.
Traffic and Transportation		
TR-1	Incorporate Public Safety Measures	Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction, to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof.

Avoidance and Minimization Measures

In addition to the standard BMPs listed in Table 2-2, Valley Water developed project-specific measures that would be incorporated into the Project in order to avoid or minimize potential adverse environmental effects. These avoidance and minimization measures (AMMs) are:

AMM BI-1: Minimize Impacts to Vegetation from Clearing and Trimming

Vegetation to be trimmed or cleared shall be evaluated by a qualified vegetation specialist or qualified biologist prior to removal. Recommendations from the qualified vegetation specialist or qualified biologist shall be followed. Cutting vegetation shall be limited to the minimum length, width, and height necessary while conforming to International Society of Arboriculture pruning standards. Woody vegetation (i.e., native trees and shrubs) which require pruning for equipment

access, construction operations, etc., shall be pruned consistent with all three of the following complementary guidance or their updates:

1. 'BEST MANAGEMENT PRACTICES, TREE PRUNING' 2008, INTERNATIONAL SOCIETY OF ARBORICULTURE;
2. American National Standards Institute (ANSI) A300 (Part 1) – 2008 PRUNING; and
3. ANSI Z133.1, 2008, SAFETY REQUIREMENTS

AMM BI-2: Minimize Root Impacts to Woody Vegetation

Construction activities associated with the proposed project, including cut and fill, shall be minimized within the root zones of existing woody vegetation to remain post project. In general, root extent can be estimated as 2-3 times canopy radius, but vary depending on slope and soil conditions, construction setbacks will be calculated using all of the following:

1. Tree diameter at 4.5 feet high (diameter at breast height); and
2. Multiplier of 1.25 (e.g. a tree measures 12 inches around its trunk X 1.25 = 15-foot radial construction setback).
3. If soil encroachment must occur in 33% or more of this area, the tree should be evaluated for removal. Additionally, mulching the root zone will be employed to provide root protection from unavoidable equipment traffic during construction, specifically:
4. Use 6 inches minimum depth of wood chips; or,
5. 4 inches minimum depth of ¾-inch (or greater) gravel.
6. Root may remain in place after work if approved by a qualified biologist or vegetation specialist.

AMM CU-1: Accidental Discovery of Archaeological Artifacts, Tribal Cultural Resources, or Burial Remains

If historical or unique archaeological artifacts, or tribal cultural resources, are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Work at the location of the find will halt immediately within 100 feet of the find. A "no work" zone shall be established utilizing appropriate flagging to delineate the boundary of this zone. A Consulting Archaeologist will visit the discovery site as soon as practicable for identification and evaluation pursuant to PRC Section 21083.2 and CCR Section 15126.4. If the archaeologist determines that the artifact is not significant, construction may resume. If the archaeologist determines that the artifact is significant, the archaeologist will determine if the artifact can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours an Action Plan which will include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If a tribal cultural resource cannot be avoided, the Action Plan will include notification of the appropriate Native American tribe, and consultation with the tribe regarding acceptable recovery options. If burial finds are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified, and the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent. No further excavation or disturbance within 100 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs.

AMM CU-2: Conduct Pedestrian Surveys for Major Excavation Activities

A pedestrian survey shall be conducted in locations with major excavation activities that could result in impacts to cultural resources. The pedestrian surveys would be conducted prior to the major excavation activities. Any cultural resources discovered during the survey would trigger implementation of AMM CU-1.

Section 3: Environmental Setting

General Site Description for the Plan Area

The LTMPs are the planning framework for the management of the Preserve. As described in the LTMPs (Valley Water 2015; Valley Water 2016a), the 1,758 acre Preserve is located 8 miles northeast of Downtown San Jose in unincorporated Santa Clara County on all of Assessor Parcel Number 042-20-010 and portions of 627-22-011, 042-07-019, 042-07-021, 042-07-023, 042-07-024, 042-07-025, 042-07-026, 042-07-027, 042-07-028, 042-08-001, 041-07-022, and 042-07-019. Areas 1 and 2 lie on the west, east, and south-facing slopes of the Diablo Range and Area 3 lies on the east and south-facing slopes of the Diablo Range, approximately 5.5 miles northwest of Mount Hamilton. The Diablo Range extends 180 miles from Mount Diablo in the northwest to the Polonio Pass in the southeast. The Diablo Range is largely undeveloped and supports a diverse mix of grassland, scrubland, and woodland communities. Cattle ranching and passive recreation are the predominant human uses throughout most of the Diablo Range.

Elevations of the Preserve range approximately 1,400 feet to 3,100 feet. The Preserve is primarily composed of steeply sloping hillsides of Poverty Ridge, which are bisected by ephemeral and intermittent drainages that flow down the south- and west- facing slopes into Upper Penitencia Creek, and down the east-facing slopes into Arroyo Hondo. Upper Penitencia Creek is a stream that drains a 24 square miles area within the larger Coyote Creek watershed; it runs for approximately 11 miles from its headwaters in the Diablo Range to its confluence with Coyote Creek. Downstream from Areas 1 and 2, Upper Penitencia Creek enters Cherry Flat Reservoir, which was constructed in 1936 to supply water to Alum Rock Park during the summer and prevent floods during the winter. Upper Penitencia Creek then flows through Alum Rock Park before exiting the hills on the valley floor. From Alum Rock Park, Upper Penitencia Creek flows westward across the Santa Clara Valley floor and through the City of San Jose for about four miles before joining Coyote Creek approximately 10 miles upstream from San Francisco Bay.

Arroyo Hondo is the only perennial stream on the Preserve and is located in Area 3. Arroyo Hondo drains a large portion of the watershed on the slopes of Mount Hamilton; its mainstem originates at the confluence of Isabel Creek and Smith Creek at the northern tip of Joseph D. Grant Coyote Park, 1.5 miles southeast of Area 3. The drainage then flows northward through a deep gorge, bound by Oak Ridge to the east and Poverty Ridge to the west, for approximately 13 miles and then drains to Calaveras Reservoir. Calaveras Dam was constructed in 1913 in response to increasing demand for drinking water in the San Francisco Bay Area at the turn of the 20th century. Today, the reservoir is San Francisco Bay Area's largest local drinking water supply, and along Calaveras Creek, Arroyo Hondo is one of its principal tributaries (Valley Water 2015; Valley Water 2016a).

Surrounding Land Uses

Most of the properties in the Project vicinity are undeveloped and have been used for long-term cattle grazing. Land uses adjacent to the Preserve include a combination of public and private ownership for private ranching, research, parks, and mitigation purposes. Surrounding land uses include: the Blue Oak Ranch Reserve (3,260 acres), located to the south; Valley Water's Upper Penitencia Creek Property located to the southwest; Cherry Flat Reservoir (City of San Jose) located to the west, and private ranch lands located to the north, northwest, and east of the Preserve.

Nearby open space areas include the San Francisco Public Utilities Commission lands to the north; Santa Clara Valley Open Space Authority lands to the west; and Joseph D. Grant County Parks to the south. Surrounding land uses are shown in the Project vicinity map (Figure 1).

Preserve's Existing Infrastructure Description

The Preserve is largely undeveloped and has very minimal existing infrastructure. The Preserve consists of a main dirt road throughout the Areas 1, 2, and 3 (See Figures 4 and 5 for road locations). The main road is drivable and extends from the southernmost end of Area 2 through the center of Areas 1 and 2, and then forks east and west along the northern edge of Area 1. The western fork road continues to a pond in the northwestern corner of Area 1. The eastern fork road creates two loop roads, one within Areas 1 and 2 and one that extends to Area 3. The roads within the Preserve cross ephemeral and intermittent streams at 21 locations. Culverts convey flows beneath the road at two locations and wooden retaining walls have been constructed on the downstream sides of the road crossings at three locations, but the remaining stream crossings are not associated with any infrastructure.

Additional Preserve infrastructure includes 10 artificial stock ponds, pipelines and spring boxes, a small ranch house, and grazing infrastructure including fences, gates and watering troughs.

Biological Settings at Identified Site Improvement Locations

Stream Crossing 4 (Area 3)

The stream that crosses the road at Stream Crossing 4 is a first order[3] ephemeral stream. The site improvement work area is surrounded by a foothill pine/oak woodland. Mixed riparian habitat is present along the stream within the work area. Vegetation present in or immediately adjacent to the work area consists of a California bay laurel *(Umbellularia californica)* and foothill pine *(Pinus sabiniana)* overstory, a sparse poison oak *(Toxicodendron diversilobum)* midstory, and an annual herbaceous understory. No wetlands are present in or immediately adjacent to the work area.

Stream Crossing 5 (Area 3)

The stream that crosses the road at Stream Crossing 5 is a first order ephemeral stream. The site improvement work area is surrounded by a foothill pine/oak woodland. Riparian habitat is absent along the stream within the work area. Vegetation present in or immediately adjacent to the work area consists of two small foothill pines making up a very sparse overstory and an annual herbaceous understory. No midstory vegetation or wetlands are present in or immediately adjacent to the work area.

Stream Crossing 6 (Areas 1 and 2)

The stream that crosses the road at Stream Crossing 6 is a first order intermittent stream. The site improvement work area is surrounded by valley and blue oak woodland. Mixed riparian forest is present along the stream within the work area. Vegetation present in or immediately adjacent to the work area consists of a California bay laurel and western sycamore *(Platanus racemosa)* overstory and an annual herbaceous understory. No midstory vegetation or wetlands are present in or immediately adjacent to the work area.

Stream Crossing 12 (Areas 1 and 2)

The stream that crosses the road at Stream Crossing 12 is a first order ephemeral stream. The site improvement work area is surrounded by a mixed oak forest. Mixed riparian forest is present along the stream within the work area. Vegetation present in or immediately adjacent to the work

[3] First order streams are the smallest of streams that flow into and "feed" larger streams, and have no other streams flowing into them.

area consists of a California bay laurel and California buckeye *(Aesculus californica*) overstory and an annual herbaceous understory. No midstory vegetation or wetlands are present in or immediately adjacent to the work area.

Section 4: Environmental Evaluation

Initial Study Checklist

In accordance with CEQA Guidelines Appendix G, the following IS Checklist is an analysis of the Project's potential environmental effects to determine whether an Environmental Impact Report is needed. Answers to the checklist questions provide factual evidence and Valley Water rationale for determinations of the potential significance of impacts resulting from the Project.

The IS checklist shows that the Project may have potentially significant effects on biological resources. Mitigation measures have been proposed for the Project that clearly reduce potential effects to less than significant levels; therefore, the proposed Mitigated Negative Declaration complies with CEQA Guidelines §15070(b). Descriptions of the BMPs, AMMs, and/or mitigation measures to be incorporated in the Project are included.

ENVIRONMENAL CHECKLIST FORM

1. Project Title:	Continued Implementation of Two Long-term Management Plans for the Rancho Cañada de Pala Preserve
2. Lead Agency Name and Address:	Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118
3. Contact Person and Phone Number:	Tiffany Chao (408) 630-3107
4. Project Location:	Approximately 8 miles northeast of downtown San Jose in unincorporated Santa Clara County on all of APN 042-20-010 and portions of APN 627-22-011, 042-07-019, 042-07-021, 042-07-023, 042-07-024, 042-07-025, 042-07-026, 042-07-027, 042-07-028, 042-08-001, 041-07-022, and 042-07-019. The Project is shown in Figure 1: Project vicinity and Surrounding Land Uses.
5. Project Sponsor's Name and Address:	Santa Clara Valley Water District 5750 Almaden Expressway San Jose CA 95118
6. General Plan Designation:	Ranchlands
7. Zoning:	R-1-1
8. Description of the Project:	The Project calls for continued implementation of two Long-term Management Plans for the Rancho Cañada de Pala Preserve, with some modifications for new proposed and foreseeable site improvements. The purpose of the Project is to ensure the Preserve is monitored, maintained, and managed in a manner that preserves its conservation values. The major proposed management actions for the Preserve include continuing cattle grazing; road maintenance; supplemental invasive weed control and monitoring; and protection measures, as needed for sensitive habitats. Other actions include improvements to infrastructure and facilities, security and safety improvements, and reporting on the progress and outcomes of the proposed management practices.
9. Surrounding Land Uses and Setting:	Most properties in the general vicinity of the Preserve are undeveloped. Lands adjacent to the Preserve include a combination of private and public ownership for private ranching, parks, research, and mitigation purposes.

10. Other public agencies whose approval is required:	○ California Department of Fish and Wildlife – Section 1602 Lake and Streambed Alteration Agreement ○ Santa Clara Valley Habitat Agency - Valley Habitat Plan permits ○ Regional Water Quality Control Board – Section 401 Water Quality Certification and/or Waste Discharge Requirements ○ U.S. Army Corps of Engineers – Section 404 Permit
11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code Section 21080.3.1?	The Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region was notified of the Project by Valley Water on September 19, 2019. No request for consultation pursuant to Public Resources Code Section 21080.3.1 was received by Valley Water.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Less than Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

DETERMINATION:

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	☐
I find that although the Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	☒
I find that the Project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	☐
I find that although the Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Project, nothing further is required.	☐

_____ _____

Signature Date

Tiffany Chao
Environmental Planner
Valley Water

1. AESTHETICS

Except as provided in Public Resources Code Section 21099,

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

Discussion

a - d) *No Impact*. Currently the visual character of the Preserve is characterized by steep hillsides dominated by oak woodlands and forests and interspersed with ephemeral and intermittent drainages. The only existing infrastructure of the Preserve include dirt roads, ponds, a small ranch house, cattle fencing and troughs, and various gates. No new buildings would be constructed, and no visually intrusive activities would occur, in association with the implementation of the Project. The existing visual character of the Preserve would therefore not change from existing conditions. Implementation of the Project would not have an adverse impact on a scenic vista, scenic resources, or scenic quality. The proposed Project would not create any new sources of light or glare. Therefore, the Project would have **no impact** on visual resources.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

2. AGRICULTURE AND FORESTRY RESOURCES

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

a-e) *No Impact*. According to the *Santa Clara County Important Farmlands Map* (CDC 2016), the Preserve area and surrounding land uses are designated as "Rangeland;" Rangeland is not mapped by the Farmland Mapping and Monitoring Program as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. According to the *Santa Clara County Williamson Act Contract Map* (County of Santa Clara 2020a), the Project site is under a Williamson Act contract. The Preserve has historically supported rangeland activities. Since the Preserve was obtained by TNC, a grazing regime at or below 50 AU per year has been maintained (including Areas 1, 2, and 3 collectively). Similar to the rest of the Project vicinity, the Preserve has historically been used for cattle grazing. The LTMPs include a livestock strategy that maintains and may improve the conservation values that currently exist within the Preserve. The Project would not result in farmland or forest land/timberland conversion, conflict with a Williamson Act contract, or conflict with existing agricultural or forest land/timberland zoning. Therefore, the Project would have **no impact** on agricultural resources.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

3. AIR QUALITY

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

The Bay Area Air Basin is in nonattainment status for various federal or state standards for ozone, $PM_{2.5}$, and PM_{10}. The BAAQMD has established significance thresholds for both construction and operational emissions of criteria air pollutants and precursors; emissions that do not exceed these thresholds are not considered cumulatively considerable (BAAQMD 2017). For construction emissions, as outlined in the current BAAQMD Air Quality Guidelines (BAAQMD 2017), the first step in determining the significance of construction-related criteria air pollutants and precursors is to compare the attributes of a Project with the applicable Screening Criteria listed in Chapter 3 of the Air Quality Guidelines. If all of the Screening Criteria are met by a proposed project, then the lead agency would not need to perform a detailed air quality assessment of its project's air pollutant emissions, and the lead agency may conclude that the Project would not result in a significant impact to air quality.

This preliminary screening provides the lead agency with a conservative indication of whether the Project would result in the generation of construction-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors shown in Table 4-1.

Table 4-1: Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs./day)
ROG	54
NO_x	54
PM_{10}	82*
$PM_{2.5}$	54*

Notes:
* Applies to construction exhaust emissions only.
CO = carbon monoxide; lbs./day = pounds per day
NO_x = oxides of nitrogen
$PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less.
PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less
ROG = reactive organic gases
Source: BAAQMD 2017.

For construction-related impacts, if all of the following BAAQMD Screening Criteria are met, the construction of a proposed project would result in a less-than-significant impact from criteria air pollutant and precursor emissions.

1. The Project is below the applicable screening level size shown in Table 4-1 of the BAAQMD CEQA Guidelines; and
2. All Basic Construction Mitigation Measures would be included in the Project design and implemented during construction; and
3. Construction-related activities would not include any of the following:
   a. Demolition;
   b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
   c. Simultaneous construction of more than one land use type (e.g., Project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
   d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
   e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

For operational emissions, BAAQMD has established the significance thresholds shown in Table 4-2.

Table 4-2: Thresholds of Significance for Operational-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs./day)
ROG	54
NO_x	54
PM_{10}	82
$PM_{2.5}$	54

Notes:
CO = carbon monoxide; lbs./day = pounds per day
NO_x = oxides of nitrogen
$PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less.
PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less
ROG = reactive organic gases
Source: BAAQMD 2017.

Discussion

This air quality impact analysis considers construction and operational air quality impacts associated with the implementation of the Project against the BAAQMD thresholds of significance. Equipment, trucks, workers, vehicles, and ground-disturbing activities associated with construction activities for road rehabilitation, repair of erosion issues, and vegetation management, as well as operational emissions (e.g. monitoring and long-term road maintenance) within the Preserve would generate emissions of criteria air pollutants and precursors.

a) ***No Impact.*** The most recently adopted BAAQMD air quality plan is the *Spare the Air – Cool the Climate 2017 Clean Air Plan* (2017 Plan). The 2017 Plan focuses on two closely-related goals: protecting impacted communities, and protecting the climate. Consistency with the BAAQMD 2017 Plan can be determined if the Project does the following: 1) supports the goals of the 2017 Plan; 2) includes applicable control measures from the 2017 Plan; and, 3) would not disrupt or hinder implementation of any control measures from the 2017 Plan. Consistency with the mobile source measures, land use and local impact measures, and energy measures is described below:

- *Mobile Source and Transportation Control Measures*. The BAAQMD identifies control measures as part of the 2017 Plan to reduce ozone precursor emissions from stationary, area,

mobile, and transportation sources. The Transportation Control Measures are designed to reduce emissions from motor vehicles by reducing vehicle trips and vehicle miles traveled in addition to vehicle idling and traffic congestion. Implementation of the Project would result in construction activities that would involve minimal amount of excavation and earthwork associated with road rehabilitation, repair of erosion issues, and vegetation management. The LTMPs do not include any development, but rather improvements to an existing open space area and therefore would not contribute or exceed air quality standards or obstruct the implementation of the 2017 Plan. Furthermore, construction and operational activities associated with the Project would not exceed the BAAQMD's emissions thresholds (Table 4-1 and Table 4-2: Construction and Operational Emissions). These thresholds are established to identify projects that have the potential to generate a substantial amount of criteria air pollutants. Because the Project would not exceed these thresholds, it would not be considered by BAAQMD to be a substantial emitter of criteria air pollutants. Therefore, the Project is consistent with the Clean Air Plan's mobile source measures.

- *Land Use and Local Impacts Measures*. The 2017 Plan includes Land Use and Local Impacts Measures to achieve the following: promote mixed-use, compact development to reduce motor vehicle travel and emissions; and ensure that planned growth is focused in a way that protects people from exposure to air pollution from stationary and mobile sources of emissions. The Project does not involve land use changes, and therefore would not conflict with the Land Use and Local Impacts Measures identified in the 2017 Plan.

- *Energy and Climate Measures*. The 2017 Plan also includes Energy and Climate Measures, which are designed to reduce ambient concentrations of criteria pollutants and reduce emissions of CO_2. Implementation of these measures is intended to promote energy conservation and efficiency in buildings, promote renewable forms of energy production, reduce the "urban heat island" effect by increasing reflectivity of roofs and parking lots, and promote the planting of (low-VOC-emitting) trees to reduce biogenic emissions, lower air temperatures, provide shade, and absorb air pollutants. The energy measures of the 2017 Plan are not applicable to the Project.

As discussed above, implementation of the Project would not disrupt or hinder implementation of the applicable measures outlined in the 2017 Plan, including Mobile Source and Transportation Control Measures, Land Use and Local Impact Measures, and Energy and Climate Measures. Therefore, implementation of the Project would result in **no impact** related to applicable air quality plans.

b) ***Less than Significant Impact*.** Project emissions are short-term construction emissions and long-term operational emissions, and would be less than significant, as described below. The Project would therefore not cause a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment.

Construction Emissions

The Project would result in short-term construction emissions. Equipment, trucks, workers, vehicles, and ground-disturbing activities associated with construction activities for road rehabilitation, repair of erosion issues, and vegetation management would generate emissions of criteria air pollutants and precursors.

The Project meets the Screening Criteria, and therefore based on the BAAQMD guidelines, the Project would result in a less than significant impact from criteria air pollutants and precursor emissions. Construction-related activities would not include demolition, simultaneous occurrence of more than two construction phases, simultaneous construction of more than one land use type, extensive site preparation, and import/export of greater than 10,000 cubic yards of soil or any extensive material transport requiring a considerable amount of haul truck activity. The BAAQMD Basic Construction Mitigation Measures have been

included in the project design. The BAAQMD Basic Construction Mitigation Measures would be implemented through BMP AQ-1. Project activities would not result in the generation of construction-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors shown in Table 4-1. An existing ranch house on the Preserve is currently vacant and may be subject to future adaptive management actions to meet LTMP objectives for the Preserve. Future management actions for the ranch house could include but are not limited to fencing and boarding of the structure to prevent trespassing and possible removal of the structure if needed, to maintain the objectives of the LTMPs. Future construction activities related to ranch house would depend on health and safety conditions of the structure at the time of the proposed work. Short term construction activities associated with the Project meet the BAAQMD Screening Criteria for construction related emissions; therefore, the Project would result in a less than significant impact from criteria air pollutants and precursor emissions during construction. Application of BMP AQ-1 would further minimize short-term construction emissions associated with the Project.

Operational Emissions

Operational emission impacts are long-term air emission impacts associated with area sources and mobile sources involving any change related to the Project. Implementation of the Project would include long-term road maintenance, biological monitoring, non-native vegetation management, and infrastructure maintenance. Monitoring activities would be conducted by foot and/or ATV. Maintenance activities for the roadways would consist of loosening the soil within the roadway and incorporation of the materials back into the road to ensure that no spoils are deposited on the road edges. No import/export of soil from or to the Preserve are anticipated during Project operations due to the low number of vehicles and equipment associated with long-term maintenance and monitoring, operational emissions are would not exceed BAAQMD operational emission thresholds.

Therefore, the Project would result in a **less significant impact** from criteria air pollutants and precursor emissions.

c) ***Less than Significant Impact*****.** Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The nearest sensitive receptors to the Preserve are single family residences located approximately 3 miles to 4 miles west of the Project site. For assessing community risk and hazards, the BAAQMD recommends using a 1,000-foot radius buffer around the project property boundary (BAAQMD 2017). At this distance, these receptors would be located well beyond the BAAQMD's 1,000-foot buffer. In addition, construction emissions would be temporary and would not result in the generation of construction-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors shown in Table 4-1. The operational emissions associated with the Project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance for Operational-Related Criteria Air Pollutants and Precursors shown in Table 4-2. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations, resulting in a **less than significant impact**.

d) ***Less than Significant Impact.*** According to BAAQMD, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The Project would maintain the habitat and conservation values of the entire Preserve, and therefore does not include any uses identified by the BAAQMD as being associated with odors. Potential odors could arise from any diesel fueled construction equipment used on-site (e.g., during road rehabilitation activities). The closest sensitive receptors to the Project site are located

approximately 3 miles to 4 miles to the west. No sensitive receptors are located within 1,000 feet of the Preserve. Emissions produced during grading and construction activities are short term, as they would occur only during construction.

The Project would not result in other emissions (such as odors) adversely affecting a substantial number of people, and this impact is considered **less than significant**. Additionally, application of BMP AQ-2 would further minimize potential odors associated with any proposed activities.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

AQ-1: Dust Control Measures
AQ-2: Avoid Stockpiling of Odorous Materials

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

4. BIOLOGICAL RESOURCES

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

The following evaluation of potential impacts to biological resources within the Project area is based on the detailed inventory of the Preserve's biological resources which are described in Chapter 3.0 of the LTMPs, biological surveys performed by various biologists since 2001 (Valley Water 2015; Valley Water 2016a), and a Biological Site Assessment prepared by Valley Water's Environmental Mitigation and Monitoring Unit in June 2019 (Valley Water 2019; Appendix C).

Discussion

The LTMPs establishes a framework for the long-term management and preservation of the Preserve in perpetuity. Conservation values for the Preserve are identified in the LTMPs, which seek to meet the overall goals of ensuring that the Preserve is monitored and managed in a manner consistent with those conservation values. Specific objectives as well as specific requirements associated with meeting those objectives are also identified in the LTMPs to meet the goals of the plan and support the conservation values. It is the intent of the LTMPs to maintain the existing habitat and improve habitat conditions when appropriate in support of management for sensitive species using the Preserve.

Surveys of the Preserve were conducted by H.T. Harvey and Associates in November 2015 for Area 3 and March 2016 for Areas 1 and 2 and annual monitoring has occurred on the entire Preserve since 2016. Detailed results of the 2015-16 surveys, including vegetation maps are

provided in the LTMPs. Vegetation types occurring on the Preserve include blue oak and valley oak woodland, valley oak savanna, mixed oak forest, foothill pine/oak woodland, mixed riparian forest, wetland, and northern mixed/chamise chaparral. Implementation of the overall objectives of the LMTPs would benefit biological resources within the Project site. However, in order to improve existing conditions and facilitate long-term management, the Project includes site improvements, which will result in construction and alteration of some existing conditions within the Preserve. The identified and foreseeable site improvements are discussed in Section 2: Project Description. The biological settings for the four identified site improvements are discussed in Section 3: Environmental Setting. The extent to which implementation of the Project may potentially affect biological resources within the Preserve is evaluated and discussed below. Additionally, consistency with existing programs or plans, including the VHP, is also discussed within this section.

a) ***Potentially Significant Impact with Mitigation Incorporated.*** Following a review of existing data sources, including surveys conducted by TNC since 2001 and surveys conducted by H.T. Harvey and Associates since 2015, the Preserve has the potential to support and therefore the Project has the potential to affect the following special-status species: California tiger salamander; California red-legged frog; foothill-yellow legged frog; western pond turtle, and American badger. Migratory bird species would also be affected. Potential impacts of the Project on these species are described below.

Special-status Species

California Tiger Salamander (*Ambystoma californiense*). Federal Listing Status: Threatened (Central Population); State Listing Status: Threatened; VHP Status: Covered. California tiger salamanders (CTS) are known to occur within the Preserve and surrounding region. In addition, all of Area 1 and most of Areas 2 and 3 include USFWS designated critical habitat for this species.

CTS have been observed (egg and larvae) in nine of the 10 ponds in Areas 1 and 2. No ponds are present within Area 3, and there are no known records of CTS within Area 3. The species is also known to occur in the surrounding region, including at the adjacent Blue Oak Ranch Reserve.

Based on the May-June site surveys conducted by H. T. Harvey and Associates in 2015, and a review of aerial topography, no major barriers or substantial impediments to dispersal occur between ponds known to be occupied by CTS on and off-site and all portions of the Preserve. Thus, CTS have the potential to occur anywhere on the Preserve and to disperse between nearby populations and the Preserve.

All ponds in Areas 1 and 2 are at least several feet deep when full and provide potential breeding habitat for CTS in years of adequate rainfall. Several bullfrogs (*Lithobates catesbeianus*) and a few red-eared sliders (*Trachemys scripta*) have been observed in Pond 1, and mosquitofish (*Gambusia affinis*) are known to occur in Pond 7. Although these non-native species may prey upon and/or compete with CTS, they do not necessarily preclude the presence of CTS or attempted breeding by CTS. No aquatic predators have been observed in other ponds on the site in recent years.

The ephemeral and intermittent streams within the Preserve do not provide suitable breeding habitat for CTS; these streams do not provide water for long enough for larval development, and flows in all streams on the Preserve are flashy enough that eggs or larvae would be washed away if eggs were laid in the streams.

CTS depend on ground squirrels (*Spermophilus beecheyii*) and Botta's pocket gophers (*Thomomys bottae*) to provide moist subterranean refugia during the non-breeding (dry)

season, as well as during overland movements to and from breeding areas during the wet season. The uplands within Areas 1 and 2 consist of woodland habitats interspersed with grassland. Burrows of California ground squirrels have been observed in extremely high abundances throughout Areas 1 and 2, and many burrows of Botta's pocket gophers have been observed as well. Thus, these uplands provide high-quality CTS breeding habitat in the on-site ponds.

The uplands within Area 3 consist of woodland habitats interspersed with grasslands. Burrows of California ground squirrels have been observed in low abundance within Area 3, likely because of the high-density wooded vegetation present in Area 3 and the extremely steep slopes. Some CTS likely disperse onto Area 3 from breeding habitats on adjacent lands, as no barriers to dispersal are present between nearby occurrences and Area 3.

Because CTS are known to occur in the Preserve, the Project has the potential to impact CTS. If individual salamanders are present in work areas (e.g., in mammal burrows underground), injury or mortality could result. While potential impacts from habitat loss or individual morality could occur during Project activities, these activities are intended to maintain, and, where possible, improve the conservation values of the Preserve. Road and grazing infrastructure maintenance, invasive species management, and monitoring, are essential management activities to maintain the conditions that support biological resources on the Preserve. Construction of site improvements would provide an overall localized benefit by repairing erosion issues on roads and drainages, thus reducing sedimentation and improving water quality and habitat conditions.

To be consistent with the VHP, the Project would adhere to the conditions discussed in Section 2 of this document. Compliance with those conditions and implementation of BMP's BI-2 through BI-6, AMM BI-1, and AMM BI-2 would minimize effects to CTS. In addition, CTS observations would be tracked in the annual monitoring reports to add to the knowledge of CTS use of and occurrences on the Preserve. This information would help inform management activities on the Preserve to avoid CTS. Nevertheless, impacts would be significant because the Project could have a substantial adverse effect, either directly or through habitat modifications, on CTS because underground refugia used by CTS could be impacted. Implementation of Mitigation Measures BI-1 and BI-3 (see full text below) would reduce this potentially significant impact to CTS from construction and long-term operation/maintenance activities to a **less than significant level** by minimizing access impacts and avoiding CTS identified during biological surveys performed by a Qualified Biologist. As a result, potential impacts to CTS are considered **less than significant with mitigation**.

California Red-legged Frog (*Rana draytonii*). Federal Listing Status: threatened; State Listing Status: Species of Special Concern; VHP Status: Covered. California red-legged frogs (CRLF) have not been documented within the Preserve but are known to occur in the surrounding region. Although no CRLF have been documented within the Preserve, the western half of Areas 1 and 2 overlap USFWS-designated critical habitat for this species. Area 3 does not overlap USFWS-designated critical habitat for this species.

CRLF have been documented in several locations within the dispersal distance of the Preserve. CRLF are known to occur in at least one pond at the Blue Oak Ranch Reserve property immediately south of the Preserve. Based on a review of aerial topography, no major barriers or substantial impediments to dispersal occur between the Preserve areas and known CRLF occurrences or other potential breeding ponds in the vicinity of the Preserve. Thus, if CRLF are present in the Project vicinity, they could disperse to the site from adjacent areas.

If CRLF were currently breeding in Areas 1 or 2, they likely would have been detected during CTS monitoring surveys performed by TNC, yet CRLF have not been recorded during such surveys. However, all of the ponds within Areas 1 and 2 are at least several feet deep when full and provide potential breeding habitat for CRLF in years of adequate rainfall. Although the bullfrogs, mosquitofish, and red-eared sliders present in Ponds 1 and 7 may prey upon CRLF, their presence does not necessarily preclude the presence of CRLF or breeding by CRLF. No ponds are present within Area 3 to provide suitable breeding habitat for CRLF.

Arroyo Hondo provides at least marginal-quality breeding habitat, as this species could attempt breeding in pools, but flashy flows during rain events may disrupt egg masses and wash them downstream. Arroyo Hondo does provide high-quality non-breeding aquatic foraging and dispersal habitat, as its perennial nature in an otherwise relatively dry landscape would be attractive to CRLF. The ephemeral and intermittent streams within the Preserve provide potential non-breeding foraging and dispersal habitat and aquatic refugia for CRLF when they contain water. Although dense vegetative cover is absent from most of these stream reaches, rock crevices and debris provide suitable refugia for CRLF. During the wet season, when most CRLF dispersal occurs, these streams could facilitate dispersal of CRLF across the landscape.

Upland habitat surrounding streams and ponds within Areas 1 and 2 includes numerous small mammal burrows which can be used by CRLF as upland refugia. Upland habitat surrounding streams and ponds within Area 3 includes some cracks and small mammal burrows which could be used by CRLF for upland refugia. As described above for CTS, only small numbers of small mammal burrows are present within Area 3. Nevertheless, cracks and woody debris provide sufficient refugia for dispersing CRLF within Area 3.

Based on the known occurrences of CRLF near the Preserve and the lack of barriers to dispersal between these occurrences/ponds and the Preserve's streams and ponds, it is likely that CRLF occur within the Preserve at least on occasion, and the species may breed in ponds in Areas 1 and 2 in the future.

Because CRLF are likely to occur on the Preserve, the Project has the potential to impact CRLF. If individuals are present in work areas, injury or mortality could result. While potential impacts from habitat loss or individual mortality could occur during Project activities, these activities are intended to maintain, and, where possible, improve the conservation values of the Preserve. Road and grazing infrastructure maintenance, invasive species management, and monitoring, are essential management activities to maintain the conditions that support biological resources on the Preserve. Construction of site improvements would provide an overall localized benefit by repairing erosion issues on roads and drainages, thus reducing sedimentation and improving water quality and habitat conditions.

To be consistent with the VHP, the Project would adhere to the conditions discussed in Section 2 of this document. Compliance with those conditions and implementation of BMP's BI-2 through BI-6, AMM BI-1, and AMM BI-2 would minimize effects to CRLF. In addition, CRLF observations would be tracked in the annual monitoring reports to add to the knowledge of CRLF use of and occurrences on the Preserve. This information would help inform management activities on the Preserve to avoid CRLF. Nevertheless, impacts would be significant because the Project could have a substantial adverse effect, either directly or through habitat modifications, on CRLF because refugia used by CRLF could be impacted. Implementation of Mitigation Measures BI-1 and BI-3 would reduce this potentially significant impact to CRLF from construction and long-term operation/maintenance activities to a **less than significant level** by minimizing access impacts and avoiding CRLF identified during

biological surveys performed by a Qualified Biologist. As a result, potential impacts to CRLF are considered **less than significant with mitigation**.

Foothill Yellow-legged Frog (*Rana boylii*). Federal Status: None; State Status: Endangered VHP Status: Covered. Foothill yellow-legged frogs (FYLF) are known to occur within the Preserve. TNC staff have observed this species along the entire reach of Arroyo Hondo in Area 3. In 2020, Valley Water staff observed this species in an unnamed stream in Area 1.

The reach of Arroyo Hondo within Area 3 provides high-quality habitat for FYLF, as this fast-moving perennial stream contains many pools and areas of riffles and runs of varying depth suitable for breeding and foraging FYLF. The ephemeral and intermittent streams throughout the entire Preserve provide potential nonbreeding habitat for FYLF when they contain water. No pools have been observed along these streams; however, if pools were present along these streams, which may occur in wet year and/or during the wet season, they would provide suitable dispersal and foraging habitat for FYLF. FYLF are known to travel up ephemeral and intermittent streams when there is abundant water. Thus, FYLF may occur along these streams to some extent when water is present, although they are primarily expected to occur along Arroyo Hondo in Area 3.

Because FYLF are known to occur along Arroyo Hondo and have the potential to occur throughout the Preserve along the ephemeral and intermittent streams when water is present, the Project has the potential to impact FYLF. If individual frogs are present in work areas, injury or mortality could result. While potential impacts from habitat loss or individual mortality could occur during Project activities, these activities are intended to maintain, and, where possible, improve the conservation values of the Preserve. Road and grazing infrastructure maintenance, invasive species management, and monitoring, are essential management activities to maintain the conditions that support biological resources on the Preserve. Construction of site improvements would provide an overall localized benefit by repairing erosion issues on roads and drainages, thus reducing sedimentation and improving water quality and habitat conditions.

To be consistent with the VHP, the Project would adhere to the conditions discussed in Section 2 of this document. Compliance with those conditions and implementation of BMP's BI-1 through BI-6, AMM BI-1, and AMM BI-2 would minimize effects to FYLF. In addition, FYLF observations would be tracked in the annual monitoring reports to add to the knowledge of FYLF use of and occurrences on the Preserve. This information would help inform management activities on the Preserve to avoid FYLF. Nevertheless, impacts would be significant because the Project could have a substantial adverse effect, either directly or through habitat modifications, on FYLF because refugia used by FYLF could be impacted. Implementation of Mitigation Measure BI-1 and BI-3 would reduce this potentially significant impact to FYLF from construction and long-term operation/maintenance activities to a **less than significant level** by minimizing access impacts and avoiding FYLF identified during biological surveys performed by a Qualified Biologist. As a result, potential impacts to FYLF are considered **less than significant with mitigation**.

Western Pond Turtle (*Actinemys marmorata*). **Federal Listing Status: None; State Listing Status: Species of Special Concern; VHP Status: Covered**. Western Pond Turtles (WPT) are known to occur in the Preserve and the surrounding region. WPT have been observed in Areas 1 and 2 in Ponds 1, 6, and 7 and along the entire reach of Arroyo Hondo in Area 3.

The perennial ponds in Areas 1 and 2 provide high-quality habitat for WPT, as these ponds may contain year-round water with suitable basking sites and foraging opportunities.

Potentially suitable nesting habitat for nesting WPT occurs in upland areas surrounding these ponds. WPT may disperse across upland habitats in Areas 1 and 2. Streams in these areas also provide potential dispersal habitat for WPT when they contain water, and both seasonal ponds and pools along streams (potentially present in wet years) provide limited foraging habitat for this species. Thus, WPT may occur in upland portions of Areas 1 and 2 and along ephemeral and intermittent drainages when dispersing or nesting but are primarily expected to occur in the perennial ponds.

The section of Arroyo Hondo in Area 3 provides high-quality habitat for WPT, as this perennial stream contains many pools of varying depth suitable for foraging and rocks suitable for basking. Potentially suitable nesting habitat for WPT occurs along the banks of Arroyo Hondo within Area 3, but due to the steep, rocky terrain on the site, if WPT nest on the site, they likely do so very close to Arroyo Hondo. Similarly, WPT are unlikely to disperse along the ephemeral and intermittent streams within Area 3 due to the extremely steep terrain. Nevertheless, these streams and upland portions of Area 3 provide potential dispersal habitat for WPT when they contain water, and if pools were present along these streams in wet years, they would provide limited foraging habitat for this species. Thus, WPT may occur in the upland portions of Area 3 and along ephemeral and intermittent drainages when dispersing or nesting but are primarily expected to occur along or near Arroyo Hondo.

Based on past site surveys, and a review of aerial topography, no major barriers or substantial impediments to dispersal occur between the ponds in Areas 1 and 2 and the surrounding areas or between Arroyo Hondo in Area 3 and the surrounding areas. Thus, WPT have the potential to occur anywhere on the Preserve and to disperse between nearby populations and the Preserve.

Because WPT are known to occur on the Preserve, the Project has the potential to impact WPT. If individuals are present in work areas, injury or mortality could result. While potential impacts from habitat loss or individual mortality could occur during Project activities, these are intended to maintain, and, where possible, improve the conservation values of the Preserve. Road and grazing infrastructure maintenance, invasive species management, and monitoring, are essential management activities to maintain the conditions that support biological resources on the Preserve. Construction of site improvements would provide an overall localized benefit by repairing erosion problems on roads and drainages, thus reducing sedimentation and improving water quality and habitat conditions.

To be consistent with the VHP, the Project would adhere to the conditions discussed in Section 2 of this document. Compliance with those conditions and implementation of BMP's BI-1 through BI-6, AMM BI-1, and AMM BI-2 would minimize effects to WPT. In addition, WPT observations would be tracked in the annual monitoring reports to add to the knowledge of WPT use of and occurrences on the Preserve. This information would help inform management activities on the Preserve to avoid WPT. Nevertheless, impacts would be significant because the Project could have a substantial adverse effect, either directly or through habitat modifications, on WPT because refugia used by WPT could be impacted. Implementation of Mitigation Measure BI-1 and BI-3 would reduce this potentially significant impact to WPT from construction and long-term operation/maintenance activities to a **less than significant level** by minimizing access impacts and avoiding WPT identified during biological surveys performed by a Qualified Biologist. As a result, potential impacts to WPT are considered **less than significant with mitigation**.

American Badger (*Taxidea taxus*). Federal Listing Status: None; State Listing Status: Species of Special Concern; VHP Status: None. TNC staff have observed American badger in Area 2 of the Preserve and this species is known to occur in the surrounding region. Suitable

foraging and denning habitats are present within the Preserve; high-quality habitat for badgers occurs in Areas 1 and 2 where expansive open grasslands and high concentration of California ground squirrels (one of the principal prey of the badger) are present.

Because American badgers have the potential to occur in the Preserve, the Project has the potential to impact badgers. However, due to their large territory size and low densities the likelihood of encountering badger while conducting Project activities is low. In addition, badger observations would be tracked in the annual monitoring reports to add to the knowledge of badger use of and occurrences on the Preserve. This information would help inform management activities on the Preserve to avoid badgers. The Project would not result in injury or mortality to badgers. As a result, potential impacts to American badger are considered **less than significant**.

Migratory Birds: The Preserve supports a number of migratory bird species protected by the Migratory Bird Treaty Act and California Department of Fish and Game code. Construction activities during site improvements and long-term maintenance activities could disturb nesting migratory birds, a substantial adverse effect which would be considered a potentially significant impact. Implementation of Mitigation Measure BI-2 (see full text below), which would require migratory bird surveys within two weeks of starting work between January 15th and August 31st and establishment of a buffer if nesting birds are discovered during the surveys, would reduce this impact to a **less than significant level with mitigation** by avoiding nesting birds identified during the biological surveys performed by a Qualified Biologist.

b) ***Less Than Significant Impact.*** Implementation of the Project would maintain and manage the Preserve in perpetuity with the stated objective to maintain habitat values and quality. However, the Project would result in minor impacts to riparian habitat and valley oak woodland and forest. Riparian habitat is considered sensitive by CDFW and valley oak woodland and forest, which is classified as vegetation type “valley oak savannah” in the LTMPs, is considered a sensitive natural community by CDFW (CDFW 2020). Site improvements may result in minor impacts to riparian habitat, such as pruning and clearing of understory vegetation, to facilitate access of equipment. However, site improvements will correct erosion issues and will result in a net ecological benefit to riparian and aquatic habitats downstream. The routine maintenance of roads for access and safety purposes may result in the minor trimming of some woody vegetation along the roads that traverse through valley oak woodland or riparian habitat. However, such minor trimming would not cause substantial adverse effects on. valley oak woodland or riparian habitat. Lastly, all trimming of woody vegetation or clearing of understory vegetation will be localized; thus, the structural diversity of sensitive habitats would not be compromised. All other long-term management tasks would have zero to minimal impacts to sensitive habitats. Although the Project will result in some impacts to sensitive habitats, these activities are considered to be very minor and ecologically beneficial for the Preserve overall. Therefore, the Project would not result in a substantial adverse impact on riparian habitat or valley oak woodland. Valley Water would comply with all applicable biological resource permits required for site improvements activities and would implement AMMs BI-1 and BI-2 for all Project activities impacting vegetation. As a result, potential impacts are considered **less than significant**.

c) ***Less than Significant Impact with Mitigation Incorporated.*** Implementation of the Project would preserve the Preserve in perpetuity with the stated objective to maintain habitat values and quality. Primarily, the Project consists of performing monitoring and management activities on the Preserve such as road maintenance, grazing infrastructure maintenance, and control of invasive weeds. These activities are not anticipated to impact jurisdictional wetlands or other waters of the U.S./State (i.e., jurisdictional waters that are not wetlands). However,

the Project includes site improvements which may impact waters of the U.S./State. Site improvements are not anticipated to impact jurisdictional wetlands because the site improvements are located at road stream crossings of first order ephemeral and intermittent streams that lack the hydrology needed to support wetlands. Site improvements may, however, result in minor impacts to other waters of the U.S./State. Minor permanent impacts to other waters of the U.S. may occur below the ordinary high-water mark from placement of fill, such as rock or retaining walls. Minor permanent impacts to other waters of the State would occur below the top of bank from placement of fill of these same materials. In these locations, temporary impacts would also occur from site preparation, re-grading, and equipment operations. In addition, where riparian habitat is present around the stream, above top of bank and within the outer riparian drip line, temporary impacts to other waters of the State would occur from equipment operations.

Project activities are, however, essential to the ecological function of stream networks, and would ultimately enhance aquatic and riparian habitats at the Project site by reducing erosion and sedimentation downstream, which would enhance the habitat in the long-term. For example, erosion issues, currently identified or foreseeable as site conditions change over time, are associated with the Preserve's existing roads, such as gullies and headcuts at stream crossings, and slump and slides along roads adjacent to steep slopes. Repairing roads to correct the drainage problems that are causing the erosion issues and remediating the impacted areas would stabilize these locations and subsequently reduce erosion downstream.

Project activities may result in minor temporary and permanent impacts to waters of the U.S./State. Due to small size of the impacts that are anticipated (i.e., hundredths of an acre per site), coupled with the ecological benefit to waters of the U.S./State, these potential adverse impacts are likely less than significant. Impacts would be minimized through implementation of BMP BI-2, AMM BI-1, and AMM BI-2. However, to be conservative, these impacts are considered to potentially result in a substantial adverse effect that would be considered a potentially significant impact. Impacts would be reduced to less than significant through Mitigation Measures BI-1, which would minimize access impacts, and Mitigation Measure B-4. Mitigation Measure B-4 calls for obtaining and complying with applicable federal and state regulatory permits, which may require Valley Water to fully compensate for impacts to jurisdictional wetlands or waters of the U.S./State. As a result, potential impacts are considered **less than significant with mitigation**.

d) ***Less than Significant Impact****.* The Project site is located within a region of important habitat connectivity for wildlife. Impacts to habitat connectivity from construction of the site improvements will be minor and temporary. Each activity area is very small, and work will last for a limited time frame. Animals moving during construction may avoid areas with temporarily high human activity and noise, but as soon as the site improvements (e.g., road repairs, etc.) have been completed, wildlife movement in any given area will return to its original condition. Furthermore, the Project will enhance the potential for movement of some species along the drainages by reducing future erosion. Lastly, the permanent protection of the Preserve will preserve habitat connectivity for wildlife. Therefore, the Project will have a **less than significant impact** on habitat connectivity and wildlife movement.

e) ***No Impact*****.** The Project is located in a rural unincorporated area in Santa Clara County, outside of city urban service areas. Therefore, local city policies or ordinances do not apply to the Project. However, county ordinances and policies do apply to the Project. Specifically, the County of Santa Clara Tree Preservation and Removal Ordinance (TPRO; County of Santa Clara 2020b) and Santa Clara County General Plan (General Plan; County of Santa Clara 1994), which protect or recommend protection of biological resources.

The TPRO states that the preservation of all trees in private and public property is necessary for the best interests of the County and its citizens in order to:

- establish and maintain the optimum amount of tree cover on public and private lands in the County;
- protect property values;
- preserve and protect aesthetic and scenic beauty;
- prevent erosion of topsoil and protect against flood hazards and the risk of landslides;
- counteract the pollutants in the air;
- protect against high winds;
- maintain the climatic balance and provide shade;
- provide habitat to a variety of wildlife species; and,
- protect valuable historical and community assets.

The purpose of the Project is to ensure the Preserve is monitored, maintained, and managed in a manner that preserves its conservation values; therefore, the purpose of the Project aligns with the purpose of the TPRO. Furthermore, the only trees that are anticipated to be removed by the Project would be trees that are irreversibly diseased, dead, or dying, substantially damaged, or hazardous. Removal of any such trees would not conflict with the TPRO because they are exempt from the ordinance and their removal would not require a permit.

The General Plan outlines a vision for Santa Clara County's future growth and development. Overall goals and objectives were created to help achieve that vision, and strategies and policies were created to help achieve those goals and objectives. Specific goals and objectives were created for "responsible resource conservation", which are related to the protection of biological resources, including wildlife, vegetation, endangered species, wildlife habitat, and corridors connecting habitat areas. Specific policies related to protection of biological resources are listed below:

- Policy C-RC 27: Habitat types and biodiversity within Santa Clara County and the region should be maintained and enhanced for their ecological, function, aesthetic, and recreational importance.
- Policy C-RC 28: The general approach to preserving and enhancing habitat and biodiversity countywide should include the following strategies:
    1. Improve current knowledge and awareness of habitats and natural areas;
    2. Protect the biological integrity of critical habitat areas;
    3. Encourage habitat restoration; and,
    4. Evaluate the effectiveness of environmental mitigations.
- Policy C-RC-29: Multi-jurisdictional coordination necessary to adequately identify, inventory, and map habitat types should be achieved at the local, regional, state, and federal levels.
- Policy C-RC 32: Land uses permitted in resource conservation areas should not be allowed to degrade the integrity of natural habitat.
- Policy C-RC 33: Linkages and corridors between habitat areas should be provided to allow for migration and otherwise compensate for the effects of habitat fragmentation.
- Policy C-RC 35: The status of various threatened and endangered species and the effectiveness of strategies and programs to preserve biodiversity should be monitored and evaluated on an ongoing basis.

- Policy C-RC 36: Specific project mitigations for the purpose of preserving habitat should be monitored for a period of time to assure the likelihood of their effectiveness.

The purpose of the Project is to ensure the Preserve is monitored, maintained, and managed in a manner that preserves its conservation values; therefore, the purpose of the Project aligns with the purpose of the General Plan's goals, objectives, strategies, and policies, that are related to the protection of biological resources.

The Project does not present conflicts with any local policies or ordinances protecting biological resources. Accordingly, there would be **no impact**.

f) ***No Impact.*** The LTMPs establish objectives, priorities, and tasks to monitor, manage, maintain, and report on aquatic, wetland, and riparian habitats under the jurisdiction of the USACE, CDFW, and RWQCB, as well as the overall conservation values within the Preserve.

The goals of the LTMPs are to:

- Meet the compensatory mitigation requirements of the Valley Water's 2002 SMP (Area 3)
- Preserve and allow the improvement of the conservation values of the Preserve
- Provide coordinated, unified management for the Preserve
- Provide feasible and effective conservation guidelines, standards, and priorities for resource management, monitoring, and adaptive management
- Be compatible with and promote cooperation among the various land owners/managers within the upper ends of the Upper Penitencia Creek and Alameda Creek watersheds (e.g., with respect to grazing regimes and invasive species control) and help ensure the survival of viable populations of sensitive species and healthy biotic communities in the area as a whole
- Provide flexibility as needed to adapt management practices in response to monitoring and field observations, and to meet revised or newly established mitigation goals for the Preserve over time

The purpose of the site improvement activities is to address erosion issues and rehabilitate Preserve infrastructure so that (a) management activities within the Project site can be performed, and (b) adverse ecological effects of erosion and siltation resulting from the existing, degraded conditions cease in the future. The Project is consistent with the goals and objectives identified in VHP. The Project does not present any conflicts with any provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other conservation plan. Accordingly, there would be **no impact**.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

BI-1: Avoid and Minimize Impacts on Native Aquatic Vertebrates
BI-2: Remove Temporary Fills
BI-3: Minimize adverse effects of pesticides on non-target species
BI-4: Choose local ecotype of native plants and appropriate erosion control seed mixes
BI-5: Avoid animal entry and entrapment
BI-6: Minimize predator-prey attraction

AVOIDANCE AND MINIMIZATION MEASURES

BI-1: Minimize Impacts to Vegetation from Clearing and Trimming
BI-2: Minimize Root Impacts to Woody Vegetation

MITIGATION MEASURES

MM BI-1: Minimize Access Impacts
MM BI-2: Avoid Impacts to Nesting Migratory Birds
MM BI-3: Avoid Impacts to Special-status Species
MM BI-4: Obtain Regulatory Permits and Compensate for Impacts to Waters of the U.S./State

MITIGATION MEASURES

MM BI-1: ***Minimize Access Impacts.*** Valley Water shall ensure that construction and operation activities associated with the Project shall utilize existing access ramps and roads. If alternative routes are necessary to avoid large mature trees, native vegetation, or other significant habitat features, temporary access points shall be constructed in a manner that minimizes impacts in accordance with the following guidelines:

1. Temporary access points shall be constructed as close to the work area as possible;
2. For channel access routes, slopes of greater than 20 percent will be avoided, if possible;
3. Any temporary fill used for access shall be removed upon completion of the Project and pre-project topography shall be restored; and,
4. When temporary access is no longer needed, disturbed areas shall be re-vegetated or filled with compacted soil, seeded, and/or stabilized with erosion control fabric immediately after construction to minimize future erosion.

MM BI-2: ***Avoid Impacts to Nesting Migratory Birds.*** Valley Water shall ensure that if construction activities occur between January 15 and August 31, Project areas shall be checked by a qualified biologist for nesting birds within two weeks of starting work. If a lapse in project-related work of two weeks or longer occurs, another focused survey will be conducted before project work can be reinitiated.

If nesting birds are found, a buffer shall be established around the nest and maintained until the young have fledged. Appropriate buffer widths are 0.5 mile for bald and golden eagles; 250 feet for other raptors and the least Bell's vireo, herons, and egrets; 25 feet for ground-nesting non-raptors; and 50 feet for non-raptors nesting on trees, shrubs and structures. A qualified biologist may identify an alternative buffer, at least equally as effective, based on a site-specific evaluation. No work within the buffer will occur without written approval from a qualified biologist, for as long as the nest is active.

The boundary of each buffer zone shall be marked with fencing, flagging, or other easily identifiable marking if work will occur immediately outside the buffer zone.

Each buffer zone shall be maintained until the nest becomes inactive, as determined by a qualified biologist.

If monitoring shows that disturbance to actively nesting birds is occurring, the biologist will require increased buffer widths until monitoring shows that disturbance is no longer occurring. If this is not possible, work shall cease in the

area until young have fledged and the nest is no longer active as determined by a qualified biologist.

MM BI-3: ***Avoid Impacts to Special-status Species.*** *Valley Water shall ensure that* all construction activities shall be assessed by a qualified biologist to determine if there is possibility for the activities to impact special-status species, such as CTS, CRLF, and FYLF. If the qualified biologist determines there is a possibility the activities could impact special-status species, a qualified biologist will conduct biological surveys ahead of the work to determine if special-status species are present. This would include visual encounter surveys in suitable habitat, including inspection of mammal burrows with burrow probe cameras if burrows were present in the work areas that could be impacted.

If special-status species are found, an appropriate buffer zone would be put in place to avoid the area where the species is present and/or a qualified biologist would monitor the work to assure the species are not impacted by the work.

The boundary of each buffer zone shall be marked with fencing, flagging, or other easily identifiable marking if work will occur immediately outside the buffer zone.

Each buffer zone shall be maintained until the species is no longer present, as determined by a qualified biologist.

If monitoring shows that disturbance to special-status species is occurring, the biologist will require increased buffer widths until monitoring shows that disturbance is no longer occurring. If this is not possible, work shall cease in the area until a qualified biologist determines that the special-status species are no longer present.

This mitigation measure aligns with and goes beyond VHP Condition 1, which requires the avoidance of impacts to legally protected species. In addition to avoiding direct impacts to legally protected species, this mitigation measure requires avoidance of impacts to special-status species that are not legally protected (e.g., California Species of Special Concern).

MM BI-4: ***Obtain Regulatory Permits and Compensate for Impacts to Waters of the U.S./State.*** For discharges to jurisdictional waters of the U.S./State, Valley Water will seek applicable regulatory permits from USACE (Section 404 permit), the San Francisco RWQCB (401 and/or WDR), and CDFW (LSAA). If required by regulatory permits, Valley Water shall develop an aquatic resource mitigation plan, subject to approval by the appropriate regulatory agencies, to fully compensate for Project impacts to waters of the U.S./State. Valley Water shall be responsible for the funding of the compensatory mitigation and compliance with the agency-approved plan. Compensatory mitigation may include one or more of the following options:

1. Payment of VHP fees prior to the start of construction;
2. Habitat preservation, creation, enhancement, and/or restoration; and,
3. Purchase of mitigation credits from an agency-approved mitigation bank prior to the start of construction.

5. CULTURAL RESOURCES

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

Discussion

a – c) ***Less than Significant Impact.*** A preliminary cultural resources assessment for the Preserve was conducted in February and March 2020 by Pacific Legacy. The assessment included an archival and records search, outreach to the Native American Heritage Commission (NAHC) and local Native American tribal representatives, and an examination of existing geoarchaeological sensitivity data for the Project site. The archival and record search revealed that no cultural resources have been previously recorded within the Project area, though one prehistoric archeological site has been recorded within a 0.25-mile radius. Contact with the NAHC revealed that no Native American cultural resources listed in the Sacred Lands Files have been reported in the Project area. An examination of the geoarchaeological sensitive data indicates that buried cultural resource potential within the Project area ranges from very low to high, with areas surrounding drainages and springs characterized as most sensitive. Although the Preserve has a moderate potential to contain prehistoric resources, none were identified in the investigations conducted by Pacific Legacy (Pacific Legacy 2020).

The objectives of the LTMPs are to preserve the existing character of the Project site. The Project only involves minor ground disturbance activities. Based on the limited nature of the work and the moderate potential that archaeological resources are located within the Preserve or in the vicinity, there is a low probability of uncovering cultural resources during site improvements and long-term maintenance activities at the Project site. There is a low probability that site improvements could result in the disturbance of previously undiscovered archaeological or historic resources that are CEQA defined “historical resources,” unique archaeological resources, or human remains interred outside of a formal cemetery, because the site improvements are located in previously disturbed areas (e.g., along roadways and at failing retaining walls). There is a low probability that other activities such as road improvements or invasive plant removal could also disturb undiscovered cultural resources that may be present within the Project area because the roads are previously disturbed and the invasive plant removal activities (e.g., herbicide application and grazing) do not include excavation.

In the event that unknown potential cultural resources are encountered during Project activities, Valley Water would implement AMM CU-1, which would require that work at the location of the find will be halted immediately within 100 feet of the find and a “no work” zone shall be established utilizing appropriate flagging to delineate the boundary of this zone. A consulting archaeologist would visit the discovery site as soon as practicable for identification and evaluation pursuant to Public Resources Code § 21083.2 and CEQA Guidelines § 15126.4. If the archaeologist determines that the artifact is not significant, the archaeologist will determine if the artifact or resource can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours

an action plan which will include provisions to minimize impacts and, if required, a data recovery plan for recovery of artifacts in accordance with Public Resources Code § 21083.2 and CEQA Guidelines § 15126.4. If a tribal cultural resource cannot be avoided, the action plan will include notification of the appropriate Native American Tribe, and consultation with the tribe regarding acceptable recovery options. If burial finds are accidently discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified, and the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent. No further excavation or disturbance within 100 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California NAHC, and/or the County Coordinator of Indian Affairs. Furthermore, Valley Water would implement AMM CU-2, which would require pedestrian surveys be conducted in locations with major excavation activities (not anticipated) that could result in impacts to cultural resources. If cultural resources were identified during the pedestrian survey, this would trigger the implementation of AMM CU-1.

Based on the above analysis, the Project impacts to cultural resources would be **less than significant** because the Project would not cause a substantial adverse change in a CEQA-defined “historical resource” or a unique archaeological resource, and would not disturb any human remains.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

AMM CU-1: Accidental Discovery of Archeological Artifacts, Tribal Cultural Resources, or Burial Remains
AMM CU-2: Conduct Pedestrian Surveys for Major Excavation Activities

MITIGATION MEASURES

No mitigation measures are required.

6. ENERGY

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

ENVIRONMENTAL SETTING

California's energy system includes electricity, natural gas, and petroleum. According to the California Energy Commission, California's energy system generates 71 percent of the electricity, 10 percent of the natural gas, and 31 percent of the petroleum consumed or used in the state. The rest of the state's energy and energy sources are imported, and includes electricity from the Pacific Northwest and the Southwest; natural gas purchases from Canada, the Rocky Mountain states, and the southwest; and petroleum imported from Alaska and foreign sources (CEC 2019a; 2019b; and 2019c). Implementation of the Project would require the use of transportation fuels, primarily in the form of gasoline and diesel.

Discussion

a) ***Less than Significant.*** This purpose of the Project is to monitor, maintain, and manage the Preserve in a manner that preserves its conservation values in perpetuity. The Project would not use excessive amounts of fuel (i.e., gasoline and diesel fuel) that would constitute wasteful, inefficient, or unnecessary consumption of energy. Only the required amount of fuel necessary to complete the proposed work would be used. Therefore, the Project would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources. As a result, the Project would result in a **less than significant impact** to energy resources.

b) ***No Impact.*** The Project would not include the development. Although demolition of an existing ranch house was described in the LTMP, it is unlikely demolition of the existing ranch house would occur. Therefore, no impact related to compliance with applicable energy and energy efficiency/conservation standards or codes, such as the California Building Standards or California Energy Code, would result. In addition, given the nature of the Project, it would have **no impact** related to conflicting with or obstructing California's Renewable Portfolio Standard, or other state or local plans for renewable energy.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

7. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Regulatory Setting

The Alquist-Priolo Earthquake Fault Zoning (AP) Act was passed into law following the destructive San Fernando earthquake in 1971. The AP Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the AP Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The Project is not located within the State Alquist Priolo Special Studies Zone (CDC 2018).

Regional Geologic Setting

The San Francisco Bay region is one of the most seismically active areas in North America and is dominated by the San Andreas Fault system. This fault system's movement is distributed across a complex system of generally strike-slip right-lateral parallel and sub-parallel faults

including San Andreas, San Gregorio, Hayward, and Calaveras. A major earthquake at any of these sites could produce a strong ground shaking in the Project area.

Liquefaction – Liquefaction is the transformation of saturated, loose, fine grained sediment to a fluid-like state because of earthquake shaking or other rapid loading. Soils most susceptible to liquefaction are loose to medium dense, saturated sands, silty sands, sandy silts, non-plastic silts, and gravels with poor drainage, or those capped by or containing seams of impermeable sediment. According to the liquefaction hazard maps prepared for the United States Geological Survey, there is no liquefaction probability in the Project area for a magnitude 6.7 Hayward Fault earthquake or magnitude 6.9 Calaveras Fault earthquake (Holzer et al. 2009).

Alquist-Priolo Fault Zone – The Project site is not located within the State-designated Alquist-Priolo Earthquake Fault Zone, where site-specific studies addressing the potential for surface fault rupture are required, and no known active faults traverse the site. The nearest Alquist-Priolo Earthquake Fault Zones are associated with the Calaveras Zone, which is located approximately 1.2 miles southwest of the Project site. The closest fault to the Preserve is the Calaveras (CDC 2018).

Seismicity - The Project site and the entire San Francisco Bay Area is in a seismically active region subject to strong seismic ground shaking. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. The extent of ground-shaking is determined by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions.

Soils – As discussed in Appendices A and B, the Preserve is underlain by four soil types within the Gaviota Series and Los Gatos-Gaviota Complex: (1) Gaviota loam 30 to 75 percent slopes; (2) Gaviota gravelly loam 30 to 75 percent slopes, severely eroded; (3) Gaviota-Los Gatos complex, 30 to 75 percent slopes; and (4) Los Gatos-Gaviota complex, 50 to 75 percent slopes. Soil Type Maps for the Preserve are provided in Figure 4 of Appendices A and B. These soils are derived from hard sandstone and shale from the Franciscan formation and younger (Miocene age) marine sediments. The Gaviota series consists of shallow soils that are well-drained and somewhat excessively drained, moderately to severely eroded, low fertility, and may be subject to burning. Serpentine soil inclusions of the Henneke series are common throughout, in addition to inclusions of the Los Gatos and Vallecitos series. Soil complexes on the Preserve generally include the Gaviota series on ridges and south-facing slopes, and soils within the Los Gatos series on north-facing slopes. The Los Gatos-Gaviota complex generally includes soils within the Gaviota series on ridges and south-facing slopes, as well as soils within the Los Gatos series on north-facing slopes. The Los Gatos series is well-drained, subject to sheet erosion, and moderately fertile. The complex may also include small areas of Vallecitos rocky loam, Los Osos clay loam, and Altamont clay. Rock outcrops and talus are also scattered across the Preserve, and much of what underlies the eastern-facing slope down to Arroyo Hondo is unstable mélange, an assortment of rock fragments of all sizes that have been arranged by earth flow landslides.

Paleontological Resources

The University of California Museum of Paleontology (UCMP) database was searched for fossil locations in Santa Clara County. The results of the UCMP record search identified numerous fossil sites in Late Jurassic to Late Cretaceous age deposits in Santa Clara County but, the Project site is not known to contain paleontological resources. Fossils of comparable age have also been recovered from the Franciscan Complex, which is located within the Project site. According to the Geologic Map of Mount Day 15-Minute Quadrangle, California, the Project area is Franciscan Complex formation. The geologic formation that underlies the Project area shows that the region is classified as consisting of Qa surficial sediments (alluvial gravel and sand of small valleys and stream channels) and Qls landslide debris (landslide rubble) (Dibblee & Minch 2006). The Franciscan Complex formation consists of deformed and metamorphosed sedimentary and volcanic rocks containing fossils. However, no paleontological resources have been identified within the Preserve.

Discussion

a-i) ***No Impact*.** Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. The Project site is located outside of the limits of the State Alquist-Priolo Special Studies Zone (CDC 2018). According to the County Geologic Hazard Zones, the Project site is located more than four miles from a fault rupture hazard zone. In addition, no housing or structures are proposed to be located on the Project site. The Preserve is located approximately 1.2 miles northeast of the Calaveras fault zone. Therefore, the Project would result in **no impact** from a fault rupture.

a-ii) ***Less than Significant Impact***. The major faults in the region that could cause ground shaking within the Project area include the Calaveras fault, Hayward fault, and the San Andreas, which are located 1.2 miles, 6.2 miles, and 23.1 miles from the Preserve, respectively. Although, seismic shaking may occur within the Project area, implementation of the Project would not be significantly impacted by seismic shaking. Project construction and workers are unlikely be affected by strong ground shaking based on the distance to the nearest faults. Therefore, this is considered to be a **less than significant impact**.

a-iii) ***No Impact*.** According to Holzer et al. (2009), there is no probability of liquefaction occurring within the Project area as a result of a magnitude 6.9 earthquake on the Calaveras Fault and magnitude 6.7 earthquake Hayward Fault. No structures are proposed within the Project vicinity. Therefore, the Project would have **no impact** associated with seismic-related ground failure, including liquefaction.

a-iv) ***No Impact*.** The topography of the Project area consists of steeply sloping hillsides of Poverty Ridge. Elevations of Areas 1 and 2 range from approximately 1900 feet National Geodetic Vertical Datum (NGVD) 29 along Upper Penitencia Creek to 3100 feet NGVD 29 on the northern border of Area 1 atop Poverty Ridge. Elevations of Area 3 range from approximately 1400 feet NGVD 29 along Arroyo Hondo to 2900 feet NGVD 29 in the southwest corner of Area 3. The Preserve is located within a landslide hazard zone. However, no structures are proposed within the Project site. Implementation of the Project would not expose people or structures to substantial adverse effects from landslides. Therefore, the Project would result in **no impact** from landslides.

b) ***Less than Significant Impact*.** Implementation of the Project may destabilize the soil and temporary increase the erosion potential from water and wind. The Project would implement Valley Water Hydrology and Water Quality BMPs including: WQ-1 (Conduct Work from Top of Bank); WQ-2 (Evaluate Use of Wheel and Track Mounted Vehicles in Stream Bottoms); WQ-3 (Limit Impacts from Staging and Stockpiling of Materials) and WQ-4 (Stabilize Construction and Entrances and Exits), which requires implementation of measures to minimize soil from being tracked near work sites; WQ-5 (Use Seeding for Erosion Control, Weed Suppression, and Site Improvement); WQ-7 (Maintain Clean Conditions at Work Sites), which requires that the work sites and access roads are maintained in an orderly condition; and WQ-8 (Prevent Water Pollution), which requires oily, greasy, or sediment laden substances or other material that originates from Project operations to not be allowed to enter or be placed where it may enter a waterway. Therefore, the Project would have a **less than significant impact** on soil erosion and the loss of topsoil.

c) ***No Impact*.** According to the Soil Survey of Santa Clara County, the Project site is not located on a soil that is considered unstable or would become unstable with implementation of the Project. Therefore, the Project would result in **no impact**.

d) ***No Impact*.** Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. Expansive soils are common throughout California and can cause damage unless properly treated during construction. According to the Santa

Clara County Soil Survey, site soils consist of well-drained, shallow to deep gravelly loams. No expansive clay soils are known to occur within the Project area. In addition, the Project does not propose the construction of any permanent structures that would be impacted by expansive soils. Therefore, there would be **no impact** associated with expansive soils.

e) ***No Impact*.** The Project does not include the installation of septic tanks or alternative wastewater disposal systems. Therefore, the Project would not result in soils incapable of adequately supporting the use of septic tanks or other wastewater disposal systems and would result in **no impact** from the Project.

f) ***Less than Significant Impact.*** According to the UCMP database search, the Project site is not known to contain paleontological resources. The Project site is underlain by the Franciscan Complex formation. The Franciscan Complex formation consists of deformed and metamorphosed sedimentary and volcanic rocks containing fossils. The geologic features of the Preserve are common throughout the region and are not considered to be unique. Ground disturbance associated with the Project would be limited to shallow and minor excavation. The Project would be unlikely to affect any paleontological resources. Therefore, the Project would result in **less than significant impact** to paleontological resources.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

WQ-1: Conduct Work from Top of Bank
WQ-2: Evaluate Use of Wheel and Track Mounted Vehicles in Stream Bottoms
WQ-3: Limit Impacts of from Staging and Stockpiling of Materials
WQ-4: Stabilize Construction Entrances and Exits
WQ-5: Use Seeding for Erosion Control, Weed Suppression, and Site Improvement
WQ-7: Maintain Clean Conditions at Work Sites
WQ-8: Prevent Water Pollution

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures required.

8. GREENHOUSE GAS EMISSIONS

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

ENVIRONMENTAL SETTING

Regulatory Setting

Executive Orders

Executive Orders (EOs) related to GHG reduction include the following:

- EO S-03-05: Set GHG-reduction targets for 2010 (2000 emission levels), 2020 (1990 emission levels) and 2050 (80 percent below 1990 levels).
- EO S-30-15: Set a GHG reduction target for 2030 (40 percent below 1990 levels).
- EO B-55-18: Set a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.

Assembly Bill 32

The California State Legislature adopted Assembly Bill (AB) 32 in 2006. AB 32 focuses on reducing greenhouse gases (GHGs; carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, California Air Resources Board (CARB) adopted the Climate Change Scoping Plan (Scoping Plan) in 2008 (CARB 2008), which outlines actions recommended to attain that goal.

SB 32

Enacted in 2016, Senate Bill (SB) 32 (Pavley 2016) requires CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. The 2017 Scoping Plan sets forth the state's current strategy to achieving SB 32's GHG reduction target of 40% below 1990 levels by 2030, and sets a pathway towards achieving EO S-3-05's ambitious 2050 GHG reduction goal of 80% below 1990 levels. The 2017 Scoping Plan integrates various CARB regulations and strategies, including the Cap-and-Trade program, the Low Carbon Fuel Standard, the Mobile Source Strategy, and the Short-Lived Climate Pollutant Strategy.

Bay Area Air Quality Management District

The BAAQMD has not adopted significance thresholds for construction related GHG emissions. However, the BAAQMD has included in its CEQA Guidelines stationary and operational-related thresholds for the emission of GHG shown in **Table 5-1.**

Table 5-1. BAAQMD Greenhouse Gas Thresholds of Significance

Project Type	Construction-Related	Operational-Related[3]
Projects other than Stationary Sources[1]	None	Compliance with Qualified GHG Reduction Strategy or 1,100 MT of CO_2e/yr. or 4.6 MT of CO_2e/SP^2/yr. (residents+employees)
Stationary Sources[1]	None	10,000 MT of CO_2e/yr.

Notes:

1. According to the BAAQMD CEQA Guidelines, a stationary source project is one that includes land uses that would accommodate processes and equipment that emits GHG emissions and would require a BAAQMD permit to operate. projects other than stationary sources are land use development projects including residential, commercial, industrial, and public uses that do not require a BAAQMD permit to operate.
2. SP = service population (residents + employees)
3. If annual emissions of operational-related GHGs exceed these levels, the Project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

Source: BAAQMD, CEQA Air Quality Guidelines, May 2017

a) ***Less than Significant Impact*****.** Implementation of the Project would preserve the property as an open space in perpetuity. Implementation of the Project would result in short-term construction emissions.

Minor construction activities associated with the site improvements would produce combustion emissions from various sources. During the construction of the site improvements, GHGs would be emitted through the operation of construction equipment and from workers and vendor vehicles, each of which typically use fossil-based fuel to operate. The combination of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Exhaust emissions from site improvements would be short-term and would have a less than significant impact to GHGs.

The BAAQMD does not have adopted thresholds of significance for construction related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction in relation to meeting AB 32 GHG reduction goals. Because construction activities would be minor and short term, they were not quantified, but they would not interfere with meeting GHG reduction goals and would be well below the BAAQMD operational emissions threshold of 1,100 MT CO_2e/year.

The Project would not generate a significant amount of operational emissions as maintenance activities would consist of annual monitoring of existing infrastructure and biological resources, livestock grazing, vegetation management, infrastructure maintenance, and routine road repair. Emissions would be well below the BAAQMD operational emissions threshold of 1,100 MT CO2e/year.

Further, construction and operations GHG emissions would be reduced because the Project would implement BMP AQ-1, which would reduce equipment idling time, ensure equipment is operating properly, and ensure the use of cleaner engines. Based on the above analysis, the impact from construction and operations GHG emissions would be **less than significant**.

b) ***No Impact.*** The Project site is located in unincorporated Santa Clara County. The County of Santa Clara adopted the Climate Action Plan (CAP) in September 2009 (County of Santa Clara 2009). Project construction-related emissions would be minor and short-term. Project

operations would not generate a significant amount of emissions as maintenance activities would consist of annual monitoring, routine road repair, and vegetation management. The County of Santa Clara's Santa Clara County General Plan for Unincorporated Areas and CAP do not set forth any construction-related guidelines for projects that do not involve the construction of buildings. The Project would not conflict with the Santa Clara County General Plan for unincorporated areas or the CAP.

Executive Orders. Because the Project's GHG emissions are minor, they would not interfere with the state's ability to achieve emissions reductions called for in EO 3-3-05, EO S-30-15, and EO B-55-18

2017 Scoping Plan. The 2017 Scoping Plan contains a variety of strategies to reduce the state's emissions. The Scoping Plan strategies are not directly applicable to the Project as the Project is intended to monitor, maintain, and manage the Preserve in a manner that preserves its conservation values. Implementation of the Project consists of annual monitoring of biological resources and infrastructure, livestock grazing, vegetation management, infrastructure maintenance, minor site improvements, and routine road maintenance. Since no strategies are directly applicable to the Project, and because the Project's minor GHG emission would not conflict with the state's ability to achieve the SB 32 emission reduction target, implementation of the Project would not conflict with the 2017 Scoping Plan.

Because the Project would not conflict with the County of Santa Clara General Plan, CAP, Executive Orders, and the 2017 Scoping Plan, there would be **no impact** related to conflicts with an applicable GHG reduction plan, policy or regulation.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

AQ-1: Use Dust Control Measures

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, storage or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Discussion

a) ***Less than Significant Impact*.** The Project consists of implementation of the LTMPs and additional minor site improvements. The Project would bring vehicles and construction equipment to the Preserve. No hazardous materials other than minimal quantities of fuels, coolants, and lubricants, would be used for the construction activities. The inclusion of Valley Water's BMPs HM-7 to HM-10 would ensure potential for the release of hazardous materials from routine use and accidental spills and/or leaks during construction is **less than significant**.

Implementation of the Project would involve future activities that may require the use of construction equipment and vehicles. The BMPs discussed above would apply to all future construction efforts associated with the implementation of the Project. Additionally, Element C of the LTMPs identifies management of non-native invasive vegetation. Aspects of non-native vegetation may involve use of herbicides for the management and control of invasive species on the Preserve. As shown in Table 2-2: Best Management Practices, BMP's HM-1 through HM-6 would be implemented to minimize potential effects from herbicide use. As a result, the potential risk from use of herbicide for management of non-native vegetation is considered a **less than significant impact**.

b) ***Less than Significant Impact*.** As described in response (a) above, implementation of the Project would not require routine use of hazardous materials other than the use of limited

quantities of ordinary equipment fuels and fluids, and small amounts of herbicide for invasive plant control. These materials would not be used in sufficient quantities to pose a substantial threat to human or environmental health due to accident conditions. Such materials would be kept at construction staging areas or offsite with maintenance crews and would be secured when not in use. As described in response (a) above, in order to avoid or minimize potential of accidental release of hazardous materials, Valley Water would implement BMP HM-5 (Comply with Restrictions on Herbicide Use in Upland Areas), BMP HM-6 (Comply with Restriction on Herbicide Use in Aquatic Areas), BMP HM-7 (Restrict Vehicle and Equipment Cleaning to Appropriate Locations), HM-8 (Ensure Proper Vehicle and Equipment Fueling and Maintenance), BMP HM-9 (Ensure Proper Hazardous Materials Management), and BMP HM-10 (Utilize Spill Prevention Measures). In the unlikely event of a spill, fuels and or herbicides would be controlled and disposed of in accordance with applicable regulations. Therefore, the Project would not create a significant hazard to the public or environment due to upsets or accidents. This impact is considered **less than significant**.

c) ***No Impact*.** The Preserve is not located within a quarter mile radius of an existing or proposed school. Therefore, the Project would not emit hazardous emissions or hazardous substances within a quarter mile of a school, which would result in **no impact**.

d) ***No Impact*.** According to the Department of Toxic Substances and Control's EnviroStor database, there are no hazardous material sites located on the Project site or in the Project vicinity (DTSC 2019), including sites complied pursuant to Government Code section 65962.5. Therefore, implementation of the Project would not result in any hazardous materials impacts related to hazardous material sites, which would result in **no impact**.

e) ***No Impact*.** The nearest airport to the Project site is the Reid-Hillview Airport, which is located approximately 6.4 miles to the southwest. According to the Comprehensive Plan for the Reid-Hillview Airport (SCCALUC 2011), the Project area is outside of the Airport Influence Area and would not result in a safety hazard to people working within the Project area. Therefore, the Project would not result in a substantial safety hazard for people residing or working in the Project site, which would result in **no impact.**

f) ***No Impact*.** According to the County of Santa Clara Emergency Operations Plan (County of Santa Clara 2017), there are no designated emergency evacuation routes within the Project site. Implementation of the Project would preserve the existing open space character of the area and would not result in construction of new buildings of facilities. Implementation of the Project would not impair implementation of, or physically interfere with an adopted emergency plan or emergency evacuation plan. The implementation of the Project would not impede emergency access to the Project vicinity and/or surrounding area. Therefore, there would be **no impact**.

g) ***Less than Significant Impact*.** The Project site is comprised of open space with very minimal infrastructure (e.g., fencing, roads). Implementation of the Project would protect the open space designation of the property in perpetuity ensuring that no residential development would occur within the Project site. Per the California Department of Forestry and Fire Protection maps of Very High Fire Hazard Severity Zones for Santa Clara County, the Preserve is located within the high fire hazard severity zone (CalFire 2007). However, the Project would implement Valley Water BMP HM-11 (Incorporate Fire Prevention Measures), which requires that equipment be equipped with spark arrestors, fire suppression equipment is available to the workers, and that smoking is prohibited in order to prevent surrounding vegetation from igniting during construction activities. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, which would be considered a **less than significant impact**.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

HM-1: Comply with All Pesticides Application Restrictions and Policies

HM-2: Minimize the Use of Pesticides
HM-3: Post Areas Where Pesticides Will Be Used
HM-4: Comply with All Pesticides Usage Requirements
HM-5: Comply with Restrictions on Herbicide Use in Upland Areas
HM-6: Comply with Restriction on Herbicide Use in Aquatic Areas
HM-7: Restrict Vehicle and Equipment Cleaning to Appropriate Locations
HM-8: Ensure Proper Vehicle and Equipment Fueling and Maintenance
HM-9: Ensure Proper Hazardous Materials Management
HM-10: Utilize Spill Prevention Measures
HM-11: Incorporate Fire Prevention Measures

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

10. HYDROLOGY AND WATER QUALITY

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

ENVIRONMENTAL SETTING

Discussion

a) ***Less than Significant Impact*****.** The Project description identifies some areas requiring improvement of existing roads for the Preserve. This includes general road maintenance away from stream crossings as well as site improvements at stream crossings. The site improvements are located at stream crossings of first order streams, the smallest type of stream. Three of these streams are ephemeral, so they only flow for short periods immediately after rains and are dry most of the year. One of the streams is intermittent, so it flows seasonally in the wet season but ceases flows during dry periods. All road and site improvements would occur in the dry season and would repair sites that have existing erosion

damage, resulting in improvements to surface water quality within the Preserve. For road maintenance activities, roads would be out-sloped where appropriate or otherwise graded to facilitate sheet flow into adjacent vegetation and minimize the concentration of water and formation of rills and gullies. For site improvements at stream crossings, failing infrastructure (e.g., retaining walls) and/or erosion issues would be remediated (See Section 2: Project Description).

Activities required to complete the Project, including minor grading, have the potential to expose soils to erosion from runoff. Erosion and sediment control BMPs WQ-1 through WQ-8 as noted in Table 2-2: Best Management Practices, would be implemented to protect water quality. These include BMPs associated with sediment handling, erosion prevention, control of discharges, site management, and clean up. Implementation of these BMPs would minimize the potential effects to water quality. As a result, the potential impacts to water quality from these activities are considered to be a **less than significant impact** because water quality standards would not be violated and surface water quality would not be substantially degraded.

Cattle grazing is one of the primary management tools to ensure the Preserve is managed in a manner that preserves its conservation values. Therefore, there is a potential for cattle manure runoff or cattle related erosion to impact water quality. However, the Preserve has a limit of a maximum of 50 AU of cattle spread on an over 1700-acre area, so any impacts to water quality from grazing would be minimal. In addition, the LTMPs require annual monitoring for adverse conditions related to livestock grazing, such as inappropriate livestock use of the watershed, which could lead to increased runoff and erosion, and intrusion by cattle into sensitive areas. In addition to the annual grazing monitoring, annual qualitative monitoring would be conducted to assess the conditions of streams, springs, ponds, and associated wetlands within the Preserve. If habitat conditions are determined to be degrading (e.g., from cattle manure runoff or cattle related erosion), adaptive management activities (e.g., cattle exclusion) would be triggered to remediate the issue. As a result, the potential impacts to water quality from these activities are considered to be a **less than significant impact** because water quality standards would not be violated and surface water quality would not be substantially degraded.

Overall, implementation of the Project would preserve the existing open space character of the Project site in perpetuity. Management objectives identified in the LTMPs would maintain or improve the overall habitat quality of the Preserve. Objectives identified in the LTMPs allow for improvements to existing infrastructure associated with cattle grazing, invasive plant control and monitoring, infrastructure and road maintenance, and habitat monitoring and improvements. The LTMPs identify restrictions, constraints, and requirements associated with the implementation of management objectives on the Preserve. Because the overall purpose of the LTMPs is to ensure that the property is monitored, maintained, and managed in a manner that preserves the conservation values in perpetuity, future activities undertaken to meet the plan objectives would consider avoidance and minimization of potential environmental impacts, including potential impacts to water quality (e.g., adaptive management to prevent erosion on existing roadways). Therefore, for the purposes of this analysis, future actions associated with the implementation of the objectives of the LTMPs would not violate any water quality standards of otherwise substantially degrade surface or groundwater quality and the Project would have a **less than significant impact**.

b) ***No Impact.*** Implementation of the LTMPs would not result in the depletion of groundwater supplies or interfere with movement of groundwater. No substantial subsurface work would be completed as part of the implementation of the Project. Therefore, the Project would have **no impact** on groundwater supplies or recharge in the area.

c-i) ***Less than Significant Impact.*** Implementation of the Project would not substantially alter existing drainage patterns, and would not result in substantial erosion or siltation on- or off-site. The Project would include the installation of rock to remediate erosion issues along roadways and at stream crossings. As a result, the Project would increase the amount of impervious surface area. However, the increase of impervious surface areas is considered minor, and would be done to remediate erosion issues and reduce downstream sedimentation, resulting in improvement to surface water quality within the Preserve and downstream areas.

The Project would repair existing roads, manage invasive vegetation, maintain existing grazing infrastructure, and repair eroded banks. Erosion impacts would be minimized by implementation of BMPS WQ-1 through WQ-8. Therefore, the Project would have a **less than significant impact** because it would not result in a substantial erosion or siltation on- or off-site**.**

c-ii) ***Less than Significant Impact.*** The Project would not substantially alter existing drainage patterns. The Project would include the installation of rock to remediate erosion issues along roadways and at stream crossings. As a result, the Project would increase the amount of impervious surface area. However, the increase of impervious surface areas is considered minor, and would be done to remediate erosion issues and reduce downstream sedimentation, resulting in improvement to surface water quality within the Preserve.

The Project would repair existing dirt roads, manage invasive vegetation, maintain existing grazing infrastructure, and repair eroded banks. Therefore, no increase in the amount of surface runoff would occur, and the Project would result in a **less than significant impact** because it would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

c-iii) ***No Impact.*** See response to C-ii above. No increase in storm water runoff would occur as a result of the Project. **No impact** to the capacity of existing or planned stormwater drainage systems, or polluted runoff, would occur.

c-iv) ***No Impact.*** See response to C-ii above. The Project would not impede or redirect flood flows. **No impact** would occur.

d) ***No Impact.*** Based on the distance of the Project area from the San Francisco Bay and the topography, the Project area would not be exposed to inundation by seiche, tsunami or mudflow. According to the California Department of Conservation Tsunami Inundation Maps (CDC 2009), the Project area is not located in a tsunami inundation zone. The Project sites are not located in a flood hazard zone (FEMA 2009). Therefore, **no impact** associated with flood hazards, tsunamis, or seiches would occur.

f) ***No Impact*****.** The Project would repair existing roads, manage invasive vegetation, maintain existing grazing infrastructures, and repair stream crossings. Because it would not substantially affect water quality, the Project would not conflict with either the San Francisco Bay Basin Water Quality Control Plan (RWQB 2015) or the Groundwater Management Plan for the Santa Clara Subbasin (Valley Water 2016b). **No impact** would occur.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

WQ-1: Conduct Work from Top of Bank
WQ-2: Evaluate Use of Wheel and Track Mounted Vehicles in Stream Bottoms
WQ-3: Limit Impacts from Staging and Stockpiling
WQ-4: Stabilize Constructions Entrances and Exits
WQ-5: Use Seeding for Erosion Control, Weed Suppression, and Site Improvement
WQ-6: Prevent Scour Downstream of Sediment Removal
WQ-7: Maintain Clean Conditions at Work Sites

WQ-8: Prevent Water Pollution

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

11. LAND USE AND PLANNING

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

Discussion

a) ***No Impact.*** The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and an outlying area. The Project area is located in an undeveloped area in unincorporated Santa Clara County. Implementation of the Project would rehabilitate existing roads, repair existing grazing infrastructure, monitor streams and ponds, and remove invasive vegetation. As such, the Project would not divide an established community and would have **no impact**.

b) ***No Impact*****.** The Project would not permanently change the existing land use within the Project area or result in the development of land uses that would be incompatible with surrounding land uses. Implementation of the Project would remove invasive vegetation, monitor streams and ponds, rehabilitate roads, and implement a livestock grazing strategy. Existing land uses would remain unchanged and the post-project conditions would not conflict with existing or future designated uses of surrounding land uses, or the Santa Clara County General Plan. Therefore, the Project would result in **no impact**.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

12. MINERAL RESOURCES

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

Discussion

a) ***No Impact*.** Since the Project area does not contain any mineral resources, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state within the Project area. Therefore, the Project would have **no impact** on mineral resources.

b) ***No Impact*.** Since the Project area does not contain any mineral resources, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan within the Project area. Therefore, the Project would have **no impact** on mineral resources.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

13. NOISE

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

ENVIRONMENTAL SETTING

The Project site is located in a large open space area and there are no residential areas or schools within the Project vicinity. The nearest residential use is located approximately three miles west of the Project. There are no existing noise sources within the Project site.

Discussion

a) ***Less Than Significant Impact*.** The Project area is largely open space and there are no residential areas or schools within the Project vicinity. The nearest residential use is located approximately three miles west of the Project. In addition, there are no existing noise sources within the Project site. Implementation of the Project would therefore not result in the exposure of sensitive receptors to excessive noise in violation with any established noise standards. Implementation of the Project would not result in a substantial increase in ambient noise levels.

Implementation of the Project may result in minor temporary increases in ambient noise levels on the Preserve from the operation of equipment. Equipment noise associated with the site improvements would only occur Monday through Friday during work hours. Additionally, the operation of construction equipment would not be audible to the nearest sensitive receptors to the Project site, which are located approximately three miles west of the Project site.

Noise generated by construction equipment, which would include a tractor, excavator, and off-road trucks, which can reach high levels. According to the Federal Highway Administration Construction Noise Handbook (FHA 2006), individual equipment noise levels range from approximately 75 to 90 decibels of the A-weighted scale (dBA) at 50 feet. Depending on the activities performed and equipment usage requirements, average hourly noise levels at construction sites typically range from approximately 65 to 89 dBA equivalent continuous sound level (L_{eq}). Assuming a maximum construction noise level of 89 dBA L_{eq} and an average attenuation rate of 6 dBA per doubling distance from the source, construction activities located within 500 feet of noise sensitive uses could reach 60 dBA L_{eq}. As the nearest sensitive

receptor is located approximately three miles west of the Preserve, the Project would have **less than significant impact** on sensitive receptors in the Project vicinity.

Also, construction activities would have a **less than significant impact** because they would comply with the Santa Clara County noise ordinance (County Code of Ordinances, Chapter VIII, Section B11-154(b)(6)). Construction equipment would not be operated on weekdays and Saturdays between 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays. Construction activities also would not exceed maximum noise levels for receiving residential and commercial land uses, which are distant from the Project site.

b) ***No Impact.*** Vibration refers to ground borne noise and perceptible motion. Ground borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernable. However, without the effects associated with the shaking of a building, there is less adverse reaction.

The Project would not use pile driving equipment or heavy equipment that would generate discernable vibrations but would use smaller construction equipment to include loaders and excavators. As a result, there would be **no impact** associated with vibration or ground borne noise from the implementation of the Project.

c) ***No Impact.*** The nearest airport to the Project site is the Reid-Hillview Airport, which is located approximately 6.4 miles to the southwest. The nearest private airstrips are located at the Reid-Hillview Airport. No other private airstrips are located near the Project site. According to the Comprehensive Plan for the Reid-Hillview Airport, the Project site is well outside of the noise contours for the airport (Santa Clara County Airport Land Use Commission 2016), and therefore the Project would not expose people working within the Project area to excessive noise levels. Therefore, **no impact** associated with airport noise would occur.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

14. POPULATION AND HOUSING

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

Discussion

a-b) No Impact. Implementation of the Project would preserve the area as open space in perpetuity. The Project would not induce population growth directly or indirectly, or displace existing housing or residents. Therefore, the Project would have **no impact**.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Discussion

a - e) No Impact. The Project would not result in an increase in population. Therefore, the Project would have no impact on police or fire protection in the Project vicinity. Implementation of the Project would not result in a need for additional schools, parks, or other public facilities. Therefore, the Project would have **no impact** on public services.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

16. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion

a) ***No Impact*****.** The Project would not result in a substantial increase in the use of existing recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Therefore, the Project would have **no impact** on neighborhood and regional parks and recreational facilities.

b) ***Less than Significant Impact*****.** As discussed in Section 2, while no public access is planned for the Preserve at this time, Valley Water may allow public access to these areas in the future. Public access would provide recreational opportunities for the public and educational outreach activities on biodiversity and conservation. Potential future trail locations would consist of approximately 7.5 miles of existing, drivable ranch road within the Preserve. Construction of new trails in undisturbed areas are not proposed. Therefore, the Project would have a **less than significant impact** associated with new recreational facilities.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

17. TRANSPORTATION

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

Discussion

a, c, and d) ***No Impact.*** Implementation of the Project would not conflict with any adopted transportation policies, plans or programs; increase traffic safety hazards, or result in inadequate emergency access. Implementation of BMP TR-1 would further minimize the potential for traffic hazard or emergency access impacts to occur. Therefore, the Project would have **no impact**.

b) ***Less than Significant Impact.*** The Project would generate very low amounts of vehicle miles travelled caused by periodic site improvement construction vehicles, and ongoing operation and maintenance vehicles. The number of daily trips would be far less than 110 trips per day, which is one of Office of Planning and Research's Screening Criteria indicating a **less than significant** vehicle miles travelled impact (OPR 2018); therefore, the Project would not conflict or be inconsistent with CEQA Guidelines § 15064.3(b).

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

TR-1: Incorporate Public Safety Measures

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Regulatory Framework

Effective July 1, 2015, AB 52 requires (1) a lead agency to provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency, and (2) if a tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe.

AB 52 creates a new category of resources, tribal cultural resources. Public Resource Code § 21074(a) defines tribal cultural resources as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
    b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
    c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria a and b also meet the definition of a historical resource under CEQA, a Tribal Cultural Resource may also require additional consideration as a Historical Resource. Tribal Cultural Resources may or may not exhibit archaeological, cultural, or physical indicators.

Summary of Tribal Consultation

At the time the draft IS/MND was released for public review, Valley Water had received one written request from the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region to receive notifications as specified in Public Resources Code Sections 21080.3.1. Therefore, Valley Water emailed a Project notification letter to Charlene Nijmeh, Chairwoman of the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region on September 19, 2019, which provided a brief description and location of the Project (Appendix D). A hard copy of the notification letter was also sent via the U.S. Postal Service the same day. A follow-up phone call was placed with Chairwoman Nijmeh on September 27, 2019, and a phone message was left. A second email was sent, and a phone message was left on October 19, 2019, the end of the 30-day notification period. No request for consultation was received within the 30-day response period. Therefore, Valley Water has concluded that no consultation on the Project is desired by the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area Region.

Discussion

a and b) *Less than Significant Impact*. As discussed in the cultural resources impact analysis, a preliminary cultural resources assessment for the Preserve was conducted in February and March 2020 by Pacific Legacy. The archival and record search revealed that no cultural resources have been previously recorded within the Project area, though one prehistoric archeological site has been recorded within a 0.25-mile radius. Contact with the NAHC revealed that no Native American cultural resources listed in the Sacred Lands Files have been reported in the Project area. An examination of the geoarchaeological sensitive data indicates that buried cultural resource potential within the Project area ranges from very low to high, with areas surrounding drainages and springs characterized as most sensitive. Although the Preserve has a moderate potential to contain prehistoric resources, none were found identified in the investigations conducted for by Pacific Legacy (Pacific Legacy 2020).

The objectives of the LTMPs are to preserve the existing character of the Project site. The Project only involves minor ground disturbance activities. Based on the limited nature of the work and the moderate potential that archaeological resources are located within the Preserve or in the vicinity, there is a low probability of uncovering tribal cultural resources during site improvements and long-term maintenance activities at the Project site. There is only a low probability that site improvements could result in the disturbance of previously undiscovered tribal cultural resources because the site improvements are located in previously disturbed areas (e.g., along roadways and at failing retaining walls). There is also only a low probability that other activities such as road improvements or invasive plant removal could also disturb undiscovered tribal cultural resources that may be present within the Project area because the roads are previously disturbed and the invasive plant removal activities (e.g., herbicide application and grazing) do not include excavation.

In the event that unknown potential tribal cultural resources are encountered during construction activities, Valley Water would implement AMM CU-1, which would require that work at the location of the find will be halted immediately within 100 feet of the find and a “no work” zone shall be established utilizing appropriate flagging to delineate the boundary of this zone. A consulting archaeologist would visit the discovery site as soon as practicable for identification and evaluation pursuant to Public Resources Code § 21083.2 and CEQA Guidelines § 15126. If the archaeologist determines that the artifact is not significant, the archaeologist will determine if the artifact or resource can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours an action plan which will include provisions to minimize impacts and, if required, a data recovery plan for recovery of artifacts in accordance with Public Resources Code § 21083.2 and CEQA Guidelines § 15126.4. If a tribal cultural resource cannot be avoided, the action plan will include notification of the appropriate Native American Tribe, and consultation

with the tribe regarding acceptable recovery options. If burial finds are accidently discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified, and the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent. No further excavation or disturbance within 100 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, NAHC, and/or the County Coordinator of Indian Affairs. Furthermore, Valley Water would implement AMM CU-2, which would require pedestrian surveys be conducted in locations with major excavation activities (not anticipated) that could result in impacts to cultural resources. If cultural resources were identified during the pedestrian survey, it would trigger the implementation of AMM CU-1. Based on the above analysis, Project impacts on tribal cultural resources would be **less than significant** because the Project would not cause a substantial adverse change in the significance of a tribal cultural resource.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

AMM CU-1: Accidental Discovery of Archeological Artifacts, Tribal Cultural Resources, or Burial Remains
AMM CU-2: Conduct Pedestrian Surveys for Major Excavation Activities

MITIGATION MEASURES

No mitigation measures are required.

19. UTILITIES AND SERVICE SYSTEMS

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

Discussion

a, & c - e) *No* Impact. The Project would preserve the Preserve as open space in perpetuity. Implementation of the Project would not result in the need for new, relocated, upgraded or expanded utilities and service system facilities in the areas of water, wastewater, stormwater drainage, electric power, natural gas, telecommunications, solid waste, or other utility systems. The Project would comply with solid waste statutes and regulations. Therefore, the Project would have **no impact** on these utilities and service systems.

b) Less than significant impact. The Project does not include irrigation of grazing land. The only water demands for the Project is to provide water for cattle to drink. Pre-existing water sources for cattle on the Preserve include ten stock ponds, six of which are perennial, as well as seven cattle troughs. All of these water sources are spring-fed and/or rain-fed. Due to the minimal number of cattle allowed on the Preserve (a maximum of 50 AU spread over 1700+ acres) compared to the number of water sources available for cattle, and because water is available for cattle year-round, these water sources have been sufficient to meet the water demands for cattle during normal, dry, and multiple dry years. If a severe drought occurred and the water sources for cattle were determined to be insufficient, the number of cattle on the Preserve would be reduced. Therefore, the Project would have a **less than significant** impact on water supplies because there would be sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

BEST MANAGEMENT PRACTICES

No best management practices are included in the Project.

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones.

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

ENVIRONMENTAL SETTING

The State of California and Santa Clara County Fire Hazard Severity Zone maps are based on an evaluation of fire history, existing and potential fuel, flame length, blowing embers, terrain, weather, and the likelihood of buildings igniting (CalFire 2007). According to CalFire Wildlife Hazard Zone in State Responsibility Area Map, the Project site is located in an area designated as a high fire hazard severity zone (CalFire 2007). The Project site is in an area of slope, prevailing winds, or areas subject to exacerbated wildfire risks or post-fire slope instability. However, BMPs would be implemented to prevent fire hazards.

Discussion

a) ***Less than Significant Impact*.** The Project is located in a state responsibility area and lands classified as a high fire hazard severity zone. The Project is implementation of LTMPs and limited site improvements to preserve the habitat and conservation values of the entire Preserve. BMP HM-11 would be implemented to prevent fire hazards Therefore, the Project would have a **less than significant impact** because it would not substantially impair an adopted emergency response plan or emergency evacuation plan.

b) ***Less than Significant Impact*.** The Project is located in a state responsibility area and lands classified as a high fire hazard severity zone. BMP HM-11 would be implemented to prevent fire hazards. Therefore, the Project would have a **less than significant impact** because it would not exacerbate wildfire risks.

c) ***Less than Significant Impact*.** The Project is located in a state responsibility area and land classified as a high fire hazard severity zone. BMP HM-11 would be implemented to prevent fire hazards. Therefore, the Project would have a **less than significant impact** because it would not exacerbate wildfire risks.

d) ***Less than Significant Impact*.** The Project is located in a state responsibility area and land classified as a high fire hazard severity zone. The Project would not expose people or

structures to significant risks from fire hazard-related runoff, post-fire slope instability, or drainage changes. Therefore, the Project would have a **less than significant impact**.

BEST MANAGEMENT PRACTICES (See details in Table 2-2)

HM-11: Incorporate Fire Prevention Measures

AVOIDANCE AND MINIMIZATION MEASURES

No avoidance and minimization measures are included in the Project.

MITIGATION MEASURES

No mitigation measures are required.

21. MANDATORY FINDINGS OF SIGNIFICANCE

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

Discussion

a) ***Less than Significant Impact with Mitigation Incorporated*****.** The analysis above finds that while the Project would result in potentially significant impacts on biological resources, implementation of mitigation measures as proposed in this IS/MND would ensure that the Project would not substantially degrade the quality of the environment, substantially reduce the habitat, population, or range of a plant or animal species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal.

b) ***Less than Significant Impact.*** As defined by Section 15355(b) of the CEQA Guidelines, the cumulative impact from several projects is "the change in the closely related past, present, and reasonably foreseeable probable future projects" and that "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." The purpose of the LTMPs is to ensure the preservation of the existing open space character and habitat quality of the Project site. The objectives and associated activities identified in the LTMPs demonstrate the framework for how preservation and habitat management of the Preserve can be accomplished. Past, present, and planned future projects in the Project vicinity (e.g., management and/or improvements at Sierra Vista Open Space Preserve, Alum Rock Park, Blue Oak Ranch Reserve, and Upper Penitencia Creek Property) would result in similar impacts as the Project. Implementation of mitigation measures as proposed in this IS/MND would ensure that the Project would not result in significant impacts by reducing impacts to a less than significant level. Impacts from these other projects would likely also be similar in land use, and therefore the cumulative impacts from this project and the other projects would be **less than significant**, and the project's contribution to cumulative impacts would be **less than cumulatively considerable**.

c) ***Less than Significant Impact.*** The above analysis shows that the project would not result in significant impacts in the resource areas relating to aesthetics, agriculture and forestry services, air quality, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and services systems, and wildfire. While the analysis found that the Project would result in some adverse impacts to biological resources, the proposed mitigation would sufficiently reduce those impacts to a level of less than significant. The purpose of this Project is to preserve the existing open space character and habitat quality of the Project site. Therefore, this Project would not result in substantial adverse effects to human beings directly or indirectly.

Section 5: Mitigation and Monitoring Reporting Program (MMRP)

The following table summarizes the Mitigation Monitoring and Reporting Program (MMRP) which includes Valley Water's best management practices (BMPs), Project-specific Avoidance and Minimization Measures (AMMs), and Mitigation Measures (MMs) identified in the Initial Study. BMPs/AMMs are part of the Project and CEQA does not require them to be to include in an MMRP, but they have been included in this MMRP to facilitate BMP/AMM implementation monitoring. For each measure, the table provides the description of the measure, implementation timing, the entity responsible for implementing the measure, and the entity responsible for monitoring and oversight of the measure.

The MMRP will be adopted by Valley Water's decisionmaker when the project is approved. Additionally, implementation of the MMRP will be reported and tracked consistent with CEQA Guidelines Section 15097 in the annual LTMP reports as applicable and per the reporting conditions in the regulatory permits that may be required to construct the site improvements.

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
AIR QUALITY					
Use Dust Control Measures	BMP AQ-1	The following Bay Area Air Quality Management District (BAAQMD) Dust Control Measures will be implemented: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered; 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited; 4. Water used to wash the various exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, etc.) will not be allowed to enter waterways; 5. All vehicle speeds on unpaved roads shall be limited to 15 mph;	During construction of site improvements and implementation of LTMPs (e.g., road maintenance)	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		6. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used; 7. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations), and this requirement shall be clearly communicated to construction workers (such as verbiage in contracts and clear signage at all access points); 8. All construction equipment shall be maintained and properly tuned in accordance with manufacturer‘s specifications, and all equipment shall be checked by a certified visible emissions evaluator; 9. Correct tire inflation shall be maintained in accordance with manufacturer‘s specifications on wheeled equipment and vehicles to prevent excessive rolling resistance; and, 10. Post a publicly visible sign with a telephone number and contact person at the lead agency to address dust complaints; any complaints shall be responded to and take corrective action within 48 hours. In addition, a BAAQMD telephone number with any applicable regulations will be included.			
Avoid Stockpiling Odorous Materials	BMP AQ-2	Materials with decaying organic material, or other potentially odorous materials, will be handled in a manner that avoids impacting residential areas and other sensitive receptors, including: 1. Avoid stockpiling potentially odorous materials within	During construction of the site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		1,000 feet of residential areas or other odor sensitive land uses; and 2. Odorous stockpiles will be disposed of at an appropriate landfill.			
Biological Resources					
Avoid and Minimize Impacts on Native Aquatic Vertebrates	BMP BI-1	Native aquatic vertebrates (fish, amphibians and reptiles) are important components of stream ecosystems. Native aquatic vertebrates may or may not be able to rapidly re-colonize a stream reach if the population is eliminated from that stream reach. If native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, an evaluation of the stream and the native aquatic vertebrates will be conducted by a qualified biologist. The qualified biologist will consider: 1. Which native aquatic species are present; 2. The ability of the species to naturally re-colonize the stream reach; 3. The life stages of the native aquatic vertebrates present; 4. The flow, depth, topography, substrate, chemistry and temperature of the stream reach; 5. The feasibility of relocating the aquatic species present; and 6. The likelihood the stream reach will naturally dry up during the work season. Based on consideration of these factors the qualified biologist may make a decision to relocate native aquatic vertebrates. The qualified biologist will document in writing the reasons to relocate native aquatic species, or not to relocate native aquatic species, prior to installation of cofferdams, water bypass structures or silt barriers.	During construction of site improvements	Valley Water	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		If the decision is made to relocate the native aquatic species, then the operation will be based on Valley Water's Fish Relocation Guidelines.			
Remove Temporary Fill	BMP BI-2	Temporary fill materials, such as for diversion structures or cofferdams, will be removed upon finishing the work or as appropriate. The creek channels and banks will be re-contoured to match pre-construction conditions to the extent possible. Low-flow channels within non-tidal streams will be contoured to facilitate fish passage and will emulate the preconstruction conditions as closely as possible, within the finished channel topography.	During construction of site improvements	Valley Water or subcontractor	Valley Water
Minimize Adverse Effects of Pesticides on Non-target Species	BMP BI-3	"Pesticides" refers to any herbicide, insecticide, rodenticide, algaecide, fungicide, or any combination of substances intended to prevent, destroy, or repel any pest. Pesticides will be handled, stored, transported, and used in compliance with any established directions and in a manner that minimizes negative environmental effects on non-target species and sensitive habitats. The Project plan for handling, storing, transporting and using pesticides must be reviewed and approved by <u>both</u> of the following subject matter experts: 1. Valley Water's Pest Control Advisor (a State-certified Qualified Applicator) – the plan will be reviewed, and modified as deemed appropriate, for compliance with: Valley Water policy, label restrictions and any advisories published by the California Department of Pesticide Regulation, the Santa Clara County Division of Agriculture, and the U.S. EPA bulletin *Protecting Endangered Species, Interim Measures for Use of Pesticides in Santa Clara County* (USEPA 2000).	During implementation of LTMPs (e.g., non-native invasive species plant management)	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		2. Qualified Valley Water Biologist (as defined in EMAP-30264) – the plan will be reviewed, and modified as deemed appropriate, for compliance with: Valley Water policy, approved environmental review documents, project permits, and avoidance of all known listed (Threatened or Endangered) and sensitive species. Information sources for determination of all known locations of species that may be harmed by pesticides include Valley Water's GIS system and California Natural Diversity Database (CNDDB). Either Valley Water's Pest Control Advisor or the Qualified Valley Water Biologist may modify the proposed pesticide plan, such as establishing buffer areas or prohibiting the use of pesticides outright, based on site-specific data, current regulatory requirements, and Valley Water policy. The purchase of all pesticides must be approved by Valley Water's Pest Control Advisor to ensure compliance with Valley Water's Control and Oversight of Pesticide Use policy and appropriate regulatory agency reporting requirements.			
Choose Local Ecotypes of Native Plants and Appropriate Erosion-control Seed Mixes	BMP BI-4	Whenever native species are prescribed for installation the following steps will be taken by a qualified biologist or vegetation specialist: 1. Evaluate whether the plant species currently grows wild in Santa Clara County; and, 2. If so, the qualified biologist or vegetation specialist will determine if any need to be local natives, i.e. grown from propagules collected in the same or adjacent watershed, and as close to the Project site as feasible. Also, consult a qualified biologist or vegetation specialist to determine which seeding option is ecologically appropriate and	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		effective, specifically: 1. For areas that are disturbed, an erosion control seed mix may be used consistent with the SCVWD Guidelines and Standards *for Land Use Near Streams, Design Guide 5, 'Temporary Erosion Control Options.'* 2. In areas with remnant native plants, the qualified biologist or vegetation specialist may choose an abiotic application instead, such as an erosion control blanket or seedless hydro-mulch and tackifier to facilitate passive revegetation of local native species. 3. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable. 4. If a gravel or wood mulch has been used to prevent soil compaction per BI-11, this material may be left in place [if ecologically appropriate] instead of seeding. Seed selection shall be ecologically appropriate as determined by a qualified biologist, per *Guidelines and Standards for Land Use Near Streams, Design Guide 2: Use of Local Native Species*.			
Avoid Animal Entry and Entrapment	BMP BI-5	All pipes, hoses, or similar structures less than 12 inches diameter will be closed or covered to prevent animal entry. All construction pipes, culverts, or similar structures, greater than 2-inches diameter, stored at a construction site overnight, will be inspected thoroughly for wildlife by a qualified biologist or properly trained construction personnel before the pipe is buried, capped, used, or moved. If inspection indicates presence of sensitive or state- or federally-listed species inside stored materials or equipment, work on those materials will cease until a qualified biologist determines the appropriate course of action. To prevent entrapment of animals, all excavations, steep-walled	During construction of site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		holes or trenches more than 6-inches deep will be secured against animal entry at the close of each day. Any of the following measures may be employed, depending on the size of the hole and method feasibility: 1. Hole to be securely covered (no gaps) with plywood, or similar materials, at the close of each working day, or any time the opening will be left unattended for more than one hour; or 2. In the absence of covers, the excavation will be provided with escape ramps constructed of earth or untreated wood, sloped no steeper than 2:1, and located no farther than 15 feet apart; or 3. In situations where escape ramps are infeasible, the hole or trench will be surrounded by filter fabric fencing or a similar barrier with the bottom edge buried to prevent entry.			

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
Minimize Predator-Attraction	BMP BI-6	Remove trash daily from the worksite to avoid attracting potential predators to the site.	During construction of site improvements	Valley Water or subcontractor	Valley Water
Minimize Impacts to Vegetation from Clearing and Trimming	AMM BI-1	Vegetation to be trimmed or cleared shall be evaluated by a qualified vegetation specialist or qualified biologist prior to removal. Recommendations from the qualified vegetation specialist or qualified biologist shall be followed. Cutting vegetation shall be limited to the minimum length, width, and height necessary while conforming to International Society of Arboriculture pruning standards. Woody vegetation (i.e. native trees and shrubs) which require pruning for equipment access, construction operations, etc., shall be pruned consistent with all three of the following complementary guidance or their updates: 1. 'BEST MANAGEMENT PRACTICES, TREE PRUNING' 2008, INTERNATIONAL SOCIETY OF ARBORICULTURE; 2. American National Standards Institute (ANSI) A300 (Part 1) – 2008 PRUNING; and 3. ANSI Z133.1, 2008, SAFETY REQUIREMENTS	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water
Minimize Root Impacts to Woody Vegetation	AMM BI-2	Construction activities associated with the Project, including cut and fill, shall be minimized within the root zones of existing woody vegetation to remain post project. In general, root extent can be estimated as 2-3 times canopy radius, but vary depending on slope and soil conditions, construction setbacks will be calculated using all of the following: 1. Tree diameter at 4.5 feet high (diameter at breast height); and	During construction of site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		2. Multiplier of 1.25 (e.g. a tree measures 12 inches around its trunk X 1.25 = 15 foot radial construction setback). 3. If soil encroachment must occur in 33% or more of this area, the tree should be evaluated for removal. Additionally, mulching the root zone will be employed to provide root protection from unavoidable equipment traffic during construction, specifically: 4. Use 6 inches minimum depth of wood chips; or, 5. 4 inches minimum depth of ¾-inch (or greater) gravel. 6. Both may remain in place after work if approved by a qualified biologist or vegetation specialist.			
Minimize Access Impacts	MM BI-1	Valley Water shall ensure that construction and operation activities associated with the Project shall utilize existing access ramps and roads. If alternative routes are necessary to avoid large mature trees, native vegetation, or other significant habitat features, temporary access points shall be constructed in a manner that minimizes impacts in accordance with the following guidelines: 1. Temporary access points shall be constructed as close to the work area as possible; 2. For channel access routes, slopes of greater than 20 percent will be avoided, if possible; 3. Any temporary fill used for access shall be removed upon completion of the project and pre-project topography shall be restored; and, 4. When temporary access is no longer needed, disturbed areas shall be re-vegetated or filled with compacted soil, seeded, and/or stabilized with erosion control fabric immediately after construction to minimize future erosion.	During construction of site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
Avoid Impacts to Nesting Migratory Birds	MM BI-2	Valley Water shall ensure that if construction activities occur between January 15 and August 31, project areas shall be checked by a qualified biologist for nesting birds within two weeks of starting work. If a lapse in project-related work of two weeks or longer occurs, another focused survey will be conducted before project work can be reinitiated. If nesting birds are found, a buffer shall be established around the nest and maintained until the young have fledged. Appropriate buffer widths are 0.5 mile for bald and golden eagles; 250 feet for other raptors and the least Bell's vireo, herons, and egrets; 25 feet for ground-nesting non-raptors; and 50 feet for non-raptors nesting on trees, shrubs and structures. A qualified biologist may identify an alternative buffer, at least equally as effective, based on a site-specific evaluation. No work within the buffer will occur without written approval from a qualified biologist, for as long as the nest is active. The boundary of each buffer zone shall be marked with fencing, flagging, or other easily identifiable marking if work will occur immediately outside the buffer zone. Each buffer zone shall be maintained until the nest becomes inactive, as determined by a qualified biologist. If monitoring shows that disturbance to actively nesting birds is occurring, the biologist will require increased buffer widths until monitoring shows that disturbance is no longer occurring. If this is not possible, work shall cease in the area until young have fledged and the nest is no longer active as determined by a qualified biologist.	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water
Avoid Impacts to Special-status Species	MM BI-3	Valley Water shall ensure that all construction activities shall be assessed by a qualified biologist to determine if there is possibility for the activities to impact special-status species, such			

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		as CTS, CRLF, and FYLF. If the qualified biologist determines there is a possibility the activities could impact special-status species, a qualified biologist will conduct biological surveys ahead of the work to determine if special-status species are present. This would include visual encounter surveys in suitable habitat, including inspection of mammal burrows with burrow probe cameras if burrows were present in the work areas that could be impacted. If special-status species are found, an appropriate buffer zone would be put in place to avoid the area where the species is present and/or a qualified biologist would monitor the work to assure the species are not impacted by the work. The boundary of each buffer zone shall be marked with fencing, flagging, or other easily identifiable marking if work will occur immediately outside the buffer zone. Each buffer zone shall be maintained until the species is no longer present, as determined by a qualified biologist. If monitoring shows that disturbance to special-status species is occurring, the biologist will require increased buffer widths until monitoring shows that disturbance is no longer occurring. If this is not possible, work shall cease in the area until a qualified biologist determines that the special-status species are no longer present. This mitigation measure aligns with and goes beyond VHP Condition 1, which requires the avoidance of impacts to legally protected species. In addition to avoiding direct impacts to legally protected species, this mitigation measure requires avoidance of impacts to special-status species that are not legally protected (e.g., California Species of Special Concern).			

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
Obtain Regulatory Permits and Compensate for Impacts to Waters of the U.S./State	MM BI-4	For discharges to jurisdictional waters of the U.S./State, Valley Water will seek applicable regulatory permits from USACE (Section 404 permit), the San Francisco RWQCB (401 and/or WDR), and CDFW (LSAA). If required by regulatory permits, Valley Water shall develop an aquatic resource mitigation plan, subject to approval by the appropriate regulatory agencies, to fully compensate for Project impacts to waters of the U.S./State. Valley Water shall be responsible for the funding of the compensatory mitigation and compliance with the agency-approved plan. Compensatory mitigation may include one or more of the following options: 1. Payment of VHP fees prior to the start of construction; 2. Habitat preservation, creation, enhancement, and/or restoration; and, 3. Purchase of mitigation credits from an agency-approved mitigation bank prior to the start of construction.			
Cultural Resources					
Accidental Discovery of Archaeological Artifacts, Tribal Cultural Resources, or Burial Remains	AMM CU-1	If historical or unique archaeological artifacts, or tribal cultural resources, are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Work at the location of the find will halt immediately within 100 feet of the find. A “no work” zone shall be established utilizing appropriate flagging to delineate the boundary of this zone. A Consulting Archaeologist will visit the discovery site as soon as practicable for identification and	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		evaluation pursuant to PRC Section 21083.2 and CCR Section 15126.4. If the archaeologist determines that the artifact is not significant, construction may resume. If the archaeologist determines that the artifact is significant, the archaeologist will determine if the artifact can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours an Action Plan which will include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If a tribal cultural resource cannot be avoided, the Action Plan will include notification of the appropriate Native American tribe, and consultation with the tribe regarding acceptable recovery options. If burial finds are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified, and the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent. No further excavation or disturbance within 100 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs.			
Conduct Pedestrian Surveys for Major	AMM CU-2	A pedestrian survey shall be conducted in locations with major excavation activities that could result in impacts to cultural resources. The pedestrian surveys would be conducted prior to the major excavation activities. Any cultural would trigger implementation of AMM CU-1.	During construction of site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
Excavation Activities			and implementation of LTMPs		
Hazards and Hazardous Materials					
Comply with All Pesticide Application Restrictions and Policies	BMP HM-1	Pesticide products are to be used only after an assessment has been made regarding environmental, economic, and public health aspects of each of the alternatives by Valley Water's Pest Control Advisor (PCA). All pesticide use will be consistent with approved product specifications. Applications will be made by, or under the direct supervision of, State Certified applicators under the direction of, or in a manner approved by the PCA. Refer to Q751D02, Control and Oversight of Pesticide Use.	During implementation of LTMPs	Valley Water or subcontractor	Valley Water
Minimize use of Pesticides	BMP HM-2	In all cases, where some form of pest control is deemed necessary by the PCA; evaluate alternative pest control methods and pesticides. Refer to Q751D02: Control and Oversight of Pesticide Use.	During implementation of LTMPs	Valley Water or subcontractor	Valley Water
Post Areas Where Pesticides Will Be Used	BMP HM-3	Posting of areas where pesticides are to be used shall be performed in compliance with Q751D02: Control and Oversight of Pesticide Use. Posting shall be performed in compliance with the label requirements of the product being applied. In addition, Valley Water shall provide posting for any products applied in areas used by the public for recreational purposes, and areas readily accessible to the public, regardless of whether the label requires such notification (the posting method may be modified to avoid destruction of bait stations or scattering of rodenticide), including: 1. Sign postings shall notify staff and the general public of the date and time of application; the product's active ingredients,	During implementation of LTMPs	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		and common name; and, the time of allowable re-entry into the treated area. 2. A Valley Water staff contact phone number shall be posted on the sign. 3. Signs shall not be removed until after the end of the specified re-entry interval. 4. Right-to-know literature on the product shall be made available upon request to anyone in the area. 5. Notification will take into account neighbors with specific needs prior to treatment of an adjacent area to ensure such needs are met. Such requests are maintained by Valley Water under Q751D02.			
Comply with All Pesticide Usage Requirements	BMP HM-4	All projects that propose ongoing use of pesticides will comply with all provisions of Q751D02: Control and Oversight of Pesticide Use, including, but not necessarily limited to the following: 1. All pest control methods will be performed only after a written Pest Control Recommendation for use has been prepared by Valley Water's PCA in accordance with requirements of the California Food and Agricultural Code. 2. F751D01 – Pest Control Recommendation & Spray Operators Report will be completed for each pesticide application.	During implementation of LTMPs	Valley Water or subcontractor	Valley Water
Comply with Restrictions on Herbicide Use in Upland Areas	BMP HM-5	Consistent with provisions of Q751D02: Control and Oversight of Pesticide Use, application of pre-emergence (residual) herbicides to upland areas will not be made within 72 hours of predicted significant rainfall. Predicted significant rainfall for the purposes of this BMP will be described as local rainfall greater than 0.5 inch in a 24-hour period with greater than a 50% probability of precipitation according to the National Weather Service.	During implementation of LTMPs	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
Comply with Restrictions on Herbicide Use in Aquatic Areas	BMP HM-6	Consistent with provisions of Q751D02: Control and Oversight of Pesticide Use, only herbicides and surfactants registered for aquatic use will be applied within the banks of channels within 20 feet of any water present. Furthermore, aquatic herbicide use will be limited to June 15th through October 31st with an extension through December 31 or until the first occurrence of any of the following conditions; whichever happens first: 1. local rainfall greater than 0.5 inches is forecasted within a 24-hour period from planned application events according to the National Weather Service; or 2. when steelhead begin upmigrating and spawning in the 14 steelhead creeks, as determined by a qualified biologist (typically in November/December). If rain is forecast then application of aquatic herbicide will be rescheduled.	During implementation of LTMPs	Valley Water or subcontractor	Valley Water
Restrict Vehicle and Equipment Cleaning to Appropriate Locations	BMP HM-7	Vehicles and equipment may be washed only at approved areas. No washing of vehicles or equipment will occur at job sites.	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water
Ensure Proper Vehicle and Equipment Fueling and Maintenance	BMP HM-8	No fueling or servicing will be done in a waterway or immediate flood plain, unless equipment stationed in these locations is not readily relocated (i.e., pumps, generators). 1. For stationary equipment that must be fueled or serviced on-site, containment will be provided in such a manner that any accidental spill will not be able to come in direct	During construction of site improvements and implementation	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		contact with soil, surface water, or the storm drainage system. 2. All fueling or servicing done at the job site will provide containment to the degree that any spill will be unable to enter any waterway or damage riparian vegetation. 3. All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will be prevented. 4. All equipment used in the creek channel will be inspected for leaks each day prior to initiation of work. Maintenance, repairs, or other necessary actions will be taken to prevent or repair leaks, prior to use. 5. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location will be done in a channel or flood plain.	of LTMPs		
Ensure Proper Hazardous Materials Management	BMP HM-9	Measures will be implemented to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means. 1. Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered. 2. Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage. 3. Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and not be allowed to enter surface waters or the storm drainage system. 4. All toxic materials, including waste disposal containers, will be covered when they are not in use, and located as	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		far away as possible from a direct connection to the storm drainage system or surface water. 5. Quantities of toxic materials, such as equipment fuels and lubricants, will be stored with secondary containment that is capable of containing 110% of the primary container(s). 6. The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations will be conducted in accordance with applicable State and federal regulations. 7. In the event of any hazardous material emergencies or spills, personnel will call the Chemical Emergencies/Spills Hotline at 1-800-510-5151.			
Utilize Spill Prevention Measures	BMP HM-10	Prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water following these measures: 1. Field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills; 2. Equipment and materials for cleanup of spills will be available on site, and spills and leaks will be cleaned up immediately and disposed of according to applicable regulatory requirements; 3. Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means; 4. Spill prevention kits will always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations), and all field personnel will be advised of these locations; and, 5. The work site will be routinely inspected to verify that spill	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		prevention and response measures are properly implemented and maintained.			
Incorporate Fire Prevention Measures	BMP HM-11	1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors. 2. During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site. 3. An extinguisher shall be available at the Project site at all times when welding or other repair activities that can generate sparks (such as metal grinding) is occurring. 4. Smoking shall be prohibited except in designated staging areas and at least 20 feet from any combustible chemicals or vegetation.	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water
Hydrology and Water Quality					
Conduct Work from Top of Bank	BMP WQ-1	For work activities that will occur in the channel, work will be conducted from the top of the bank if access is available and there are flows in the channel.	During construction of site improvements	Valley Water or subcontractor	Valley Water
Evaluate Use of Wheel and Track Mounted Vehicles in Stream Bottoms	BMP WQ-2	Field personnel will use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately tired vehicles, either tracked or wheeled, will be used depending on the situation. Tracked vehicles (bulldozers, loaders) may cause scarification. Wheeled vehicles may cause compaction. Heavy equipment will not operate in the live stream.	During construction of site improvements	Valley Water or subcontractor	Valley Water
Limit Impacts from Staging and	BMP WQ-3	1. To protect on-site vegetation and water quality, staging areas should occur on access roads, surface streets, or other disturbed areas that are already compacted and only support ruderal vegetation. Similarly, all equipment and	During construction of site	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
Stockpiling Materials		materials (e.g., road rock and project spoil) will be contained within the existing service roads, paved roads, or other pre-determined staging areas. 2. Building materials and other project-related materials, including chemicals and sediment, will not be stockpiled or stored where they could spill into water bodies or storm drains. 3. No runoff from the staging areas may be allowed to enter water ways, including the creek channel or storm drains, without being subjected to adequate filtration (e.g., vegetated buffer, swale, hay wattles or bales, silt screens). 4. The discharge of decant water to water ways from any on-site temporary sediment stockpile or storage areas is prohibited. 5. During the wet season, no stockpiled soils will remain exposed, unless surrounded by properly installed and maintained silt fencing or other means of erosion control. During the dry season; exposed, dry stockpiles will be watered, enclosed, covered, or sprayed with non-toxic soil stabilizers.	improvements		
Stabilize Construction Entrances and Exits	BMP WQ-4	Measures will be implemented to minimize soil from being tracked onto streets near work sites: 1. Methods used to prevent mud from being tracked out of work sites onto roadways include installing a layer of geotextile mat, followed by a 4-inch thick layer of 1 to 3-inch diameter gravel on unsurfaced access roads. 2. Access will be provided as close to the work area as possible, using existing ramps where available and planning work site access so as to minimize disturbance to the water body bed and banks, and the surrounding land	During construction of site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		uses.			
Use Seeding for Erosion Control, Weed Suppression, and Site Improvement	BMP WQ-5	Disturbed areas shall be seeded with native seed as soon as is appropriate after activities are complete. An erosion control seed mix will be applied to exposed soils down to the ordinary high water mark in streams. 1. The seed mix should consist of California native grasses, (for example *Hordeum brachyantherum*; *Elymus glaucus*; and annual *Vulpia microstachyes*) or annual, sterile hybrid seed mix (e.g., Regreen™, a wheat x wheatgrass hybrid). 2. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable, or have other appropriate erosion control measures in place.	During construction of site improvements and implementation of LTMPs	Valley Water or subcontractor	Valley Water
Prevent Scour Downstream of Sediment Removal	BMP WQ-6	After sediment removal, the channel will be graded so that the transition between the existing channel both upstream and downstream of the work area is smooth, and continuous between the maintained and non-maintained areas, and does not present a sudden vertical transition (wall of sediment) or other blockage that could erode once flows are restored to the channel.	During construction of site improvements	Valley Water or subcontractor	Valley Water
Maintain Clean Conditions at Work Sites	BMP WQ-7	The work site, areas adjacent to the work site, and access roads will be maintained in an orderly condition, free and clear from debris and discarded materials on a daily basis. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways. For activities that last more than one day, materials or equipment left on the site overnight will be stored as inconspicuously as possible, and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related	During construction of site improvements	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		materials will be removed from the work site.			
Prevent Water Pollution	BMP WQ-8	Oily, greasy, or sediment laden substances or other material that originate from the project operations and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway. The project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows: 1. where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases will not exceed 5 percent; 2. where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent; 3. where the receiving water body is a dry creek bed or storm drain, waters in excess of 50 NTU will not be discharged from the project. Water turbidity changes will be monitored. The discharge water measurements will be made at the point where the discharge water exits the water control system for tidal sites and 100 feet downstream of the discharge point for non-tidal sites. Natural watercourse turbidity measurements will be made in the receiving water 100 feet upstream of the discharge site. Natural watercourse turbidity measurements will be made prior to initiation of project discharges, preferably at least 2 days prior to commencement of operations.	During construction of site improvements	Valley Water or subcontractor	Valley Water
Traffic and Transportation					
Incorporate Public Safety Measures	BMP TR-1	Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction, to give adequate warning to the public of the	During construction of site	Valley Water or subcontractor	Valley Water

MITIGATION MONITORING AND REPORTING PROGRAM					
Resource Areas	**BMPs, AMMs, and MMs**	**Description of Measures**	**Implementation Timing**	**Implementation Responsibility**	**Responsibility for Oversight**
		construction and of any dangerous condition to be encountered as a result thereof.	improvements		

Section 6: Report Preparation

This section lists those individuals who contributed to the preparation of this IS/MND.

Valley Water

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Section 7: References

Barry, S. J., R. E. Larsen, G. A. Nader, M. Doran, K Guenther and G. Hayes. 2011. *Understanding livestock grazing impacts: strategies for the California annual grassland and oak woodland vegetation series.* Publication 21626, University of California Division of Agriculture and Natural Resources, Oakland.

Bartolome, J., W. Frost, and N. McDougald. 2006. *Guidelines for residual dry matter on coastal and foothill rangelands in California.* Rangeland Monitoring Series, Publication 8092, University of California.

[BAAQMD] Bay Area Air Quality Management District. 2017. *California Environmental Quality Act Air Quality Guidelines*. Retrieved from: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

[CARB] California Air Resources Board. 2008. *Climate Change Scoping Plan*. Retrieved from https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan

[CDC] California Department of Conservation. 2009. *California Official Tsunami Inundation Maps*. Retrieved from: https://www.conservation.ca.gov/cgs/tsunami/maps

[CDC] California Department of Conservation. 2016. *Santa Clara County Important Farmlands Map*. Retrieved from: https://www.conservation.ca.gov/dlrp/fmmp/

[CDC] California Department of Conservation. 2018. *EQ Zap: California Earthquake Hazards Zone Application*. Retrieved from: https://www.conservation.ca.gov/cgs/geohazards/eq-zapp

[CDFW] California Department of Fish and Wildlife, 2020.*California Sensitive Natural Communities*. Retrieved from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.

[CEC] California Energy Commission. 2019a. *Total System Electric Generation in Gigawatt Hours*. Retrieved from: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html

[CEC] California Energy Commission. 2019b. *Supply and Demand of Natural Gas in California*. Retrieved from: http://www.energy.ca.gov/almanac/naturalgas_data/overview.html

[CEC] California Energy Commission. 2019c. *Oil Supply Sources to California Refineries*. Retrieved from: http://www.energy.ca.gov/almanac/petroleum_data/statistics/crude_oil_receipts.html

CalFire. 2007. *Fire Hazard Severity Zones in State Responsibility Areas*. Retrieved from: https://osfm.fire.ca.gov/media/6766/fhszs_map43.pdf

County of Santa Clara. 1994. *Santa Clara County General Plan.* Retrieved from: https://www.sccgov.org/sites/dpd/DocsForms/Documents/GP_Book_B.pdf

County of Santa Clara. 2009. *Climate Action Plan for Operation and Facilities*. Retrieved from: https://www.sccgov.org/sites/osp/Documents/CAPOF_2009_09_29FINAL.pdf

County of Santa Clara. 2017. *Santa Clara County Operational Area Hazard Mitigation Plan*. Retrieved from: https://emergencymanagement.sccgov.org/partners/Documents/Local-Hazard-Mitigation-Plan-LHMP-Vol-2.pdf

County of Santa Clara. 2020a. *Tree Preservation and Removal Ordinance*. Retrieved from: https://library.municode.com/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITCCODELAUS_DIVC16TRPRRE

County of Santa Clara. 2020b. *Williamson Act Properties*. Retrieved from: https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=1f39e32b4c0644b0915354c3e59778ce

[DTSC] Department of Toxic Substance Control. 2019. *EnviroStor Sites and Facilities*. Retrieved from: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=San+Jose

Dibblee T.W, and Minch, J.A. 2006. *Geological Map of the Mount Day Quadrangle, Santa Clara and Alameda Counties*. Retrieved from: https://ngmdb.usgs.gov/ngmbin/pdp/zui_viewer.pl?id=34496

[FHA] Federal Highway Administration. 2006. *Construction Noise Handbook*. Retrieved from: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/

[FEMA] Federal Emergency Management Agency. 2009. *Flood Insurance Rate Map*. Retrieved from: https://msc.fema.gov/portal/home

Holzer, T.L., Noce, T.E., Bennett, M.J. 2009. *Scenario liquefaction hazard maps of Santa Clara Valley, Northern California: Seismological Society of America Bulletin*. Retrieved from: https://pubs.usgs.gov/of/2008/1270/

[OPR] Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation on CEQA*. Retrieved from: https://opr.ca.gov/docs/20180416743_Technical_Advisory_4.16.18.pdf

Pacific Legacy. 2020. *Santa Clara Valley Water District Rancho Cañada de Pala Cultural Resources Assessment*.

[RWQCB] San Francisco Bay Regional Water Quality Control Board. 2015. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*. Retrieved from: https://cawaterlibrary.net/wp-content/uploads/2017/05/RWQCB-SF-Bay-Basin-Plan.pdf

[SCCALUC] Santa Clara County Airport Land Use Commission. 2011. *Comprehensive Land Use Plan Santa Clara County.* Retrieved from: https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_SJC_CLUP.pdf

[USEPA] U.S. Environmental Protection Agency. 2007. *Final Stipulated Injunction and Related Information Involving Pesticides and the California Red-legged Frog (EPA-HQ-OPP-2006-0702)*. Retrieved from: https://www.regulations.gov/document?D=EPA-HQ-OPP-2006-0702-0027

Wildland Solutions. 2008. *Monitoring Annual Grassland Residual Dry Matter: A Mulch Manager's Guide for Monitoring Success (2nd ed.).* Brewster, WA: K. Guenther and G. Hayes.

Valley Water. 2014. *Best Management Practices Handbook*. Retrieved from: https://www.valleywater.org/sites/default/files/201802/Att%20F%20BMPs_070214_CLEAN.PDF

Valley Water. 2015. *Rancho Cañada de Pala Preserve Area 3 Long-term Management Plan*.

Valley Water. 2016a. *Rancho Cañada de Pala Preserve Areas 1 and 2 Long-term Management Plan*.

Valley Water. 2016b. *Groundwater Management Plan*. Retrieved from: https://s3.uswest2.amazonaws.com/assets.valleywater.org/2016%20Groundwater%20Management%20Plan.pdf

Valley Water. 2019. *Biological Site Assessment Rancho Cañada de Pala Preserve Long-term Management Plan Implementation*.