DRAFT Mitigated Negative Declaration

Valley Water

JANUARY 2021

Pacheco/Santa Clara Conduit Right-of-Way Acquisition Project

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Clean Water • Healthy Environment • Flood Protection

Pacheco/Santa Clara Conduit Right-of-Way Acquisition Project

CEQA Draft Mitigated Negative Declaration
Project No. 92144001

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Prepared by:

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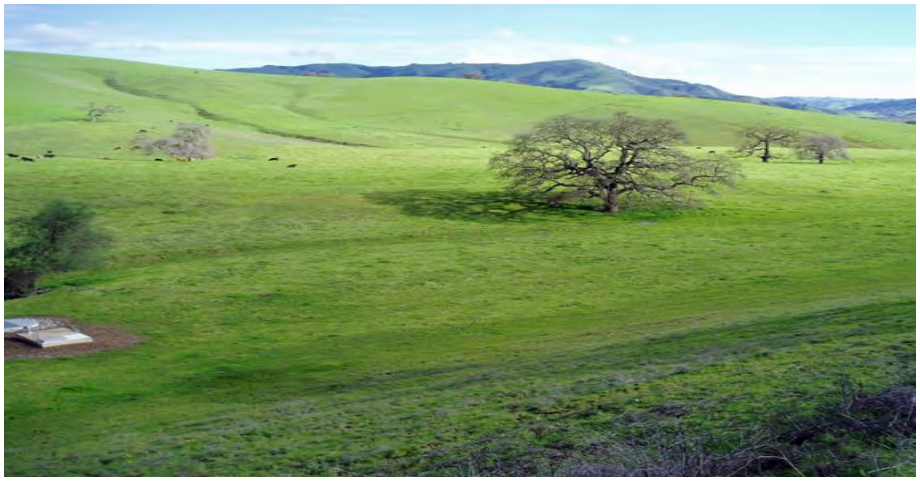

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AMMs	Avoidance and Minimization Measures
APCD	Air Pollution Control District
AQMP	Air Quality Management Plan
ARB	Air Resource Board
ATCM	Asbestos Airborne Toxic Control Measures
BA	Biological Assessment
B.P.	Before Present
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
BO	Biological Opinion
BSA	Biological Study Area
CALTRANS	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CDFW	California Department of Fish & Wildlife
CE	California Endangered, Threatened or Endangered to CACA
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH_4	methane
CHRIS	California Historical Resources Information System
CLUP	Comprehensive Land Use Plan
CMA	Congestion Management Agency
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CP	State of California Fully Protected
CSC	California Species of Concern
CUP	Conditional Use Permit
CVP	Central Valley Project
dB	decibel(s)—measurement of sound
dBA	A-weighted decibel(s)
DEH	Santa Clara County Department of Environmental Health
EA	Environmental Assessment Order
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency

FE	federally endangered
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FSC	Federal Species of Concern
FTA	Federal Transit Administration
FWS	United States Fish & Wildlife Service
GHG	greenhouse gas
H_2S	hydrogen sulfide
HCP	Habitat Conservation Plan
HM	Hazardous Materials
HP	Horsepower
IS	Initial Study
KOP	Key Observation Points
LAFCO	Local Agency Formation Commission
LEA	Local Enforcement Agency
LOS	level of service
LSAA	Lake and Streambed Alteration Agreement
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MBARD	Monterey Bay Air Resources District.
MLD	Most Likely Descendant
MMT	Million metric tons
MND	Mitigated Negative Declaration
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCCAB	North Central Coast Air Basin
NCCP	Natural Community Conservation Planning
NEPA	National Environmental Policy Act
NOA	Naturally occurring asbestos
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWIC	Northwest Information Center, Sonoma State University
OHW	Ordinary High Watermark
PC	Pacheco Conduit
Pb	lead
PG&E	Pacific Gas & Electric Company
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PMP	Pipeline Maintenance Program

PQP	public/quasi-public
PVC	Poly Vinyl Chloride
QC	Quality Control
Reclamation	United States Department of the Interior Bureau of Reclamation
ROG	Reactive Organic Gas
RWQCB	Regional Water Quality Control Board
SCRWA	South County Regional Wastewater Authority
Valley Water	Santa Clara Valley Water District
SFBAAB	San Francisco Bay Area Air Basin
SCC	Santa Clara Conduit
SMARA	Surface Mining & Reclamation Act
SO_2	sulfur dioxide
SOI	Sphere of Influence
SR	State Route
SSC	State-designated species of special concern
ST	State Threatened
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TIA	Transportation Impact Analysis
TPZ	Timber Preserve Zone
UCB	Uniform Building Code
USACE	United States Army Corps of Engineers
USGS	United States Geological Service
US 101	Federal Highway 101
VdB	Vibration Velocity Level
VHP	Santa Clara Valley Habitat Plan
VMT	Vehicle Miles Traveled
VTA	Valley Transportation Authority

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1. INTRODUCTION

1.1 ORGANIZATION OF THIS DOCUMENT

This document is organized to assist the reader in understanding the potential environmental impacts of the proposed Pacheco/Santa Clara Conduit Right of Way Acquisition Project (Project) and to fulfill requirements of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.).

Section 1, Introduction indicates the Project purpose under CEQA, describes the public participation process, and summarizes regulatory or other approvals that may be required from federal, state, and local agencies. Section 2, Project Description identifies the location and features of the Project, and the environmental setting. Section 3, Environmental Evaluation assesses potential environmental impacts through application of the CEQA Initial Study Checklist questions to Project implementation. Section 4 contains the document References. Section 5 contains the List of Preparers that were involved in the preparation of this document.

1.2 PURPOSE OF THE MITIGATED NEGATIVE DECLARATION

The Santa Clara Valley Water District (also known as Valley Water) will be referred to as "Valley Water", from here on in this document. Valley Water acting as the Lead Agency, is proposing to improve access through formal agreements with landowners, and implement cost-effective physical improvements to vaults and above-ground maintenance sites along the Pacheco Conduit (PC) and Santa Clara Conduit (SCC): "Pacheco/Santa Clara Conduit Right of Way Acquisition Project", hereinafter "proposed project" or "Project". The purpose of the Mitigated Negative Declaration (MND) is to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed project

This MND was prepared consistent with CEQA, 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).

1.3 DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION FOR THIS PROJECT

The Initial study (IS) (Section 3) indicates that there would be no significant impacts from the proposed project with implementation of mitigation measures. Valley Water best management practices (BMPs) and other applicable avoidance measures have also been included as part of the proposed project to avoid/minimize effects from the proposed work activities. In accordance with CEQA Guidelines §15070, an MND is appropriate for this Project to comply with CEQA because the IS identifies potentially significant effects, however:

a. Revisions to the proposed project were made that would avoid, or mitigate the effects to a point where clearly no significant effects would occur, and;

b. There is no substantial evidence in light of the whole record that the proposed project, as revised, may have a significant effect on the environment.

1.4 PUBLIC REVIEW PROCESS

This Draft MND will be circulated to local and state agencies, interested organizations, and individuals who may wish to review and provide comments on the Project description, the proposed mitigation measures or other aspects of the report. The publication will commence the 30-day public review period per CEQA Guidelines §15105(b) beginning on **Friday, January 8, 2021** and end on **Monday, February 8, 2021** at 5:00 p.m.

The Draft MND and supporting documents are posted on the Valley Water website:

https://www.valleywater.org/public-review-documents

Hard copies of the Draft MND and supporting documents are not available due to the Covid-19 current shelter in place order.

Written comments or questions regarding the Draft MND should be submitted to Mike Coleman at the address indicated below not later than 5 pm on **Friday, February 8, 2021**. The final MND along with any comments received by Valley Water during the public review period will be considered by the Valley Water's decision-making body or person prior to a decision on the project.

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1.5 PERMITS AND APPROVALS

The CEQA responsible agencies are state and local agencies 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.

This MND is intended to assist state and local agencies to carry out their responsibilities for permit review or approval authority over various aspects of the Project. The proposed project would require Project-specific permitting and/or review by a number of agencies, which also include federal agencies. These agencies are listed in Table 1.5-1.

As described in Section 2, Project Description, the proposed project includes physical improvement of facilities owned by United States (US) Department of the Interior, Bureau of Reclamation (Reclamation) for purpose of improving future access and maintaining the facilities by the Valley Water. Reclamation has determined that the National Environmental Policy Act (NEPA) applies to its approval relating to the proposed project and will fulfill responsibilities as the NEPA lead agency. Reclamation is currently preparing and will be releasing a Draft Environmental Assessment for public review of the Project. In addition, Reclamation is also preparing biological assessments as part of the Section 7 consultation process pursuant to the federal Endangered Species Act.

TABLE 1.5-1
Permits and Approvals

Potential Permit or Approval	Agency
Clean Water Act Section 404 Permit It is anticipated that the proposed project would obtain permit coverage through one or more US Army Corps of Engineers Nationwide Permits. It is expected that an NWP 46 and NWP 12 would be required as well as Regional General Permit 20 under the Santa Clara Valley Habitat Plan.	US Army Corps of Engineers (USACE)
Biological Opinion pursuant to the Federal Endangered Species Act under Section 7 of the Endangered Species Act	US Fish and Wildlife Service (USFWS) Sacramento and Ventura
Clean Water Act Section 401 Water Quality Certification and General Order associated with Nationwide permits.	Central Coast Regional Water Quality Control Board (RWQCB, Region 3)
California Fish and Game Code Section 1600 Lake or Streambed Alteration Agreement (LSAA)	California Department of Fish and Wildlife (CDFW), Bay Delta Region
Section 2081 incidental take permit pursuant to California Endangered Species Act	CDFW Bay Delta Region and Central Region
Santa Clara Valley Habitat Conservation Plan & Natural Communities Conservation Plan compliance	Santa Clara Valley Habitat Agency
Local Permits: Santa Clara County and/or San Benito County permits may be required for grading, driveway construction, or traffic control plans.	County of Santa Clara and County of San Benito
Encroachment Permit State Highway 152	CALTRANS-District 4, Santa Clara County

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2. PROJECT DESCRIPTION

2.1 BACKGROUND

The PC and SCC are part of the of the San Felipe Division conduit and tunnels supplying raw water to both Valley Water and San Benito County Water District. The facilities were constructed by Reclamation in the 1980's as a part of the Federal Central Valley Project (CVP), which conveys water from the water-rich northern part of California to the more arid parts of the state. Through agreements made with Reclamation at the start of the system, Valley Water maintains the SCC and PC, and obtained vehicle and worker access through verbal agreements with landowners as needed. Valley Water has determined that formal access agreements are needed to more efficiently fulfill its obligation to maintain the conduits.

Valley Water maintenance crews need to access pipeline vaults (enclosed access points where maintenance workers can reach devices attached to the pipeline; see Appendix A of this document for pipeline definitions) two or three times each year for maintenance. These vaults contain air release valves (devices that release entrapped air in the pipeline), blow-off valves (devices that allow portions of the pipeline to be drained for maintenance), or other appurtenances on the SCC and PC. In addition to access difficulties related to lack of easements, there are physical impediments to maintenance staff accessing pipeline vaults at several locations. For example, wet weather creates difficulty and sometimes inability to access sites, fences without nearby gates block convenient routes requiring a roundabout way to access vaults, and other existing site conditions create physical hazards for maintenance staff.

2.1.1 Project Objectives

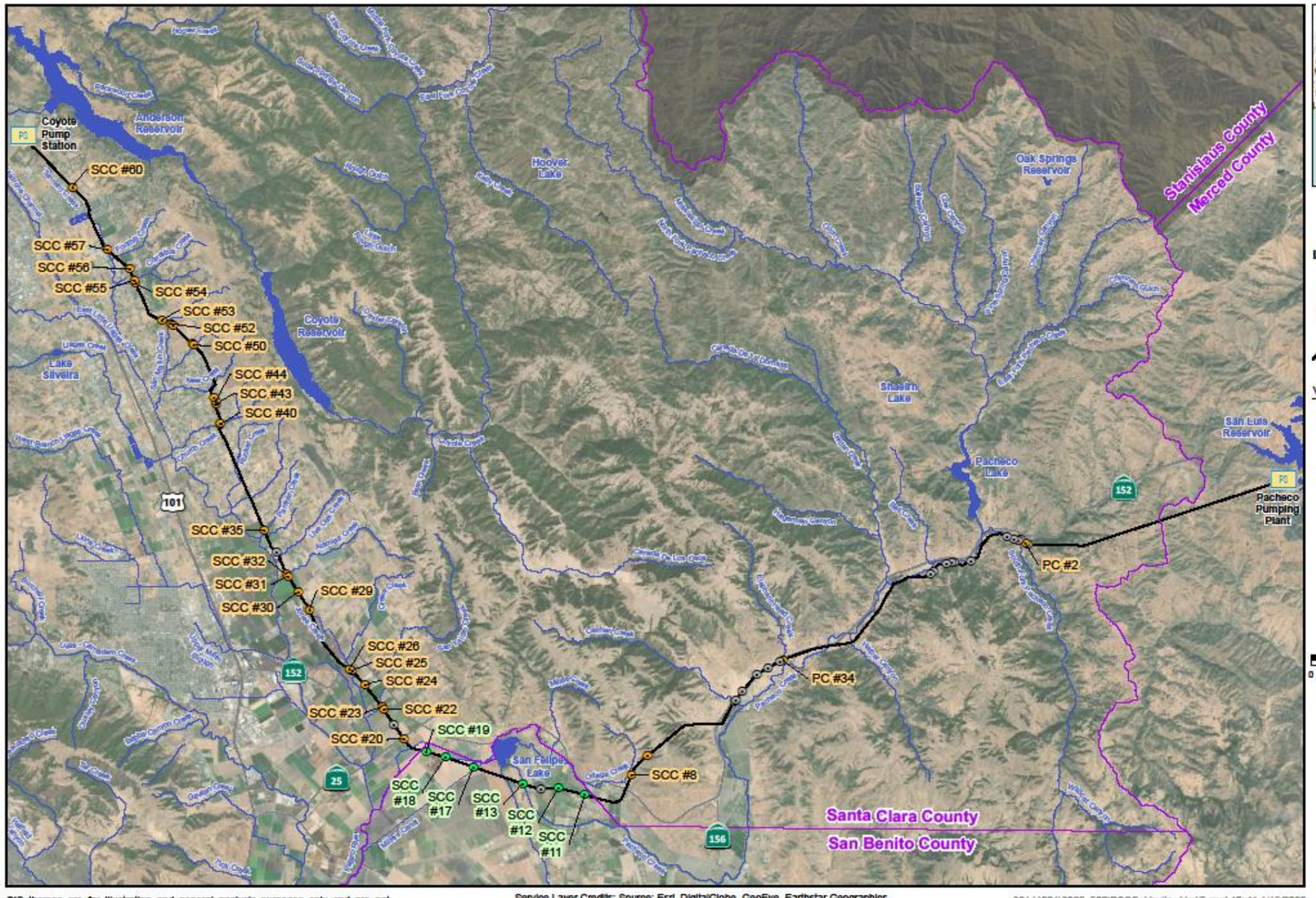
The objectives of the proposed project are to acquire formal access agreements with landowners and implement cost-effective physical improvements to vaults, and above-ground maintenance sites along the PC and SCC. No changes to the existing operational and maintenance (O&M) agreements between Valley Water and Reclamation are proposed at this time.

2.1.2 Project Location

The PC and SCC are located within unincorporated Santa Clara and San Benito Counties and owned by Reclamation. The Project would include new easement acquisitions and/or installation/construction of vault improvements, and/or implementing travel routes to or near 37 vaults on the SCC and PC. The 37 vault locations are shown in Figure 2-1.1. Proposed project activities are summarized in Table 2.1-1 by the County in which activities take place and the vault they would serve.

These vaults and proposed project activities are located within either unincorporated Santa Clara County or unincorporated San Benito County. SCC 60 is located outside of the Morgan Hill city limits, just adjacent to the City of Morgan Hill boundary in Santa Clara County.

Santa Clara Conduit & Pacheco Conduit Vaults



Legend

- County Boundary
- Pump Station
- Santa Clara / Pacheco Conduit

Vault Work Site Locations:

- San Benito County
- Santa Clara County
- None Worksite

Approximate Scale

0 1 2 4 Miles

Valley Water

GIS themes are for illustration and general analysis purposes only and are not accurate to surveying or engineering standards. Information is not guaranteed to be accurate, current, or complete and use of this information is your responsibility.

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Sources: Esri, USGS, NOAA

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FIGURE 2.1-1
Project Location Map

TABLE 2.1-1
Summary of Proposed Activities

Pipeline	Vault No.	Acquire New Easements	Implement New Route	Install/ Construct New Gravel Path	Install/ Construct New Gravel Collar	Install/ Construct New Driveway	Install/ Construct New Sign	Install/ Construct New Gate
Santa Clara County								
Pacheco Conduit (PC)	2				✓			
	15		✓					
	16		✓					
	17		✓					
	34				✓			
	38		✓					
Santa Clara Conduit (SCC)	8		✓	✓				
	20				✓			
	21		✓		✓			✓
	22		✓		✓			✓(2)
	23		✓		✓			
	24		✓		✓			✓
	25	✓	✓		✓			
	26		✓		✓			
	29	✓						
	30		✓		✓			
	31		✓		✓			
	32		✓			✓		
	34		✓					✓
	35		✓		✓			
	40	✓	✓					✓
	43		✓		✓	✓		✓
	44	✓						
	50							✓
	52				✓			
	53							✓
	54	✓	✓			✓		✓(2)
	55	✓						
	56	✓			✓			
	57	✓			✓			
	60	✓	✓					
San Benito County								
Santa Clara Conduit (SCC)	11		✓		✓	✓		✓
	12		✓			✓	✓	✓(3)
	13							✓
	17				✓			
	18	✓	✓		✓			
	19				✓			
Totals:	**37**	**10**	**23**	**1**	**20**	**5**	**1**	**16**

2.1.3 Environmental Setting

The Project encompasses 37 separate sites at or near vault locations lying within and surrounded by undeveloped hillsides and valleys of central California in Santa Clara and San Benito Counties, which includes the upper Pajaro River watershed draining to Monterey Bay, Pacheco Pass, south Santa Clara Valley, Morgan Hill, and Gilroy. The sites are comprised of mostly rural and agricultural annual grassland, interspersed with scattered oaks, shrubs and wetlands. Scattered ranches, farms, and low-density residential uses are located within the vicinity of the Project sites.

2.2 PROJECT DESCRIPTION

The proposed project would include acquisition of easements and/or installing/constructing one new path at SCC 8, and/or installing/constructing gravel collars, driveways, gates, signs, and/or implementing new travel routes near some of the 37 vaults on the existing SCC and PC as identified above in Figure 2.1-1 and Table 2.1-1. Some of the vaults have more than one project element (e.g., could be any combination of easement acquisition, implementation of a new travel route, installation/construction of one new gravel path to SCC 8, installation/construction of a new gravel collar, installation/construction of a new driveway, or installation/construction of new gates) as listed below. Each of the proposed project elements is further described below.

2.2.1 Project Elements

Acquisition of Easements

Valley Water is proposing to obtain easements from private landowners near ten SCC Vault locations as described in Figure 2.1-1. These easements were selected based on maintenance input as to the vaults most needing improved access and considerations of cost and practicability of making the proposed improvements at a given location. Easements are proposed for purpose of getting access to the following vaults:

1. SCC 17/18/19 –Lake Road
2. SCC 25 –SR 152
3. SCC 29 –Dunlap Road
4. SCC 40 –Foothill Avenue
5. SCC 44 –Church Avenue
6. SCC 54 –Center Avenue
7. SCC 55 –Center Avenue
8. SCC 56 –Maple Avenue
9. SCC 57 –Tenant Avenue
10. SCC 60 –Hendry Drive

Path Installation/Construction

Valley Water would grade and install/construct one new gravel path to provide permanent all-weather access from an existing driveway off State Route (SR) 152 to

Vault SCC 8. The path would be approximately 850 feet in length and 12 feet in width, plus an additional 12 feet in width for temporary construction purposes (graders, trucks, worker access during construction). The path would be installed/constructed through the existing farm field to accommodate all weather travel for all sizes of Valley Water repair trucks as may be needed. Gravel would be placed down on the graded path for erosion control and stability to allow year-round access.

In advance of the path installation/construction, Valley Water would survey the proposed path alignment, develop topographic data for design, and set construction stakes for the grading and installation/construction of the new graveled pathway. The path alignment would be designed to avoid or minimize environmental impacts to the extent possible. Heavy equipment would be used to perform the grading work and dump trucks would be used to haul excess soil from the site. Soils removed from the path installation/construction site would be recycled on other Valley Water projects or disposed of at landfills for recycling or cover, as appropriate.

Gravel Collar Installation/Construction

The Project proposes installing/constructing new gravel collars at ground level around the top of each of the 20 vaults, listed below, to allow for safe access by maintenance personnel. Collars would be created by clearing a square shaped area measuring a maximum of 32 feet by 32 feet around designated vaults. Generally, collars would provide at least 16 feet of space in front of pipe appurtenances; collar dimensions would be reduced to a 4-foot curve around the back of any vaults that back onto a waterway or wetland. A small volume of soil mixed with plant debris could be removed from each site during collar clearing activities. Soils removed from the collar installation/construction sites would be recycled on other Valley Water projects or disposed of at landfills for recycling or cover, as appropriate. Any vegetation and shrubs that would be removed from the site during minor ground disturbance or clearing activities would be taken to a composting facility or chipped and used as mulch. To complete the collars, gravel would be placed in the cleared areas to create a solid pad for maintenance staff to safely perform needed work in the associated vault.

Gravel collars would be installed/constructed at the following 20 vaults:

1. PC 2
2. PC 34 (partial collar)
3. SCC 11
4. SCC 17
5. SCC 18
6. SCC 19 (partial collar)
7. SCC 20
8. SCC 21
9. SCC 22
10. SCC 23
11. SCC 24
12. SCC 25
13. SCC 26
14. SCC 30

15. SCC 31
16. SCC 35
17. SCC 43
18. SCC 52
19. SCC 56
20. SCC 57 (partial collar)

Driveway Installation/Construction

Valley Water would install/construct five new driveways to provide access from public roads to vault locations. The driveways would be approximately 30 feet long perpendicular to the road and would taper to 15 feet wide within 10 feet from the roadway. Driveways would be paved with asphalt and meet County design standards. Some or all of the installation/construction of the five asphalt driveways may be undertaken by a Valley Water contractor.

Driveways would be constructed in the following vault locations:

1. SCC 11 – Lovers Lane
2. SCC 12 – Lovers Lane
3. SCC 32 – Leavesley Road
4. SCC 43 – Church Avenue
5. SCC 54 – Center Avenue

Gate Installation/Construction

Gates would be constructed near public roadways to provide controlled access to vaults. By constructing and installing new metal field gates along with fence relocations, access to the vaults is improved by using existing Reclamation right-of-way, placing the new gates at strategic locations, shortening and making access more direct, and avoiding the need for new private easements at the following locations:

The Project would install/construct 16 new gates at twelve (12) locations to shorten drive routes, make routes more direct, use existing Reclamation right-of-way when possible, and avoid the need for acquiring new private easements at the following vault locations:

1. SCC 11
2. SCC 12 (3 gates)
3. SCC 13
4. SCC 21
5. SCC 22 (2 gates)
6. SCC 24
7. SCC 34
8. SCC 40
9. SCC 43
10. SCC 50

11. SCC 53
12. SCC 54 (2 gates)

(Note: unless specified otherwise above, there would be one new gate installed/constructed per vault; total gates installed would be 16)

Sign Installation/Construction

Valley Water would construct one new sign to call out improved vault location sighting of SCC 12. The new sign would make the vault location more visible for maintenance crews to locate the vault in a more expeditious fashion.

New Travel Routes

Valley Water would adopt new unimproved travel routes for better access to the vaults as shown in Appendix E, at PC vault locations of 15,16,17, 38 and SCC vault locations of 8, 21, 22, 23, 24, 25, 26, 30, 31, 32, 34, 35, 40, 43, 54 and 60 all within the County of Santa Clara. The vault locations within San Benito County that would be associated with new unimproved travel routes would be SCC 11, 12 and 18. The total existing vaults with new unimproved routes (within Reclamation right-of-way) would be 23 for the County of Santa Clara and San Benito (see Table 2.1-1 and further discussion below).

Operations

Generally, the project elements as described above are designed to promote easier access and reduce route distances to the facilities and to improve safety for maintenance staff. After construction of the project elements is completed, Valley Water would implement modified standard practices for operational and maintenance activities. Under existing practice, Valley Water crews use standard fleet vehicles (e.g., full size, heavy duty trucks) to access vault sites for routine operation and maintenance activities. However, standard fleet vehicles have limited abilities to traverse undeveloped ground surfaces during wet conditions. The new practice would involve use of lighter four- to six-wheeled all-terrain vehicles (ATVs) when site conditions limit the use of standard service trucks; however, if practicable, Valley Water would avoid vehicular access and maintenance activities for 24hours following rain events at locations where special status species may be present, unless the activities must be undertaken immediately to maintain the pipelines. The frequency of post-project operational/maintenance trips and associated route distances would remain similar to the current condition. Once the Project elements are constructed, Valley Water would continue to maintain the facilities approximately 2-3 times a year.

Valley Water as described above proposes to allow access to new off-road unimproved travel routes to 23 existing vaults along and within existing Reclamation right-of-way easements to standardize the most efficient routes.

New travel routes as listed above in Table 2.1-1 are as follows as identified by vault location:

Santa Clara County	San Benito County
1. PC 15	1. SCC 11
2. PC 16	2. SCC 12
3. PC 17	3. SCC 18
4. PC 38	
5. SCC 8	
6. SCC 21	
7. SCC 22	
8. SCC 23	
9. SCC 24	
10. SCC 25	
11. SCC 26	
12. SCC 30	
13. SCC 31	
14. SCC 32	
15. SCC 34	
16. SCC 35	
17. SCC 40	
18. SCC 43	
19. SCC 54	
20. SCC 60	

The change in access to these vaults would not result in a measurable increase in total distance traveled for the operational and maintenance activities.

2.2.2 Project Construction

Construction would occur over two years with approximately 50 percent of the work completed each year. Valley Water estimates that it would take approximately 136 days in total to complete the construction (107 days in Santa Clara County and 29 days in San Benito County). Construction activities would occur on weekdays generally from 7:00 a.m. to 5:00 p.m. While unlikely, construction activities may occur occasionally after 5 pm during weekdays and on Saturdays but construction hours would be limited to those permissible under applicable county ordinances. No Sunday, holiday, or nighttime construction (after 7 pm) is planned for the Project.

Regarding solid waste disposal, no demolition would be associated with the proposed project. However, minor grading or ground disturbance with some vegetation clearance would likely necessitate disposal at a landfill. Any soils removed from the Project sites would be recycled on other Valley Water projects if possible or disposed of at the landfills/recycling centers. Any vegetation or shrubs removed during construction would be taken to a composting facility.

Construction Staging Areas

As construction would be small scale, minimal amounts of staging would be needed. Staging would be accommodated at each work site. Valley Water would use previously disturbed areas for staging, such as paved or gravel parking lots and roads, to the extent practicable. Valley Water would stage construction supplies and equipment on dry ground out of the waterways.

Construction Workers and Construction Traffic

Each Project site would typically have a maximum of 4 to 8 workers per day during construction. Since this Project would be primarily constructed by Valley Water work crews, in most cases there would be no Valley Water staff personal vehicles on site. Since construction of the five asphalt driveways may be outsourced at individual separate construction sites, some personal vehicles could be present near the Project sites. Project sites would be accessed via public roads and dedicated utility roads.

The proposed project would generate limited traffic during construction activities. Construction is expected to generate 8 to 16 additional inbound and outbound trips truck trips per Project work site over the total 12-month work period (two 6-month construction periods in two years). As described above, during the two 6-month construction periods, it is estimated that Valley Water would be undertaking construction on approximately 136 days. Construction vehicles would be parked near the Project sites or in designated areas at the respective individual work sites away from public travel routes.

Construction Equipment and Supplies

Based on engineering and field staff's estimation, the types and number of equipment that would be required for the construction of the proposed project at each site include, but are not limited as shown in Table 2.2-1 below:

TABLE 2.2-1
Construction Equipment for the Proposed Project

Project Phase	Construction Equipment Type	Horsepower	Make Model	Model	Estimated Hours/ Workday
Gravel Collars	Roller	80	Caterpillar	CB24B	8
Gravel Collars	Loader	97	Caterpillar	239D	8
Gate Installation	Skid Steer Loader	65	Caterpillar	N/A	8
Driveway	Paver	130	Caterpillar	AP500E	8
Driveway	Roller	80	Caterpillar	CB24B	8
Driveway	Loader	97	Caterpillar	239D	8
Roadway	Grader	187	Caterpillar	12M3	8
Roadway	Roller	80	Caterpillar	CB24B	8
Roadway	Loader	97	Caterpillar	239D	8
Marker Installation	Skid Steer Loader	65	Caterpillar	N/A	8

Source: Technical specifications obtained from CalEEMod version 2016.3.1 default assumptions.

2.2.3 Environmental Protection Measures

Best Management Practices (BMPs) are standard practices that prevent, avoid, or minimize potentially adverse effects associated with construction and other activities. Valley Water routinely incorporates a wide range of BMPs from its Best Management Practices Handbook (Valley Water 2014) into Project design and implementation. The proposed project would include the applicable Valley Water's BMPs, as summarized in Table 2.2-2 below. All BMPs for Project construction activities would be incorporated into the construction documents (plans and specifications).

In addition to Valley Water's applicable BMPs, the proposed project would also include those applicable avoidance and minimization measures included in the Santa Clara Valley Habitat Plan (VHP). The VHP is a joint habitat conservation plan and Natural Communities Conservation Plan (NCCP) developed to serve as the basis for issuance of incidental take permits and authorizations pursuant to Section 10 of the federal Endangered Species Act, the California Endangered Species Act, and California Natural Community Conservation Planning Act. The proposed project (Santa Clara County portion) is a covered activity identified in the VHP. All activities associated with the proposed construction within Santa Clara County must be implemented consistent with requirements outlined in the VHP, including the payment of impact fees. The proposed project would adhere to all applicable Avoidance and Minimization Measures (AMMs) as shown in Table 2.2-3 below, and with all applicable VHP conditions as shown in Table 2.2-4 below, and Valley Water would pay all applicable impact fees. Similar to Valley Water's BMPs, all applicable VHP conditions and AMMs would be incorporated into the

Project design and construction documents.

In addition, Valley Water will implement appropriate measures to minimize, to the maximum extent practicable, the potential spread of Phytophthora plant pathogens to the work sites during construction. For guidance on appropriate measures, Valley Water will rely upon internal subject matter experts (Valley Water botanists) in coordination with evolving guidelines and expertise of the Working Group for Phytophthoras in Native Habitats (www.calphytos.org).

For general guidelines on site sanitation, the exterior and interior of all vehicles, construction equipment, and tools will be kept clean and free of debris, soil and mud (including mud on tires, treads, wheel wells and undercarriage); work shoes will be kept clean by inspecting shoe soles and removing mud, debris, and soil off treads before moving to a new job site. Vehicles will stay on established roads whenever possible.

For work in sensitive areas (i.e., San Felipe Lake), the document titled “Guidance for plant pathogen prevention when working at contaminated restoration sites or sites with rare plants and sensitive habitat”, found at www.calphytos.org will be used, after consultation with internal subject matter experts (Valley Water botanists).

TABLE 2.2-2
Best Management Practices (BMPs)

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;

Air Quality (Continued)	
AQ-1 Use Dust Control Measures The following Bay Area Air Quality Management District (BAAQMD) Dust Control Measures will be implemented:	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.

Biological Resources	
BI-2 Minimize Impacts to Steelhead	Minimize potential impacts to salmonids by avoiding routine use of vehicles and equipment in salmonid streams between January 1 and June 15.
BI-5 Avoid Impacts to Nesting Migratory Birds	Nesting birds are protected by state and federal laws. Valley Water will protect nesting birds and their nests from abandonment, loss, damage, or destruction. Nesting bird surveys will be performed by a qualified biologist prior to any activity that could result in the abandonment, loss, damage, or destruction of birds, bird nests, or nesting migratory birds. Inactive bird nests may be removed with the exception of raptor nests. Birds, nests with eggs, or nests with hatchlings will be left undisturbed.
Cultural Resources	
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 [1]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 Section 21083.2 of the Public Resources Code and Section 15126.4 of the California Code of Regulations. If the archaeologist determines that the artifact or resource is not significant, construction may resume. If the archaeologist determines that the artifact or resource is 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 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.

[1] District BMP CUL-1 was updated to extend the no-work buffer zone from 30 feet to 100 feet if archeological artifacts, tribal cultural resources, or burial remains are encountered during construction.

Hazards & Hazardous Materials	
HM-7 Restrict Vehicle and Equipment	Vehicles and equipment may be washed only at approved areas. No washing of vehicles or equipment will occur at job sites.
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 clean-up 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.

Hazards & Hazardous Materials (Continued)	
HM-12 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
Traffic	
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.
Hydrology/Water Quality	
WQ-5 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
WQ-6 Limit Impact of Concrete Near Waterways	Concrete that has not been cured is alkaline and can increase the pH of the water; fresh concrete will be isolated until it no longer poses a threat to water quality using the following appropriate measures: 1. Wet sacked concrete will be excluded from the wetted channel for a period of four weeks after installation. During that time, the wet sacked concrete will be kept moist (such as covering with wet carpet) and runoff from the wet sacked concrete will not be allowed to enter a live stream. 2. Poured concrete will be excluded from the wetted channel for a period of four weeks after it is poured. During that time, the poured concrete will be kept moist, and runoff from the wet concrete will not be allowed to enter a live stream. Commercial sealants (e.g., Deep Seal, Elasto-Deck Reservoir Grade) may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If a sealant is used, water will be excluded from the site until the sealant is dry. 3. Dry sacked concrete will not be used in any channel. An area outside of the channel and floodplain will be designated to clean out concrete transit vehicles.

Hydrology/Water Quality (Continued)	
WQ-9 Use Seeding for Erosion Control, Weed Suppression, and Site Improvement	1. 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. 2. The seed mix should consist of California native grasses, (for example *Hordeum brachyantherum*; *Elymus glaucus*; and annual *Festuca microstachys*) or annual, sterile hybrid seed mix (e.g., Regreen™, a wheat x wheatgrass hybrid). 3. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable or have other appropriate erosion
WQ-16 Prevent Stormwater Pollution	To prevent stormwater pollution, the applicable measures from the following list will be implemented: 1. Soils exposed due to Project activities will be seeded and stabilized using hydroseeding, straw placement, mulching, and/or erosion control fabric. These measures will be implemented such that the site is stabilized, and water quality protected prior to significant rainfall. In creeks, the channel bed and areas below the Ordinary High-Water Mark are exempt from this BMP. 2. The preference for erosion control fabrics will be to consist of natural fibers; however, steeper slopes and areas that are highly erodible may require more structured erosion control methods. No non-porous fabric will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff, but only if there are no indications that special-status species would be impacted by the application. 3. Erosion control measures will be installed according to manufacturer's specifications. 4. To prevent stormwater pollution, the appropriate measures from, but not limited to, the following list will be implemented: a. Silt Fences b. Straw Bale Barriers c. Brush or Rock Filters d. Storm Drain Inlet Protection e. Sediment Traps or Sediment Basins f. Erosion Control Blankets and/or Mats g. Soil Stabilization (i.e., tackified straw with seed, jute or geotextile blankets, etc.) h. Straw mulch 5. All temporary construction-related erosion control methods shall be removed at the completion of the Project (e.g. silt fences). 6. Surface barrier applications installed as a method of animal conflict

Source: Valley Water BMP Handbook 2014

TABLE 2.2-3
Santa Clara Valley Habitat Conservation Plan/NCCP
Avoidance and Minimization Measures (AMMs) *August 2012

Avoidance and Minimization Measures. During Project design and construction, Valley Water shall implement the following measures:	
ID	**General**
1	Minimize the potential impacts on covered species most likely to be affected by changes in hydrology and water quality.
2	Reduce stream pollution by removing pollutants from surface runoff before the polluted surface runoff reaches local streams.
3	Maintain the current hydrograph and, to the extent possible, restore the hydrograph to more closely resemble predevelopment conditions.
4	Reduce the potential for scour at stormwater outlets to streams by controlling the rate of flow into the streams.
5	Invasive plant species removed during maintenance will be handled and disposed of in such a manner as to prevent further spread of the invasive species.
6	Activities in the active (i.e., flowing) channel will be avoided. If activities must be conducted in the active channel, avoidance and minimization measures identified in this table will be applied.
7	Personnel shall prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels.
8	Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations).
11	Vehicles shall be washed only at approved areas. No washing of vehicles shall occur at job sites.
12	No equipment servicing shall be done in the stream channel or immediate flood plain, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps, generators).
13	Personnel shall use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately tired vehicles, either tracked or wheeled, shall be used depending on the situation.
21	To the extent that stream bed design changes are not part of the Project, the stream bed will be returned to as close to pre-Project condition as appropriate.
26	Any sediment removed from a Project site shall be stored and transported in a manner that minimizes water quality impacts.
ID	**Project Design**
35	Use pervious materials, such as gravel or turf pavers, in place of asphalt or concrete to the extent practicable.
39	Minimize alterations to existing contours and slopes, including grading the minimum area necessary.
58	Existing access routes and levee roads shall be used if available to minimize impacts of new construction in special status species habitats and riparian zones.

Avoidance and Minimization Measures. During Project design and construction, Valley Water shall implement the following measures:	
ID	**Construction**
61	Minimize ground disturbance to the smallest area feasible.
62	Use existing roads for access and disturbed area for staging as site constraints allow. Off-road travel will avoid sensitive communities such as wetlands and known occurrences of
76	Prevent spills and clean up spilled materials.
89	The potential for traffic impacts on terrestrial animal species will be minimized by adopting traffic speed limits.
90	All trash will be removed from the site daily to avoid attracting potential predators to the site. Personnel will clean the work site before leaving each day by removing all litter and construction-related materials.

TABLE 2.2-4
Santa Clara Valley Habitat Conservation Plan/NCCP
Conditions

- ☒ Condition 1. Avoid Direct Impacts on Legally Protected Plant and Wildlife Species
- ☐ Condition 2. Incorporate Urban-Reserve System Interface Design Requirements
- ☒ Condition 3. Maintain Hydrologic Conditions and Protect Water Quality
- ☒ Condition 4. Avoidance and Minimization for In-Stream Projects
- ☒ Condition 5. Avoidance and Minimization Measures for In-Stream Operations and Maintenance
- ☐ Condition 6. Design and Construction Requirements for Covered Transportation Projects
- ☒ Condition 7. Rural Development Design and Construction Requirements
- ☒ Condition 8. Implement Avoidance and Minimization Measures for Rural Road Maintenance
- ☐ Condition 9. Prepare and Implement a Recreation Plan
- ☐ Condition 10. Fuel Buffer
- ☐ Condition 11. Stream and Riparian Setbacks
- ☒ Condition 12. Wetland and Pond Avoidance and Minimization
- ☐ Condition 13. Serpentine and Associated Covered Species Avoidance and Minimization
- ☐ Condition 14. Valley Oak and Blue Oak Woodland Avoidance and Minimization
- ☒ Condition 15. Western Burrowing Owl
- ☒ Condition 16. Least Bell's Vireo
- ☒ Condition 17. Tricolored Blackbird
- ☒ Condition 18. San Joaquin Kit Fox
- ☐ Condition 19. Plant Salvage when Impacts are Unavoidable
- ☐ Condition 20. Avoid and Minimize Impacts to Covered Plant Occurrences

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3. ENVIRONMENTAL EVALUATION

This Initial Study (IS) has been prepared in accordance with the CEQA and CEQA Guidelines to provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration. As shown in the analysis that follows, none of the environmental factors discussed and analyzed in this document would involve an impact that is a "Potentially Significant Impact" as indicated by the CEQA checklist.

This IS identifies less than significant impacts with mitigation incorporated on air quality, biological resources, and cultural resources. Mitigation measures have been proposed for the Project to clearly reduce such effects to less-than-significant levels. In accordance with CEQA Guidelines §15070, an MND is appropriate for this Project to comply with CEQA because the IS identifies potentially significant effects, however:

1. Revisions to the proposed project were made that would avoid, or mitigate the effects to a point where clearly no significant effects would occur, and;

2. There is no substantial evidence in light of the whole record that the Project, as revised, may have a significant effect on the environment.

Therefore, an MND may be prepared in accordance with Section 15070 of the CEQA Guidelines.

1. Project Title:	Pacheco/Santa Clara Conduit Right-of-Way Acquisition Project
2. Lead Agency and Address:	Valley Water (Santa Clara Valley Water District) 5750 Almaden Expressway
3. Contact Person and Phone Number:	Mike Coleman, AICP, Environmental Planner (408) 630-3096
4. Project Location:	SCC and PC vaults located in Santa Clara and San Benito Counties
5. General Plan Designation:	Rural Residential, Agriculture, Ranchlands, Open Space
6. Zoning:	Residential, Agricultural, Open Space
7. Description of the Project:	The purpose of the Proposed project is to improve access through formal agreements with landowners and cost-effective physical improvements to vaults and above-ground maintenance sites along the PC and SCC.

8. Surrounding Land Uses and Setting:	Rural Residential, Agricultural, Scenic Highway
9. Other public agencies whose approval may be required:	Bureau of Reclamation Regional Water Quality Control Board State Water Resources Control Board California Department of Fish and Wildlife US Fish and Wildlife Service Santa Clara Valley Habitat Agency Counties of Santa Clara and San Benito CALTRANS
10. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	Written request for consultation was received from the Muwekma Ohlone Indian Tribe on or about February 12, 2019. Consultation with the Tribe began on February 27, 2019. The first Tribal consultation meeting occurred on March 15, 2019 at the Valley Water office. The AB 52 consultation process was concluded on or about April 15, 2019.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, including at least one impact that is “Less Than Significant Impact with Mitigation Incorporated” as indicated by the checklist on the following pages:

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

DETERMINATION: On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by Valley Water. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "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 proposed 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 proposed project, nothing further is required.

	**Date:01/04/2021**
Printed Name: Michael F. Coleman, AICP	**For: Valley Water (Santa Clara Valley Water District)**

3.1 AESTHETICS

3.1.1 Environmental Setting

State Route (SR) 152 in Santa Clara County is an eligible state scenic highway. The Highway continues into Merced County east past San Luis Reservoir. The highway is a listed State Scenic Highway from the Santa Clara County line to the junction with Interstate 5, along a 13.8-mile stretch (Caltrans 2005). SR 152 would be the main access route for maintenance work on the southern and eastern portions of the SCC and PC.

Counties also maintain their own list of scenic roads. The Santa Clara County General Plan supports the designation of scenic roads that link the urban areas to rural and open space areas with careful consideration of fire risks, hazards, and natural resource protection (County of Santa Clara 1994). Santa Clara County contains 64 County-designated scenic roads, all of which are within or adjacent to rural areas. The list of roads is included in the Santa Clara County Zoning Ordinance Chapter 3.30: SR Scenic Roads Combining District. The purpose of the SR Scenic Roads Combining District is to protect the visual character of scenic roads in Santa Clara County through special development and sign regulations. The SR Combining District applies to all designated scenic roads in unincorporated Santa Clara County. Many of the vault facilities along the SCC are located within viewing distance of County-listed scenic roads.

According to the Santa Clara County General Plan, SR 152 is considered one of the most dramatically scenic gateways into Santa Clara County. Santa Clara County is currently actively seeking official State designation of this road as a State Scenic Highway. Policy R-RC(i) 36 of the Santa Clara County General Plan is intended to protect the scenic value of several major county thoroughfares and entranceways through State Scenic Highway designation, including Pacheco Pass (SR 152 east of Gilroy).

The relatively short portion of the SCC located outside of Santa Clara County in San Benito County is located within viewing distance of SR 152. No San Benito County roads were identified as Scenic Roads within the Project area.

3.1.2 Aesthetics Impacts

3.1.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

3.1.2.2 Discussion

A. Have a substantial adverse effect on a scenic vista? *(Less than Significant)*

A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The proposed project sites would be framed by long-range views of undeveloped hillsides, which could be considered a scenic view (vista).

From various near and medium viewpoints surrounding the Project sites, views of the proposed project would include views of existing vaults, gates, signs, driveways and roads. Representative views of proposed project sites are shown in Figure 3.1-1. The construction of new facilities would not substantially affect existing views because those views are overwhelmingly dominated by the natural lay of the land. Upgraded facilities would be so minor in scale that they would not affect views that may be considered “scenic” by the general public and local residents. Visual impacts to a scenic vista have therefore been determined to be less than significant.

Representative view of vault in typical hillside setting

Close-up view of typical vault in agricultural field

Representative view of vault SCC 8 and proposed road location

Close-up view of typical vault adjacent to waterway

FIGURE 3.1-1
Project Site Views

B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (*Less than Significant*)

The proposed project would not damage scenic resources such as trees, rock outcroppings, or historical buildings within a state or county scenic highway or road. New physical features proposed with the Project that could result in impact on scenic resources include installation/construction of one gravel path to SCC 8, one sign near SCC 12, five driveways, 16 gates, and 20 gravel collars around existing vaults.

Staging and construction (e.g., excavation equipment on site; spoils per storage, excavation/grading scars, and other general construction activities) may be visible from designated scenic roads primarily located in rural areas of Santa Clara County; however, construction work would occur over a period of 6 months in 2 years and construction is expected to be completed in approximately 136 days in total and thus the impact would be temporary. The visual effect of construction would be minimal because of the remote nature of the sites involved and the small scale of construction. Since the new construction would be so minimal and consistent with the surrounding environments, there would be no substantial change in scenic views. In San Benito County, there are no roadways within the Project area designated as having local, state or federal scenic designations.

Impacts could also occur from the appearance of new facilities viewed from a scenic route once construction is completed. At 850 feet in length and 12 feet in width, the gravel path to SCC 8 from SR 152 would be small in size and would look like the numerous gravel farm roads/paths in the vicinity of the proposed project site. Similarly, proposed driveways, gates, fencing, and sign would blend into existing features common to the Project area. Gravel collars would be added to existing developed vaults and would not exceed 1,024 square feet in area per vault location.

Based on the above, the proposed project would have a less than significant impact on scenic resources within a state or county scenic highway or road.

C. Substantially degrade the existing visual character or quality of the site and its surroundings? (*Less than Significant*)

As discussed under Items (A) and (B) above, the small-scale construction would not be visually dominant in the landscape where views include abundant rural and open space elements. Aside from the temporary intrusion of construction equipment and materials, the existing visual character and quality of the Project sites and surroundings would remain substantially unchanged. In addition, the permanent features including the new SCC 8 gravel path, gates, driveways, and gravel collars would be consistent with the surrounding environments and would not substantially degrade the existing visual character or quality of the sites. Thus, this would be considered a less than significant impact.

D. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? (*No Impact*)

None of the new Project features after construction would create a new source of light or glare that would affect day or nighttime views in the area.

As described in Section 2, Project Description, no nighttime construction is proposed and thus, construction would not create a source of substantial light or glare during nighttime. Glare from construction or maintenance vehicles would have the potential to occur at the Project site; however, construction and maintenance would not require a substantial number of additional vehicles beyond those that currently travel to and from the existing Valley Water facilities and thus, the Project would not alter existing conditions relative to glare to any noticeable degree.

For these reasons, construction of the proposed project and future operation would not create a new source of substantial light or glare that would adversely affect views in the surrounding areas. There would be no impact.

3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1 Environmental Setting

As previously described in Section 2.1.3, the Project sites are surrounded by rolling hills with annual grassland and ranching, farming, and open space. Pockets of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are located within the vicinity of Project sites according to the California Department of Conservation Farmland Mapping and Monitoring Program (California Department of Conservation 2014). Portions of the SCC and PC pass through or are located near Prime, Unique or Farmland of Statewide Importance. However, the Project will not change any existing land use as the pipeline sites and vaults are currently in place as constructed in the 1980's.

The valley areas of South Santa Clara County, especially south and east of Gilroy, continue to be an important source of cut flowers, vegetables and grains, fruits, nuts, berries, and other crops (County of Santa Clara, 1994 General Plan). Although industrialized uses rather than agricultural ones now dominate the region's economy, approximately 56 percent of the unincorporated area of Santa Clara County remains subject to agreements called "Williamson Act contracts" that have been entered into pursuant to the California Land Conservation Act of 1965. The Project sites are not under a Williamson Act contract.

Similarly, agriculture is the predominant land use in San Benito County, totaling 747,409 acres or 85 percent of the unincorporated county. Grazing is the largest category of agricultural land, and accounts for over 70 percent of all existing land use in the unincorporated county. None of the San Benito County Project sites are under a Williamson Act contract as well.

Between 2000 and 2001, approximately 2,450 acres of privately-owned lands in San Benito County were classified as Timberland Production Zone (TPZ) (Department of Forestry and Fire Protection, 2002). Between 2000 and 2009, an average of approximately 0.6 percent (43,223 acres) of the County's timberland was harvested each year (Department of Forestry and Fire Protection, 2010). The Project sites are not on forest land, timberland, or timberland zoned Timberland Production. No portion of the existing SCC and PC and vaults are within the TPZ. No TPZ would be converted to non-forestry use. It should be noted that Santa Clara County does not have a TP zone district but allows timber harvests in other zone districts (County of Santa Cruz memo to Board of Supervisors, entitled "Minimum Parcel Size to Qualify for TP Zoning". April 10, 2007).

3.2.2 Agriculture and Forestry Resources Impacts

3.2.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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 nonagricultural 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 in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104 (g))?	☐	☐	☐	☒
D. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
E. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.2.2 Discussion

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 nonagricultural use? *(No Impact)*

Farming has been conducted alongside the existing conduits and vaults since inception of the water system many decades ago by Reclamation. Although some of the proposed project sites may be located on Farmland, the proposed project would not convert land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Thus, there would be no impact associated with conversion of Farmland.

B. Conflict with existing zoning for agricultural use or a Williamson Act contract? *(No Impact)*

Implementation of the proposed project would not conflict with agricultural uses of project sites, as none of the Project sites are under a Williamson Act contract. No impact would occur.

C. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104 (g))? (*No Impact*)

The Project sites would be located within the existing pipeline alignments of the San Felipe System. The Project sites would not be located on forest land, timberland, or timberland zoned Timberland Production. Therefore, no impact would occur.

D. Result in the loss of forest land or conversion of forest land to non-forest use? *(No Impact)*

The proposed project sites are located on undeveloped hillsides comprised of annual grassland, interspersed with scattered landscape trees and shrubs and water courses. The Project activities would not result in the loss of forest land and would not convert forest land to non-forest use. No impact would occur.

E. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use? *(No Impact)*

There would be no Farmland conversion to nonagricultural use caused by this Project. There are no forestry uses in the immediate vicinity of the Project sites. The implementation of the Project would not result in changes in the

environment such that Farmland or forest land would be converted to nonagricultural use or non-forest use. No impact would occur.

3.3 AIR QUALITY

Air Quality is affected by local climate, topography, and pollutants emitted into the atmosphere from activities such as construction, industrial operations, transit, and transportation vehicles.

3.3.1 Environmental Setting

3.3.1.1 Air Basins

The San Francisco Bay Area Air Basin (SFBAAB) includes Marin, San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, and Napa Counties and a portion of Solano and Sonoma Counties. A majority of the Project sites are in Santa Clara County, within the SFBAAB. The SFBAAB is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD).

Project activities within San Benito County would be in the North Central Coast Air Basin (NCCAB). The NCCAB includes Santa Cruz, San Benito, and Monterey Counties, and is within the jurisdiction of the Monterey Bay Air Resources District (MBARD), formerly the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

3.3.1.2 Air Quality

The Clean Air Act (amended 1990) requires the US Environmental Protection Agency (EPA) to identify ambient air quality standards to protect public health and welfare. The US EPA has established National Ambient Air Quality Standards (NAAQS) for ozone (O_3), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur dioxide (SO_2), lead, particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). The California Air Resources Board (CARB) has also established ambient air quality standards for ozone, CO, NO, SO_2, sulfates, PM_{10}, $PM_{2.5}$, lead, hydrogen sulfide (H_2S) and visibility-reducing particles. In most cases, California ambient air quality standards are stricter than US EPA standards.

These pollutants are called “criteria” pollutants because the standards satisfy criteria specified in the Clean Air Act. Pursuant to the Clean Air Act, the EPA has classified air basins (i.e., distinct geographic regions) as either “attainment” or “non-attainment” for each criteria pollutant, based on whether the federal ambient air quality standards have been achieved. Some air basins have not received sufficient analysis for certain criteria air pollutants and are designated as “unclassified” for those pollutants. Table 3.3-1 summarizes the national and state air quality classifications for the affected air basins.

TABLE 3.3-1
Designations for State and National Air Quality Standards

Pollutant	SFBAAB		NCCAB	
	State Standard	National Standard	State Standard	National Standard
Ozone	Nonattainment	Nonattainment	Nonattainment	Attainment/ Unclassified
PM10	Nonattainment	Unclassified	Nonattainment	Attainment
PM2.5	Nonattainment	Nonattainment	Attainment	Attainment/ Unclassified
Carbon Monoxide	Attainment	Attainment/ Unclassified	Unclassified	Attainment/ Unclassified
Nitrogen Dioxide	Attainment	Attainment/ Unclassified	Attainment	Attainment/ Unclassified
Sulfur Dioxide	Attainment	Attainment	Attainment	Attainment
Lead	Attainment	Attainment/ Unclassified	Attainment	Attainment/ Unclassified
Sulfates	Attainment	NA	Attainment	NA
Hydrogen Sulfide	Unclassified	NA	Unclassified	NA
Visibility Reducing Particles	Unclassified	NA	Unclassified	NA

Source: CARB 2015

In May 2017, the BAAQMD initiated an effort to update its 2010 CEQA Guidelines including release of a May 2017 version of the guidelines (BAAQMD 2017). The May 2017 Guidelines includes revisions made to earlier 2010 Guidelines to incorporate the California Supreme Court's opinion in *California Building Industry Association v. Bay Area Air Quality Management District* (2015)62 Cal 4th 369. The BAAQMD is currently working to update outdated references, links, analytical methodologies or other technical information in the May 2017 Guidelines Update. BAAQMD noted that lead agencies may rely on its CEQA Guidelines for assistance in calculating air emissions, obtaining information regarding health impacts of air pollutants, and identifying potential mitigation measures if a lead agency determines that the thresholds reflect an appropriate measure of a project's impacts. Valley Water has independently reviewed BAAQMD recommended thresholds in its updated CEQA Guidelines (BAAQMD 2017) and determined that they are supported by substantial evidence and are appropriate for use to determine significance in the environmental review of this Project. Specifically, Valley Water has determined that the BAAQMD thresholds are well founded and grounded on air quality regulations, scientific evidence, and scientific reasoning concerning air quality and greenhouse gas emissions. Table 3.3-2 shows the BAAQMD's significance thresholds for construction and operation related emissions of criteria pollutants and precursors.

The BAAQMD's Bay Area 2017 Clean Air Plan (CAP) was adopted in April 2017 (BAAQMD 2017) and provides a comprehensive plan to improve Bay Area air quality

and protect public health. This plan outlines an integrated, multi-pollutant control strategy to reduce emissions of particulate matter, TACs, ozone precursors and greenhouse gases). The control strategy is based on four key priorities: reduce emissions of criteria air pollutants and TACs from all key sources; reduce emissions of greenhouse gases such as methane, black carbon, and fluorinated gases; decrease demand for fossil fuels, and decarbonize our energy system.

The MBUAPCD Triennial Plan Revision 2009-2011 focus continues to be on achieving the 8-hour component of the ozone standard since the region has attained the 1-hour standard (MBUAPCD 2009). The primary elements from the 2008 air quality management plan (AQMP) updated in the 2012 revision include the air quality trends analysis, emission inventory, and mobile source programs. The MBUAPCD has jurisdiction over stationary emission sources which continue to be the smallest portion of both the reactive organic gas (ROG) and oxides of nitrogen (NO_x) emissions inventories. Area-wide sources are the main contributor to ROG emissions in the region. The recent changes that contributed to reducing estimated ROG emissions compared to the 2008 AQMP include lower vehicle miles traveled and aligning Rule 426 Architectural Coatings to the ARB's recommendations. Cleaner exhaust standards for mobile sources continue to be an important factor in reducing regional ROG and NOx emissions over the lifetime of the AQMP series.

The MBARD's 2008 CEQA Guidelines (MBUAPCD 2008) recommend a numerical threshold of 82 lbs./day for PM10 as a threshold for construction impacts. For construction sites with earthmoving activities, the MBARD guidelines suggest that projects with activity level below 2.2 acres per day would be assumed to generate emissions below the 82 lb./day threshold (i.e., at less-than-significant level). Table 3.3-3 shows MBARD's significance thresholds for construction and operation related emissions of criteria pollutants and precursors.

TABLE 3.3-2
BAAQMD Proposed Air Quality CEQA Thresholds of Significance

Pollutant	Construction-Related	Operational-Related	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	**Average Daily Emissions (lb/day)**	**Average Daily Emissions (lb/day)**	**Maximum Annual Emissions (tpy)**
ROG	54	54	10
NO_X	54	54	10
PM_{10} (exhaust)	82	82	15
$PM_{2.5}$ (exhaust)	54	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

Pollutant	Construction-Related	Operational-Related
Project-Level		
GHGs **Projects other than Stationary Sources**	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents + employees)
GHGs **Stationary Sources**	None	10,000 MT/yr
Risks and Hazards – New Source (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Receptor (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Source (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor

Source: BAAQMD 2017

TABLE 3.3-3
MBARD Air Quality CEQA Thresholds of Significance*

Pollutant Source	Threshold(s) of Significance
VOC	137 lbs./day (direct + indirect)
NO_X, as NO_2	137 lbs./day (direct + indirect)
PM_{10}	82 lbs./day (on-site)**
	AAQS exceeded along unpaved roads (off-site)
CO	LOS at intersection/road segment degrades from D or better to E or F or V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more***
	550 lbs./day (direct)***
SO_X, as SO_2	150 lbs./day (direct)**

* Projects that emit other criteria pollutant emissions would have a significant impact if emissions would cause or substantially contribute to the violation of State or national AAQS. Criteria pollutant emissions could also have a significant impact if they would alter air movement, moisture, temperature, climate, or create objectionable odors in substantial concentrations. When estimating project emissions, local or project-specific conditions should be considered.

** Construction projects with earthmoving below 2.2 acres per day are assumed to be below the 82 lbs./day threshold of significance, while projects with activity levels higher than those above may have a significant impact on air quality. The MBUAPCD 82 lbs./day operational phase threshold of significance applies only to onsite emissions and project-related exceedances along unpaved roads. These impacts are generally less than significant. On large development projects, almost all travel is on paved roads (0%) unpaved), and entrained road dust from vehicular travel can exceed the significance threshold.

*** Modeling should be undertaken to determine if the project would cause or substantially contribute (550 lbs./day) to exceedance of CO AAQS. If not, the project would not have a significant impact.

Source: Monterey Bay Unified Air Pollution Control District 2008.

3.3.1.3 Naturally Occurring Asbestos

Naturally occurring asbestos (NOA) has been identified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB). No quantitative significance thresholds have been set for NOA. However, CARB approved an Asbestos Airborne Toxic Control Measure (ATCM) requiring road construction and maintenance activities, construction/grading operations, and quarrying and surface mining operations in areas where NOAs is likely to be found to employ the best available dust mitigation measures. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the BAAQMD /MBARD or Project owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The ATCM also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity.

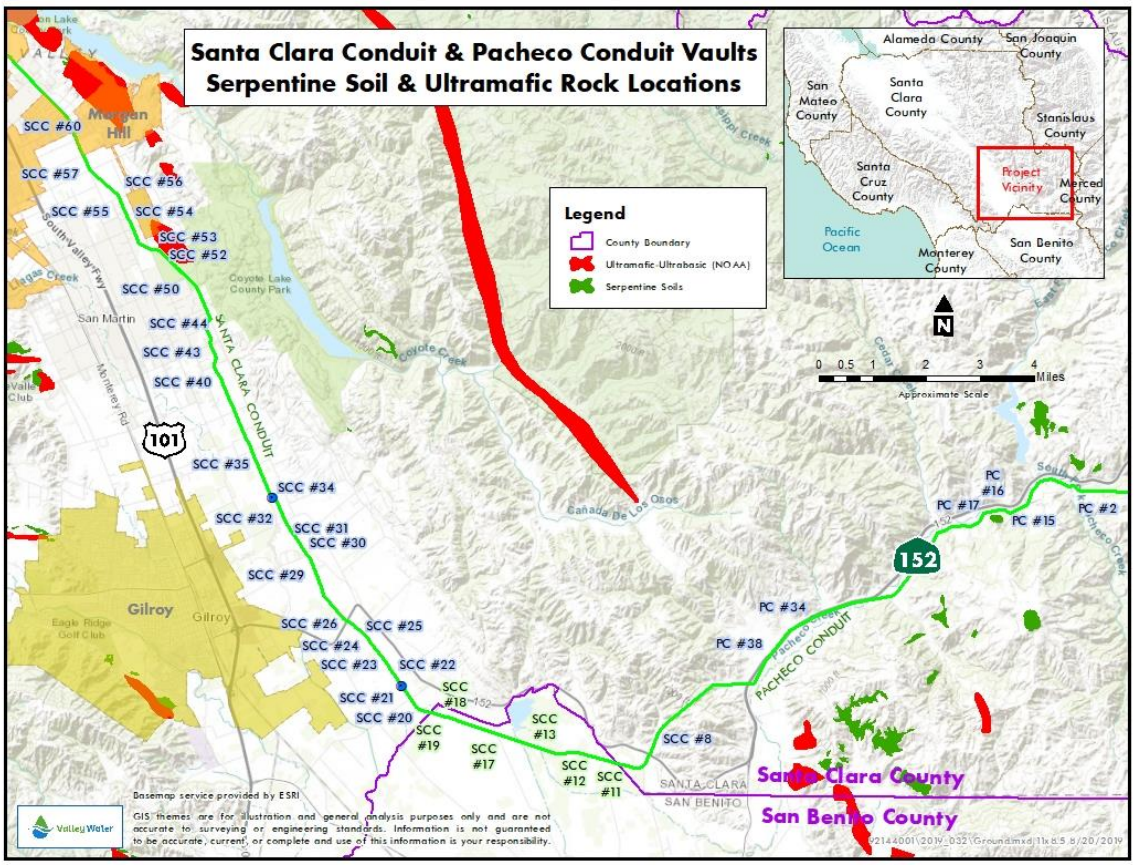

FIGURE 3.3-1
SCC and PC Vaults Serpentine
Soil and Ultramafic Rock Locations

The above map (see Section 5 References) shows areas more likely to contain NOA. Soil-disturbing construction activity in these areas would result in an elevated risk of entraining NOA.

3.3.2 Air Quality Impacts

3.3.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
B. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
C. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
D. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
E. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

3.3.2.2 Discussion

A. Conflict with or obstruct implementation of the applicable air quality plan? *(No Impact)*

The air quality plans applicable to the Project area are the BAAQMD's Bay Area 2017 Clean Air Plan (2017 CAP) for Santa Clara County, which was adopted on April 19, 2017, and the 2012 Triennial Plan and related air plans of the MBUAPCD (now MBARD), adopted on April 17, 2013 for San Benito County.

The BAAQMD Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest heath risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the Project: 1) supports the goals of the Clean Air Plan; 2) includes applicable control measures from the Clean Air Plan; and 3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan. An evaluation of the Project's consistency with each of these criteria is provided below.

The 2012 Triennial Plan documents the MBARD's progress toward attaining the state ozone standard and is the Air District's review and update to the 2008 AQMP. In preparing this report, the MBARD reviewed the following areas required by §40924 and §40925 of the Health and Safety Code: 1) Extent of air quality improvement based upon ambient measurements and air quality indicators; 2) Expected and revised reductions for each measure scheduled for adoption; 3) Incorporate new data or projections into the attainment plan, including, but not limited to population-related, industry-related, and vehicle-related emissions growth; 4) Compare the new data to the rate of emission reductions and growth projected in the previous triennial plan revision. The 2012 AQMP update builds on information developed in past AQMPs. Consequently, some sections of the 2008 AQMP are incorporated by reference for those elements that have not been updated.

Clean Air Plan Goals. The primary goals of the BAAQMD's 2017 Clean Air Plan are to: attain state and national air quality standards and eliminate disparities among Bay Area communities in cancer health risk from TACs. BAAQMD guidance states that "if approval of a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the Project would be considered consistent with the CAP (BAAQMD, 2017). As indicated in the analysis presented below in Item B, air modeling results for the proposed project show that the Project would not exceed the significance criteria for air pollutants and would not expose sensitive receptors to substantial air pollutant concentrations. The proposed project would not hinder the region from attainment of the goals outlined in the Clean Air Plan. Therefore, the Project would be considered to support the goals of the 2017 Clean Air Plan.

Any project that could conflict with the MBARD's goal of attaining the state 8-hour ozone standard would be considered to conflict with the intent of the 2012 AQMP. The measures for determining whether a project would conflict with the intent of the 2012 AQMP is consistency with the CEQA mass emissions thresholds of significance for NO_x and ROG, and/or whether a project would contribute to population growth not accounted for in the 2012 AQMP. As analyzed below in Item B, because the proposed project's emissions would not exceed the MBARD's thresholds of significance, nor would the project be growth inducing, then the project would not be considered to conflict with the 2012 AQMP.

Clean Air Plan Implementation. In the Clean Air Plan, the BAAQMD identifies control measures to reduce potential criteria pollutant, TAC and greenhouse gases emissions from a number of emission sources or sectors such as stationary, transportation, and energy sources. The stationary source measures would not be applicable to the proposed project as those measures are aimed to reducing emissions from sources such oil refineries, cement plants, natural gas distribution facilities, crude oil and natural gas production facilities, gas stations, dry cleaners, metal fabricators, chemical and pharmaceutical production facilities, diesel generators, and large boilers, which are not proposed as part of the Project. The transportation control measures are designed to reduce emissions from motor vehicles by reducing demand for motor vehicle travel,

promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The proposed project would not conflict with the identified transportation and mobile source control measures of the Clean Air Plan, as the Project would not result in a substantial increase in vehicle trips. The control measures recommended in the Clean Air Plan would not be applicable to the Project. For example:

- Mobile source measures of the Clean Air Plan are not applicable to the proposed project because these measures address increases in vehicle mile travelled by promoting ride sharing, telecommuting and improvements to transit. The proposed project would generate minimal, if any, new operational trips and therefore the proposed project would not be a candidate for implementing such measures.

- Land Use and Local Impact measures of the Clean Air Plan are not applicable to the proposed project because these measures address goods movement (e.g. trucking) and direct the BAAQMD to develop new rules and programs.

- Energy Control Measures of the Clean Air Plan are not applicable to the proposed project because these measures address energy efficiency of buildings, promote renewable energy systems, use of cool roofs for buildings and tree planting. The proposed project would not result in construction of new buildings that would require heating or cooling and therefore the proposed project would not be a candidate for implementing such measures.

Based on the above, the Project would not conflict with or obstruct implementation of applicable air quality plans.

B. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (*Less than Significant*)

Construction

Construction activities of the proposed project would result in air pollutant emissions from construction equipment and minor earthmoving. The Proposed activities would require travel to and from Project sites both on highways and residential streets as well as on recreational unpaved or off-road areas. Hauling activities would be limited to delivery of materials and removal or disposal of excess soil.

Site preparation, access road or path grading, and gravel application would generate the greatest amount of dust and particulate matter and would occur for short periods of time during the construction period. Construction vehicles associated with these activities would emit diesel exhaust particulate matter and criteria pollutants. Construction activities would occur over two dry seasons. The total construction period is anticipated to last approximately 12 months.

The California Emissions Estimator Model® (CalEEMod) was used to calculate the projected Project's average daily construction-related emissions. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, (applicable to land use development projects), such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

The CalEEMod modeling inputs and results are included as Appendix B of this document while the emission estimates are summarized in Table 3.3-4, below. Emissions were estimated separately for those generated in Santa Clara County which is in the San Francisco Bay Area Air Basin and subject to the significance thresholds developed by the BAAQMD and those emissions generated in San Benito County which is in the North Central Coast Air Basin and subject to significance thresholds developed by the MBARD. As can be seen from Table 3.3-4, neither the estimated average daily emissions (Santa Clara County) nor the estimated maximum daily emissions (San Benito County) of criteria pollutants and precursors during construction of the Project would not exceed applicable significance thresholds. Thus, air quality impact relating to criteria air pollutants and precursors in both counties would be less than significant.

For fugitive dust, BAAQMD recommends use of basic construction mitigation measures for all proposed projects. Valley Water would implement of BMP AQ-1 (see Table 2.2-2), which requires implementation of these BAAQMD dust control measures. This BMP would further reduce the less-than-significant emissions of fugitive dust during construction activities.

TABLE 3.3-4
CalEEMod Construction-Related Criteria Air Pollutant and Precursor Emissions of the Proposed Project

	ROG	Criteria Emissions (lbs./day)		
		NO_X	$PM_{2.5}$	PM_{10}
Average Daily Project Emissions in Santa Clara County	0.57	6.81	0.29	0.32
BAAQMD Thresholds	**54**	**54**	**54**	**82**
Maximum Daily Project Emissions in San Benito County	1.03	8.84	0.50	0.68
MBARD Thresholds	**None**	**None**	**None**	**82**

Operations and Maintenance

Maintenance of Reclamation facilities has been conducted as part of the Valley Water's Pipeline Maintenance Program which requires periodic maintenance several times a year. The proposed project does not involve construction of new vaults or pipelines, and Valley Water would continue to maintain the facilities at a similar frequency. Consequently, there would be less than significant impact regarding operational air quality emissions in either BAAQMD or MBARD jurisdiction.

C. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? (*Less than Significant*)

In developing the thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project 's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region 's existing air quality conditions. As discussed under Item (B) above, the proposed project would not result in emissions of criteria air pollutants exceeding the significance threshold. Consequently, criteria pollutant emissions increase in the SFBAAB would not be cumulatively considerable. Emissions increases in the NCCAB would not be cumulatively considerable for similar reasons.

In addition, since the nature and frequency of future maintenance activities would remain similar to current condition, no substantial long-term operational emissions would occur and thus Project operations would also not result in cumulatively considerable emissions increases.

D. Expose sensitive receptors to substantial pollutant concentrations? (*Less than Significant*)

Sensitive receptors are facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollution. Where construction activities are proposed, sensitive receptors could be exposed to air pollutants. The nearest sensitive receptors to the Project sites are residences located within 250-feet away from construction activities near SCC 11, 12, 34, 40, 43, 50, 53, 54, and 57.

Toxic Air Contaminants (TAC)

A project would have a significant impact on a sensitive receptor if it would result in an unacceptable health risk due to exposure to TAC emissions. TACs are those chemicals "that may cause or contribute to an increase in mortality or in serious illness or may pose a present or potential hazard to human health" when they are present in the atmosphere (California Health and Safety Code

SS39655). During Project construction, TAC emissions associated with construction activities would be generated primarily by operating diesel off-road equipment and vehicles with diesel combustion engines. This conclusion is drawn from the ARB that informs particulate matter from diesel-fueled engines (diesel PM) contributes over 70% of the known risk from air toxics today.

Generally, health risks from TACs are a function of both concentration and duration of exposure. Construction of the Project would occur over approximately 107 working days in the County of Santa Clara and 29 days in the County of San Benito, which is considered a short duration compared to the 30-year health risk exposure analysis period. In addition, since construction related emissions of the Proposed project would only occur for a short period of time (most likely a few days at any one location), exposure durations would be well below the 30-year exposure period. Finally, as shown in Table 3.3-4, Project construction PM_{10} exhaust emissions (the primary source of construction TAC emissions) would be well below the applicable significance thresholds. Thus, construction of the proposed project would not expose sensitive receptors to substantial TAC concentrations; the impact would be less than significant.

As described in Section 2.2.1 and above analysis, the nature and frequency or timing of the access to the vaults would remain substantially similar to current practice, and thus, the increased emissions from Project maintenance, if any, would be minimal. Thus, the exposure of sensitive receptors to TAC emissions would not be substantial and associated impacts would be less than significant.

Naturally Occurring Asbestos (NOA)

Based on the generalized Serpentine Mapping (see serpentine soils locations on Figure 3.3-1), Naturally Occurring Asbestos (NOA) may exist in site rock or soils near vaults SCC 50 52, 53, 54, 55, 56, 57, and 60 and PC 34. Since no construction is proposed near vaults SCC 55 and 60, no exposure to NOA is expected in these areas. Construction of gravel collar at vaults at PC 2, PC 34, SCC 52, SCC 56, and SCC 57, construction of driveway at SCC 54, and construction of gates at SCC 50, SCC 53, and 54 may result in exposure of construction workers to NOA. Valley Water collected soil samples at PC 2, PC 34, and SCC 60 in May 2017 and the sample results indicated no presence of NOA at these locations. Due to the potential presence of NOAs, some construction locations for the Project would be subject to the Asbestos Air Toxic Control Measures (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations at the above-specified locations unless otherwise exempted.

For driveway and gate construction activities at SCC 54, the ATCM requires notification to the BAAQMD at least fourteen days before the beginning of the activity. During construction activity, Valley Water would also be required to implement a number of dust control measures including stabilizing unpaved areas by keeping the areas adequately wetted, treating with chemical dust suppressant or cover with material containing less than 0.25% asbestos; limiting the speed of vehicles and equipment traveling across unpaved areas; stabilizing storage piles and disturbed areas not subject to vehicular traffic by keeping the

areas adequately wetted, treating with chemical dust suppressant, or covering with material containing less than 0.25% asbestos; and conducting activities so that no track-out from construction is visible on paved roadways open to public. For construction activities at the other locations, Valley Water would implement dust mitigation measures in accordance with the ATCM. These measures would limit construction vehicle speed at work site, applying sufficient water to the area to be disturbed prior to ground disturbance, keeping areas to be graded or excavated areas adequately wet, keeping storage piles adequately wetted, washing down equipment before moving from the property onto a paved public road, and cleaning visible track-out on the paved public road. Compliance with these applicable ATCM requirements would assure that any potential impact relating to NOA would be less-than-significant.

E. Create objectionable odors affecting a substantial number of people? (*Less than Significant*)

Construction of the proposed project could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust during the short-term construction period. However, because the construction equipment would be operating intermittently at various locations throughout the construction sites, and because any operations near existing receptors would be temporary, impacts associated with odors during construction are not considered significant.

3.4 BIOLOGICAL RESOURCES

3.4.1 Environmental Setting

This biological site assessment (i.e., environmental setting for biological resources) is based on information from the Reclamation Biological Assessments (BA's 2015 and 2016) for the Project; wetland delineation and special-status species surveys conducted by H. T. Harvey and Associates on behalf of Valley Water for portions of the Project site (H. T. Harvey and Associates 2018 and 2014a, respectively); focused surveys for the California tiger salamander (*Ambystoma californiense*) conducted at the Calaveras Fault Inlet/Outlet (CFI/CFO) site, located between Project work areas SCC 13 and 17 in 2012 (H. T. Harvey & Associates 2012); and special-status species surveys conducted by Valley Water staff, including in 2013, 2015, 2016, 2017, and 2019. Special-status wildlife surveys were conducted by H. T. Harvey & Associates on several occasions from 2014 to 2016, primarily around the CFI/CFO area, south of San Felipe Lake, in conjunction with repairs to the access road to that location. H. T. Harvey biologists conducted additional mapping of jurisdictional wetlands and other waters, and assessment of land cover types and potential for occurrence of special-status species, in 2019.

The purpose of these surveys was to determine whether any sensitive biological resources such as wetlands, streams, or habitats for special-status plants and wildlife species are in proximity to the proposed project, and to determine whether Project activities would result in potentially significant biological impacts. Sensitive biological resources include the following:

1. Plants or animals that are listed as rare, threatened, or endangered or as species of special concern, pursuant to Federal or State law, and habitat essential to special-status species of plants or wildlife;

2. Natural communities indicated as rare or threatened by the California Natural Diversity Database (CNDDB) of the CDFW;

3. Wetlands and streams, and the riparian vegetation surrounding them, or natural vegetation designated as significant natural habitat; and

4. Natural communities and associated buffers protected pursuant to applicable plans, policies, and regulations.

The geographic scope of the biological site assessment was limited to the areas that are within and adjacent to the proposed project activities, as well as associated vehicle access roads and one path. These are the areas where impacts, both direct and indirect, of the proposed project activities may occur. Areas along the Pacheco Conduit and Santa Clara Conduit where no new activities (e.g., no installation/construction of new gates, no installation/construction of gravel collars around vaults, no installation/construction of stabilized paths, no access roads or driveways or no new sign, or no implementation of new unimproved travel routes) will occur are not included in the scope of this assessment, as continuation of ongoing maintenance activities in those locations is covered by the PMP EIR.

General Vegetation and Vegetative Communities

The vegetation in Santa Clara and San Benito Counties consists of plant communities adapted to the Mediterranean climate of the region, which is typified by hot, dry summers and cool, moist winters. The most prevalent vegetation type in the Santa Clara Valley consists of valley and foothill grassland communities. Much of the valley grassland habitat once occurring regionally on fertile alluvial soils has now been converted to urban uses or to agricultural cropland. The majority of remaining foothill grasslands is utilized for livestock grazing. Wetland delineation and rare plant surveys identified ten habitat types in the Project sites (H. T. Harvey & Associates 2014a and b and updated 2019). These habitats are coastal and valley freshwater marsh, seasonal wetland, ephemeral stream, drainage ditch, Central California sycamore alluvial woodland, mulefat riparian scrub, ornamental woodland, valley and foothill grassland, agricultural land, and urban-suburban land. Mesic alkaline grassland and special-status rare plants adapted to this habitat type, including San Joaquin spearscale (*Extriplex joaquiniana*), Hoover's button celery (*Eryngium aristulatum var*. *hooveri*), and prostrate navarretia (*Navarretia prostrata*) occur in the area surrounding San Felipe Lake and SCC 19, 18, 17, and 12 (all located in San Benito County), although the habitats at these specific work sites are too degraded or affected by agriculture to have been mapped as alkaline grasslands. San Joaquin spearscale occurs within the annual grasslands near the Project boundary at SCC 19 in San Benito County.

1. **Coastal and Valley Freshwater Marsh.** Coastal and valley freshwater marsh occurs at SCC 11, 12, 13, in San Benito County, and SCC 22 in Santa Clara County. The majority of this habitat is covered by surface water year-round, and

these marshes are characterized by high water tables and a permanently saturated soil profile. Soils are hydric clays and clay loams with mild to moderate alkalinity. The perennial marsh vegetation is dominated by perennial aquatic emergent vegetation, such as cattails (*Typha* sp.) and smartweed (*Persicaria* sp.)

2. **Seasonal Wetland.** Seasonal wetlands occur at SCC 11 and 13 in San Benito County, and SCC 21, 22, 52, 57, and PC 2 and PC 34 in Santa Clara County. These wetlands occur within the Pajaro River and Tennant Creek channels, adjacent to Pacheco Creek, and in other areas on flat, poorly drained, low-lying agricultural land and meadows. Seasonal wetlands lack standing water for much of the year, and a high-water table in years with normal rainfall would allow the soil to remain saturated through the dry season. Seasonal wetlands are underlain by hydric clays and clay loams, and several of these features are situated upon soils that are mildly to moderately alkaline. The vegetation is dominated by Italian ryegrass (*Festuca perennis*), seaside barley (*Hordeum marinum*), iris-leaved rush (*Juncus xiphioides*), spearmint (*Mentha spicata*), and bird's foot trefoil (*Lotus corniculatus*).

3. **Ephemeral Stream.** Ephemeral, single-thread channels were observed at SCC 8, 11, 24, 43, 54 and 57 in Santa Clara County. Ephemeral streams include portions of Tennant Creek, an unnamed tributary that drains into Ortega Creek, and Elephant Head Creek.

4. **Drainage Ditch.** Wetlands and other waters that have been created by anthropogenic activities include drainage ditches and associated culverts that have been excavated in uplands and are designed to carry runoff from roadways and agricultural land. These features were observed within or near the limits of the BSA at SCC 21, 24, 35, 53, and 54 (all located in Santa Clara County).

5. **Mulefat Riparian Scrub.** Mulefat (*Baccharis salicifolia*) shrubs occur as pure stands within the Elephant Head Creek and in and adjacent to the Pacheco Creek channels at PC2 and PC34 in Santa Clara County, and are underlain by a cobbly substrate.

6. **Central California Sycamore Alluvial Woodland.** Western sycamore (*Platanus racemosa*) is the dominant species in the overstory in this habitat type at PC 34 in Santa Clara County. The CNDDB (2019) classifies California sycamore alluvial woodland as a sensitive natural community. Within the Project sites, this habitat type occurs in the riparian corridor of Pacheco Creek, which is characterized by braided, depositional channels, and terraces within the floodplain that are subject to high-intensity flooding. Soils are alluvial, cobbly, and rocky. Vegetation in the understory is dominated by mulefat, bird's foot trefoil and naked sedge (*Carex nudata*).

7. **Ornamental Woodland.** This habitat type is present at SCC 57 in Santa Clara County. The overstory of is dominated by planted Northern California black walnut (*Juglans hindsii*), non-native camphora (*Cinnamomum camphora*), and coast live oak (*Quercus agrifolia*). Dominant shrubs include Carolina laurel cherry (*Prunus caroliniana*) and Sierra plum (*Prunus subcordata*). Although Northern

California black walnut has a California Native Plant Society (CNPS) rank of 1B.1, only three native stands of this tree species have been observed in Napa, Contra Costa, and Lake counties (CNDDB 2019). The rationale for identifying this area as ornamental woodland is supported by widespread planting of walnut across the state of California as an ornamental tree, and its frequent hybridization with English walnut (*Juglans regia*).

8. **Valley and Foothill Grassland.** This habitat type is found in San Benito County at SCC 11, SCC 13, SCC 18, and SCC 19; and in Santa Clara County at SCC 21, SCC 50, SCC 52, SCC 57, PC 2, 17, , and PC 34. Grasslands in the Project sites are degraded and support a low proportion of native species. Much of this habitat is currently grazed by cattle, and is dominated by annual non-native grasses, such as wild oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), meadow barley (*Hordeum murinum*), and soft chess (*Bromus hordeaceus*). Common forbs include bur medic (*Medicago polymorpha*), spring vetch (*Vicia sativa*), California poppy (*Eschscholzia californica*), western blue-eyed grass (*Sisyrinchium bellum*), and popcorn flower (*Plagiobothrys* sp.)

9. **Agricultural Land.** Much of the larger landscape surrounding the Project sites is agricultural land. Actively or recently farmed sites include SCC 17 to 19 in San Benito County, and SCC 20, 22 to 25, 29 to 32, 34, 35, 44, and 54 to 56 in Santa Clara County. Much of the larger landscape surrounding the Project sites is agricultural land that is largely barren, or colonized by wild oats, ripgut brome, black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*), and chicory (*Cichorium intybus*). SCC 55 is adjacent to Corralitos Creek.

10. **Urban-Suburban Land.** Urban-suburban land includes hardscape, such as paved roads and driveways, well-used agricultural roads and heavily disturbed farm lots (including dirt and gravel roads with little or no vegetation and lacking mammal burrows), and residential areas; such land uses are present along portions of new/proposed access routes at SCC 23, 24, 25, 26, 35, 40, 43, 54, and 60 in Santa Clara County and in San Benito County at SCC 12. Common species in this habitat include various non-native, annual grasses, prostrate knotweed (*Polygonum aviculare*), scarlet pimpernel (*Lysimachia arvensis*), olive (*Olea europaea*), rose clover (*Trifolium hirtum*), and poison hemlock (*Conium maculatum*).

Sensitive Natural Communities

Riparian Habitats. Sycamore alluvial woodland is found at Pacheco Creek near Pacheco Peak southeast of Gilroy where the creek opens into the Hollister Plain. Sycamore alluvial woodland is considered a unique plant community; only 2,000 acres occur worldwide, all of which occur in only 17 stands in California (CDFG 2006). The natural hydrologic regime of sycamore alluvial woodland is impacted by upstream dams on seven of the 17 stands, and gravel mines are causing impacts to seven of the stands (CDFG 2006). Sycamores thrive in areas where deep, coarse sediment has accumulated, because the water table drops rapidly through the growing season and does not remain high enough for willows and cottonwoods to out-compete them. Sycamores have little tolerance of artificially manipulated water levels. If water flow is eliminated too early in the year due to

diversions, the soil-water reservoir available to the root system may be depleted before the growing season ends. If the water table is raised a few feet during the growing season, roots may be injured due to poor aeration. Sycamore alluvial woodland also requires overbank flooding, which generally occurs during the dormant season (winter) for short durations and is usually shallow. The stand along Pacheco Creek has some trees that appear to be afflicted with a fungal disease that may have infected the trees during the recent wet years prior to last year (Abel, pers. comm.).

Riparian habitat is considered sensitive because it provides disproportionately high functions and values for wildlife. Riparian habitat within the Project sites includes mulefat scrub and Central California sycamore alluvial woodland. In addition, CDFW riparian jurisdiction will likely include the areas below the top of the stream banks or the landward extent of attendant riparian tree canopy, whichever is of greater extent. Common CDFW riparian species in the vicinity of Project sites include willow (*Salix* spp.), western sycamore, coast live oak, coyote brush, and California blackberry.

Wetlands and Waters of the US/State. Based on the assessment completed by H. T. Harvey and Associates, wetlands or Waters of the US/State that are regulated under Clean Water Act Sections 404 and 401 were identified at thirteen vault or Project impact locations (H. T. Harvey and Associates 2018). Of these, ten vault locations (SCC 57, SCC 54, SCC 52, SCC 43, SCC 24, SCC 22, SCC 21, SCC 8, PC 34, and PC 2) are located within Santa Clara County and are within the Plan area for the Santa Clara Valley Habitat Plan (VHP). The additional three vault impact sites or other waters (SCC 11, 12, and 13) are in San Benito County, outside of the VHP boundaries.

Non-jurisdictional waters (maintained agricultural irrigation ditches) were observed at SCC 21, SCC 22, SCC 24, SCC 35, SCC 53, and SCC 54. These maintained irrigation ditches did not have ordinary high-water mark indicators and are artificial features that do not replace any natural stream channels or drainages. In addition, they are currently managed to keep vegetation from establishing in the channels. Therefore, these features were considered non-sensitive and non-jurisdictional.

Special-Status Plant Species

As described above three vault impact sites or other waters (SCC 11, 12, and 13) are in San Benito County, outside of the VHP boundaries. San Joaquin spearscale (*Extriplex joaquiniana*) was detected near SCC 19 in San Benito County. Because San Benito County is not within the VHP plan area, VHP fees would not be assessed for Project impacts in San Benito County. The District would obtain federal Endangered Species Act take authorization from USFWS if required and would comply with the permit requirements. Implementation of Mitigation Measures BIO-1 described below for Project activities undertaken in San Benito County would avoid impacts to the San Joaquin spearscale to the extent practicable by implementing design and protective measures.

Based on CNDDB (2019) records and the CNPS's Rare Plant Inventory tool (CNPS 2018), 115 special-status plant species were identified that are known to occur within the general vicinity of the Project sites (defined for the purpose of this analysis as being within one of the 19 USGS 7.5-minute quadrangles including or surrounding the site for CNPS Rare Plant Rank 1-2 species, or within Santa Clara and San Benito Counties for

CNPS Rare Plant Rank 3-4 species). For the purpose of this Initial Study, special-status plants were defined as state or federally rare, threatened, or endangered species, species with CNPS Rare Plant Ranks 1-4, or Santa Clara Valley Habitat Plan (VHP) covered species.

This list of 115 potentially occurring species was reduced to six plant species that could occur within one or more vault work sites within the Project sites (Table 3.4-1). None of the Project sites contained suitable habitat for any VHP-covered species. Special-status plant species were determined to be absent from the vault work site based upon (1) the lack of suitable habitat types; (2) the lack of specific edaphic requirements such as serpentine soils; (3) other edaphic requirements were not met by the habitats on-site; (4) the elevation range of the species is outside the range of the study area; or (5) the species is considered extirpated from the immediate vicinity of the Project based upon CNDDB records (2019) and records from the Consortium of California Herbaria (CCH 2018). The six species discussed in Table 3.4-1 as potentially occurring were the subject of focused surveys in 2014 (H.T. Harvey & Associates 2014). San Joaquin spearscale (*Extriplex joaquiniana*) was detected near SCC 19 while prostrate navarretia and Hoover's button celery were detected at the Calaveras Fault Inlet/Calaveras Fault Outlet (CFI/CFO) site (not a part of this Project), however these latter species were not detected at any of the project's sites.

TABLE 3.4-1
Special-Status Plant Species With Potential to Occur in the Project Study Area

Species	Status[1]	VHP Covered	Habitat	Blooming Period
San Joaquin spearscale (*Extriplex joaquiniana*)	CNPS 1B.2	No	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, often on alkaline soils	April – September
Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*)	FE, CNPS 1B.1	No	Valley and foothill grassland, often on alkaline soils	May – October
Hoover's button celery (*Eryngium aristulatum* var. *hooveri*)	CNPS 1B.1	No	Vernal Pool, wetland (alkaline depressions)	July
Legenere (*Legenere limosa*)	CNPS 1B.1	No	Vernal pool, wetland	April – June
Prostrate vernal pool navarretia (*Navarretia prostrata*)	CNPS 1B.1	No	Coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools, often on alkaline soils	April – July
Saline clover (*Trifolium hydrophilum*)	CNPS 1B.2	No	Marshes and swamps, valley and foothill grassland, vernal pools, often on alkaline soils	April – June

[1] Status Definitions:
FE = Federally Endangered
ST = State Threatened
CNPS = California Native Plant Society
1A =Plants presumed to be extirpated in California and either rare or extinct elsewhere
1B = Plants that are rare, threatened, or endangered in California and elsewhere
2A = Plants rare, threatened, or endangered in California but more common elsewhere
2B = Plants presumed extirpated in California, but more common elsewhere
3 = Plants about which information is needed-a review list
4 = A watch list of plants of limited distribution,
0.1: Seriously endangered in California
0.2: Fairly endangered in California
0.3: Not very endangered in California

Source: H.T. Harvey and Associates 2014 b

Special-Status Wildlife Species

For purposes of this analysis, special-status animals are considered animal species that are:

- listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species;
- listed under CESA as threatened, endangered or a candidate threatened or endangered species;
- designated by the CDFW as a California species of special concern; or
- listed in the California Fish and Game Code as a fully protected species (fully protected birds are designated in §3511, mammals in §4700, reptiles and amphibians in §5050, and fish in §5515).

The legal status and likelihood of occurrence of special-status animal species known to occur or potentially occurring within the vicinity of the Project sites are presented in Table 3.4-2 below. Expanded descriptions are included below Table 3.4-2 for those species that are known to occur on the Project site; for which potentially suitable habitat occurs within or in the general vicinity of the Project site; for which the site is accessible to animals from known populations; and for which resource agencies and/or the VHP have expressed particular concern such that more expanded discussion is required. Species that are listed in Table 3.4-2 but not discussed further have no suitable habitat or reasonable expectation of occurrence on the Project site.

TABLE 3.4-2

Special-Status Wildlife Species

Species	Legal Status	Habitat	Potential for Occurrence on Project Site
South-Central California Coast steelhead (*Oncorhynchus mykiss*)	FE	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	Known to occur in the Project vicinity along Pacheco Creek, Millers Canal, and the Pajaro River. However, no work areas are immediately adjacent to, or require impacts (e.g., for access) to, any of these waterbodies that support steelhead.
California tiger salamander (*Ambystoma californiense*)	FT, ST, VHP	Grasslands and low foothills with pools or ponds that are necessary for breeding. Natural breeding areas are mostly seasonal pools. Lives underground for much of its life, using burrows made by ground squirrels and other burrowing mammals.	There are known occurrences of the species associated with ponds near several of the Project sites and this species could occur on the Project site. The VHP maps a number of ponds in the vicinity of Project sites as breeding habitat and given this species' dispersal capability, undeveloped upland habitat within most of the Project area could serve as dispersal habitat, and possibly refugial habitat in non-agricultural areas, where small mammal burrows are present for this species. Intensively cultivated agricultural fields provide very low-quality habitat but could possibly be used for dispersal.
California red-legged frog (*Rana draytonii*)	FT, CSC, VHP	A variety of habitat elements with aquatic breeding areas embedded within a matrix of riparian and upland dispersal habitats. Breeding sites are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons. Frequently breeds in artificial impoundments such as stock ponds.	There are known occurrences of the species associated with ponds near several of the Project sites, and this species could occur on the Project site. The VHP maps a number of ponds and creeks in the vicinity of Project sites as breeding habitat, and given this species' dispersal capability, upland habitat within most of the Project area could serve as dispersal habitat for this species. Intensively cultivated agricultural fields provide very low-quality habitat but could possibly be used for dispersal.
Foothill yellow-legged frog (*Rana boylii*)	CSC, SC, VHP	Partially shaded shallow streams and riffles with a rocky substrate. Occurs in	Although this species was historically recorded along Pacheco Creek (CNDDB 2019), there are no recent records there or elsewhere in the

Species	Legal Status	Habitat	Potential for Occurrence on Project Site
		a variety of habitats in coast ranges.	Project vicinity, and it is therefore considered absent.
Western pond turtle (*Actinemys marmorata*)	CSC, VHP	Ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation and suitable basking sites. Often found in same habitat as CRLF.	There are known occurrences of the species associated with ponds and creeks near several of the Project sites, and this species could occur on the Project site. The VHP maps a number of ponds and creeks in the vicinity of Project sites as primary aquatic habitat, and upland habitat adjacent to such waterbodies could potentially provide nesting habitat. This species is not expected to occur in upland habitat, particularly intensively cultivated agricultural fields, more than ¼ mile from a waterbody.
White-tailed kite (*Elanus leucurus*)	CP	Open grasslands and agricultural areas throughout central California.	Known to breed and forage in grasslands in much of the Project area, and likely to occur on the Project site.
Northern harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	Known to forage in grasslands in much of the Project area, and likely to occur on the Project site as a forager. Although suitable breeding habitat is present along existing work areas between SCC 12 and SCC 13 (where no new/changed activities are proposed), suitable breeding habitat is absent from other work areas and immediately adjacent areas.
Golden eagle (*Aquila chrysaetos*)	CP	Breeds mainly on steep cliffs or tall trees in open woodlands bordering on open rangeland. Forages over open rolling hillsides, and various grasslands.	Known to forage in grasslands in much of the Project area, and likely to occur on the Project site as a forager, but suitable nesting habitat is absent.
Bald eagle (*Haliaeetus leucocephatus*)	SE/CP	The breeding range is mainly in mountainous habitats near reservoirs, lakes and rivers. Has been documented at San Felipe Lake. Large nests are	Known to forage and nest around San Felipe Lake and Pacheco Creek, and could occur on the Project site as a forager, but unlikely to nest close enough to any Project sites for Project activities to disturb active nests.

Species	Legal Status	Habitat	Potential for Occurrence on Project Site
		normally built in the upper canopy of large trees, usually conifers. The birds are opportunistic foragers, usually feeding on fish or waterfowl, but they also prey on other small animals and eat carrion.	
Swainson's hawk (*Buteo swainsoni*)	ST	Nests in trees surrounded by extensive marshland or agricultural foraging habitat.	This species is a very rare breeder in Santa Clara and San Benito counties, but one of two nests known in Santa Clara County is present 375 feet from the new/proposed access route to SCC 8. Elsewhere, the species may occur as a scarce migrant and possible forager in grassland, wetland, or agricultural habitats.
Peregrine falcon (*Falco peregrinus*)	CP	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	Known to forage near much of the Project area, and likely to occur on the Project site as a forager, but suitable nesting habitat is absent.
Burrowing owl (*Athene cunicularia*)	CSC	Forages in grasslands and occupies burrows constructed by other species, usually ground squirrels.	Could potentially roost and forage in grasslands in much of the Project area, and likely to occur on the Project site as an occasional forager or non-breeding visitor. Not known or expected to be currently nesting in Project work areas. The VHP maps grasslands in the Project vicinity as either wintering-only habitat (in areas along Highway 152 east of the Santa Clara Valley floor) or potential breeding and likely wintering habitat (on the Santa Clara Valley Floor) for this species. There is a low probability that this species roosts in burrows within the immediate Project work area owing to its low densities relative to the extent of regionally available habitat.

Species	Legal Status	Habitat	Potential for Occurrence on Project Site
Loggerhead shrike (*Lanius ludovicianus*)	CSC	Forages in grasslands, nests in nearby trees and shrubs.	Known to breed and forage in grasslands in much of the Project area, and likely to occur on the Project site in low numbers.
Least Bell's vireo (*Vireo bellii pusillus*)	FE, SE, VHP	Nests in dense, early-successional riparian woodland and forest.	The only breeding records in Santa Clara County are from Llagas Creek southeast of Gilroy in 1997 and the Pajaro River south of Gilroy in 1932 (Rottenborn 2007); there are no recent records from San Benito County. The VHP maps potential habitat as occurring along Pacheco Creek and along other creeks draining to the Pajaro River. However, due to this species' rare and sporadic occurrence in the Project vicinity, there is a very low probability of its occurrence in the Project area.
Yellow warbler (*Setophaga petechia*)	CSC	Nests in riparian habitats, particularly those dominated by cottonwoods, willows, and sycamores.	Likely present as a scarce breeder in riparian habitat along Pacheco Creek; occurs in other portions of the Project area only as a migrant.
Tricolored blackbird (*Agelaius tricolor*)	ST, VHP	Breeds near fresh water in dense emergent vegetation, though found year-round in open fields and on dairy farms.	Known to forage in grasslands and agricultural areas in much of the Project area. Not known to nest in Project work areas, but suitable nesting habitat is present in emergent wetlands in and near the Project site, especially around and southeast of San Felipe Lake. The VHP maps wetlands, ponds, and riparian habitats in the Project vicinity as potential breeding habitat for this species.

Species	Legal Status	Habitat	Potential for Occurrence on Project Site
American badger (*Taxidea taxus*)	CSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	Likely present in very low densities in grasslands near Highway 152 east of San Felipe Lake. Elsewhere in the Project area, this species may occur only as a very infrequent dispersant.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, ST, VHP	Occurs primarily in grasslands and scrublands on the margins of the San Joaquin Valley and adjacent valleys. Prefers habitats with loose-textured soils suitable for digging.	The VHP maps grasslands in the Project vicinity along Highway 152 in the Pacheco Creek/San Felipe Lake area as secondary habitat for this species. There is some potential for occasional dispersants from Central Valley populations to occur in this portion of the Project area, though the likelihood and frequency of occurrence is low.
Pallid bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	Could potentially roost in large trees with cavities or in barns in the general Project area, but there are no high-quality roost sites in the immediate vicinity of Project sites.

Source: H.T. Harvey 2018

Key to Status Abbreviations: Federally Endangered (FE); Federally Threatened (FT); State Endangered (SE); State Threatened (ST); State Candidate for listing (SC); State Fully Protected (CP); California Species of Special Concern (CSC); Santa Clara Valley Habitat Plan Covered Species (VHP)

Of the species listed in Table 3.4-2, the northern harrier (*Circus hudsonius*), bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), and peregrine falcon (*Falco peregrinus*) are expected to occur around the Project sites only as occasional foragers. Project activities will not result in substantial impacts (e.g., injury or mortality, or disturbance of nests) for any of these species. Therefore, these species are not discussed further in the analysis below. The potential for occurrence of the remaining species listed in Table 3.4-2 in Project sites is discussed further for each species below.

South-Central California Coast Steelhead (Federally Threatened Species)

The South-Central California Coast steelhead (*Oncorhynchus mykiss*) occurs in the Project vicinity within Pacheco Creek, and it uses Millers Canal to move between the Pajaro River and Pacheco Creek. However, no Project sites are located immediately adjacent to, or require impacts (e.g., for access) to, any of these waterbodies.

California Tiger Salamander (Federally Threatened and State Threatened Species)

The proposed project is within the range of the California tiger salamander and there are known breeding localities north and east of San Felipe Lake, with the nearest to Project

work areas being approximately 0.4 mile from SCC 11 and 0.4 mile from SCC 52 (CNDDB 2019). Perennial marsh habitat near SCC 12 and 13, and aquatic habitat along pooled portions of the old Pajaro River alignment, and at the Pajaro River Wetlands Mitigation Bank near SCC 17, 18, and 19, provide ostensibly suitable aquatic breeding habitat for this species. However, fish, bullfrogs (*Lithobates catesbeiana*), and crayfish are present in these areas, and would prey upon early life stages of the California tiger salamander (Shaffer et al. 1993; Seymour and Westphal 1994), and it is therefore unlikely that California tiger salamanders breed in these waterbodies. Valley Water conducted surveys on July 31, 2017 for the California tiger salamander at several facilities, including the CFI/CFO site, which is located between Project vaults SCC 13 and 17. H. T. Harvey and Associates conducted larval surveys in nine small ponds that were found along the berm between the CFI and CFO on March 30, 2012 (1st survey), April 26, 2012 (2nd survey), and May 22, 2012 (3rd survey). No California tiger salamander larvae were found. A number of other species were captured, including larval bullfrogs and crayfish. In addition, preconstruction surveys and monitoring during the replacement of culverts under the CFI/CFO access road in 2016 did not detect any individual California tiger salamanders. Although seasonal wetlands are present near some of the other vault and access road locations, ponding in those wetlands is not long or deep enough to support breeding by California tiger salamanders. Therefore, no occupied breeding habitat is known or expected to be present within Project impact areas.

In areas that are not developed, such as grassland, seasonal wetland, and agricultural areas, there is some potential for occurrence by California tiger salamanders during dispersal, and upland areas providing small mammal burrows or deep soil cracks may be used as refugial habitat by salamanders. Virtually all undeveloped habitat in the Project area is either suitable for use by dispersing California tiger salamanders (based on proximity to known or potential breeding habitat and lack of insurmountable barriers to dispersal) or, in Santa Clara County, is considered “non-breeding habitat” by the VHP, and therefore all undeveloped habitat in the Project area is considered potential California tiger salamander habitat for the sake of this analysis. In Santa Clara County, this includes areas where gravel collars will be added at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56; where new gates will be installed to access SCC 21, 22 (2 gates), 24, 34, 50, 53, and 54; and where new access routes will be established to vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54. In San Benito County, such potential California tiger salamander habitat includes areas where gravel collars will be added at vaults SCC 11, 17, 18, and 19; where new gates will be installed to access SCC 11, 12 (3 gates), and 13; and where new access routes will be established to vaults SCC 11, 12, and 18. However, the vast majority of potential habitat in these areas, particularly from SCC 20 northward, is dominated by agricultural fields that are cultivated intensively enough that small mammal burrows are scarce or absent. As a result, California tiger salamanders are likely very scarce in, and may be absent altogether from, most work areas.

Designated critical habitat East Bay Unit 12 for the California tiger salamander is present along Highway 152 in the vicinity of San Felipe Lake and Casa de Fruta. The only Project work area within this critical habitat unit is the northern end of the new travel route implemented at the new installed/constructed path to SCC 8.

California Red-legged Frog (Federally Threatened Species and California Species of Special Concern)

The proposed project is within the range of the California red-legged frog (*Rana draytonii*). There are areas of known occurrence in the upper Pacheco Creek watershed and along the eastern side of the Santa Clara Valley near the Project site, with the nearest to Project work areas being approximately 0.2 mile from SCC 54, 0.3 mile from PC 38, 0.4 mile from SCC 52, and 0.6 mile from PC 2 (CNDDB 2019). A number of stock ponds in the hills near the Project alignment support potential breeding habitat, and the species could possibly breed in nearby creeks as well. Perennial marsh habitat near SCC 12 and 13, and aquatic habitat along pooled portions of the old Pajaro River alignment and at the Pajaro River Wetlands Mitigation Bank near SCC 17, 18, and 19, provide ostensibly suitable aquatic breeding habitat for this species. However, surveys in and adjacent to SCC 13 in 2003 did not reveal any California red-legged frogs (Rana Resources 2003), and the nearby San Felipe Lake habitat was found to support a large population of predatory fish (Smith 2005). Fish and crayfish would prey upon early life stages of the California red-legged frog (USFWS 2002 and references therein), and the proximity of SCC 12 and 13 to San Felipe Lake, and of SCC 17, 18, and 19 to aquatic predators in nearby waterbodies, makes the occurrence of special-status amphibians unlikely. In addition, preconstruction surveys and monitoring during the replacement of culverts under the CFI/CFO access road in 2016 did not detect any individual California red-legged frogs.

Although seasonal wetlands are present near some of the other vault and access road/driveway locations, ponding in those wetlands is not long or deep enough to support breeding by California red-legged frogs. Therefore, no occupied breeding habitat is known or expected to be present within Project impact areas.

In areas that are not developed, such as grassland, seasonal wetland, and agricultural areas, there is some potential for occurrence by California red-legged frogs during dispersal, and upland areas providing small mammal burrows may be used as refugial habitat by this species. Virtually all undeveloped habitat in the Project area is either suitable for use by dispersing California red-legged frogs (based on proximity to known or potential breeding habitat and lack of insurmountable barriers to dispersal) or, in Santa Clara County, is considered “dispersal habitat” or “refugia habitat” by the VHP, and therefore all undeveloped habitat in the Project area is considered potential California red-legged frog habitat for the sake of this analysis. In Santa Clara County, this includes areas where gravel collars will be added at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56; where new gates will be installed to access SCC 21, 22 (2 gates), 24, 34, 50, 53, and 54; and where new access routes will be established to vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54. In San Benito County, such potential California red-legged frog habitat includes areas where gravel collars will be added at vaults SCC 11, 17, 18, and 19; where new gates will be installed to access SCC 11, 12 (3 gates), and 13; and where new access routes will be established to vaults SCC 11, 12, and 18. However, the vast majority of potential habitat in these areas, particularly from SCC 20 northward, is dominated by agricultural fields that are cultivated intensively enough that small mammal burrows are scarce or absent. As a result, California red-legged frogs are likely very scarce in, and may be absent altogether from, most work areas.

Santa Clara County Unit 2 (Wilson Peak) of designated critical habitat for the California red-legged frog overlaps the eastern part of the Project area, including proposed activities at PC 2, 15, 16, 17, 34, and 38.

Western Pond Turtle (California Species of Special Concern)

The proposed project is within the range of the western pond turtle (*Actinemys marmorata*). There are areas of known occurrence in the Project vicinity, with the nearest to Project work areas being a pond at Casa de Fruta, approximately 0.9 mile from PC 38 (CNDDB 2019). There are a number of ponds in the vicinity of the Project site that could support this species, and it may also occur in creeks such as Pacheco Creek. Vaults PC 2, 15, 16, 17, 34, and 38 occur close enough to Pacheco Creek or suitable ponds that it is possible for pond turtles to occasionally disperse into the work areas for these vaults. Also, perennial marsh habitat near SCC 12 and 13, and aquatic habitat along pooled portions of the old Pajaro River alignment and at the Pajaro River Wetlands Mitigation Bank near SCC 17, 18, and 19, provide suitable aquatic habitat for this species, and the species could occur in upland areas near these work locations and near Pacheco Creek. Although the VHP maps all creeks in the Project vicinity as providing potential "primary habitat" and "secondary habitat" for this species, there is low potential for this species to occur in the narrow ditches and ephemeral creeks in the vicinity of other Project areas owing to poor habitat quality.

Swainson's Hawk (State Threatened Species)

Swainson's hawks apparently nested in small numbers in Santa Clara County historically, and there is an 1894 nest record from the Berryessa area (in eastern San Jose) (Bousman 2007). Until 2013, however, the species was unknown as a breeder in the county. Since 2013, a pair of Swainson's hawks has nested successfully each year near Coyote Creek in northern Coyote Valley. Closer to the Project site, another pair unsuccessfully attempted nesting in 2018 northeast of the Highway 152 intersection with San Felipe Road, approximately 375 feet from the new/proposed access route to SCC 8. This pair returned to nest again in 2019 and was apparently successful this year (Shawn Lockwood, pers. comm. to S. Rottenborn). Although the species has recently begun breeding in San Benito County as well, all nests in that county are in or south of the Hollister vicinity (D. Shearwater, pers. comm. to S. Rottenborn), and no nests are known in or near the San Benito County portion of the Project area. Aside from the known nest location, the species may occur in the Project area as a scarce migrant and possible forager in grassland, wetland, or agricultural habitats.

Least Bell's Vireo (Federally Endangered and State Endangered Species)

Least Bell's vireos (*Vireo bellii pusillus*) have been observed near the Project area, including a 2001 breeding record approximately three miles west (Rottenborn 2007, CNDDB 2019), and the VHP maps all riparian habitat along Santa Clara County creeks draining to the Pajaro River as "primary habitat" for the species. However, suitable habitat for this species is absent from most vault locations due to the absence of dense, woody riparian vegetation. Only two vaults are located close to such habitat – PC 2 and PC 34 – and riparian vegetation at these sites may provide nesting habitat for vireos. Willow riparian habitat is present in the San Felipe Lake area, but SCC 11, SCC 12, and

SCC 13 do not have suitable riparian habitat for this species, and surveys in 2003 revealed no breeding habitat in areas adjacent to SCC 13 (Rana Resources 2003). In addition, preconstruction surveys and monitoring during the replacement of culverts under the CFI/CFO access road, between SCC 13 and SCC 17, in 2016 did not detect any least Bell's vireos. Surveys conducted along nearby areas of prior occurrence (lower Llagas Creek) by Valley Water biologists have not detected any Least Bell's Vireos in or near the Project area since 2001. Therefore, there is a very low probability of this species' occurrence anywhere near the Project area, and there is no suitable nesting habitat close enough to Project activities for impacts to this species to occur during Project implementation.

Burrowing Owl (California Species of Special Concern)

Although burrowing owls (*Athene cunicularia*) historically nested in the Project vicinity, in grasslands on the southern Santa Clara Valley floor, they have disappeared from these areas as a breeding species and they are no longer expected to nest in the immediate Project work areas. They still occur in the vicinity in small numbers as non-breeding individuals (i.e., during migration and in winter) in grassland and ruderal habitats. Project sites near extensive grassland or agricultural lands provide suitable foraging habitat, and possible roosting habitat where California ground squirrel (*Spermophilus beecheyi*) burrows are present. For example, an individual has wintered the past two years (2017-18 and 2018-19) along Bloomfield Avenue 0.3 mile from SCC 11 (S. Rottenborn, pers. obs.). The VHP maps grasslands and agricultural habitats in the Project vicinity as either wintering-only habitat (in areas along Highway 152 east of the Santa Clara Valley floor) or potential breeding and likely wintering habitat (on the Santa Clara Valley Floor) for this species, but intensively cultivated fields generally lack suitable burrows and therefore provide low-quality habitat for this species. The most likely habitat to be used by this species would be the annual grasslands and agricultural areas at and near PC 34 and 38 and SCC 8, 17, 18, 19, 20, and 52. However, owing to the low numbers of burrowing owls present in the region and the vast extent of potential habitat in the Project vicinity, there is a low probability that burrowing owls would roost within Project work areas.

White-tailed Kite (California Fully Protected Species)

White-tailed kites (*Elanus leucurus*) occur in a number of areas in the Project vicinity. Project sites near extensive grassland or agricultural lands provide suitable foraging habitat, and trees near these sites provide potential nest sites. The most likely habitat to be used by this species would be the annual grasslands and agricultural lands at PC 2, 15, 16, 17, 34, and 38 and SCC 8, 11, 12, 13, 17, 18, 19, 20, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, 50, 52, 54, and 56.

Loggerhead Shrike (California Species of Special Concern)

Loggerhead shrikes (*Lanius ludovicianus*) are scarce and local residents of grasslands and other open areas, but a few pairs still occur in the Project vicinity. Project sites near extensive grassland or agricultural lands provide suitable foraging habitat, and trees and large shrubs near these sites provide potential nest sites. This species' habitat associations are similar to those of the white-tailed kite, and this species is therefore most likely to occur in the same locations indicated above for the kite. However, the

number of sites occupied by shrikes is expected to be low (e.g., 3-4 sites at most) due to this species' localized distribution.

Yellow Warbler (California Species of Special Concern)

Yellow warblers (*Setophaga petechia*) breed in riparian woodland at a number of locations in southern Santa Clara County and northern San Benito County. In the immediate vicinity of the Project area, however, suitable habitat is absent from most vault locations due to the absence of dense, woody riparian vegetation. Only two vaults are located close to, but not within such habitat – PC 2 and PC 34 – and riparian vegetation near these sites may provide nesting habitat for yellow warblers. Willow riparian habitat is present in the San Felipe Lake area, but SCC 11, SCC 12, and SCC 13 do not have suitable riparian habitat for this species. Elsewhere in the Project area, yellow warblers are expected to occur only as migrants.

Tricolored Blackbird (State Threatened Species)

Tricolored blackbirds (*Agelaius tricolor*) nest in large colonies, usually in extensive emergent vegetation but occasionally in thickets of thistles, mustard, and other upland vegetation. Within the Project vicinity, the most likely location for occurrence of a breeding colony is in marshes around San Felipe Lake. As a result, this species is most likely to occur near SCC 12 and 13. In addition, emergent vegetation or tall thistles or mustard near sites SCC 17, 18, and 19 could also potentially support breeding tricolored blackbirds. Preconstruction surveys and monitoring during the replacement of culverts under the CFI/CFO access road, between sites SCC 13 and 17, in 2016 did not detect any evidence of this species' breeding colonies, but because of the sporadic nature of this species' occurrence in any given location, future breeding in the vicinity of sites SCC 12 through 19 is possible.

American Badger (California Species of Special Concern)

American badgers (*Taxidea taxus*) occur in low densities in foothill grasslands and scrublands near the Project area. They are most likely to occur in the Project area itself where work areas occur in or near these habitats, such as at PC 2, 15, 16, 17, 34, and 38, and at SCC 8. When dispersing, they may occur in more disturbed valley floor grassland or agricultural habitats, and there is some potential for dispersing badgers to occur near virtually any work area. However, this species is sensitive to human disturbance and is therefore highly unlikely to den in or near Project work areas, and it most likely occurs in the Project alignment only as an occasional dispersant.

San Joaquin Kit Fox (Federally Endangered and State Threatened Species)

San Joaquin kit foxes (*Vulpes macrotis mutica*) are wide-ranging and have been observed in the Project vicinity, with the area of closest occurrence being approximately 0.5 mile from PC 17 (CNDDB 2019). However, according to the VHP, kit foxes are expected to occur only in the Pacheco Creek/Highway 152 corridor and around San Felipe Lake; they have not been recorded, and are not expected to occur, along the portion of the Project alignment north of these areas. The most likely habitat to be used by this species would be the annual grassland and scrubland at PC 2, 15, 16, 17, 34,

and 38, and at SCC 8. Surveys in and adjacent to SCC 13 in 2003 did not reveal any evidence of use by this species (Rana Resources 2003), or in 2011 by a Valley Water biologist. In addition, preconstruction surveys and monitoring during the replacement of culverts under the CFI/CFO access road in 2016 did not detect any evidence of kit fox presence. Agricultural lands at SCC 17, 18, 19, and 20 could also be used by kit foxes during dispersal. Warrick et al. (2007) found that San Joaquin kit foxes will forage but not den in some agricultural lands, when they are located near more suitable habitat. Due to the very low number of records of this species in the Project vicinity, there is a low probability that it would be present when work occurs, or that it would be denning anywhere in Project work areas.

Pallid Bat (*California Species of Special Concern*)

Pallid bats (*Antrozous pallidus*) roost in rock outcrops, cavernous buildings such as barns, and large trees with sizeable cavities. Although such potential roost sites are widespread, pallid bats are scarce and local, and there is no high-quality habitat (e.g., very large trees with large cavities, or large barns) close enough to any Project work areas (a) to support a large colony of pallid bats, and (b) to be disturbed by Project activities.

3.4.2 Biological Resources Impacts

3.4.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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 a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
C. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
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?	☐	☐	☐	☒

3.4.2.2 Discussion

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the US Fish and Wildlife Service? *(Less Than Significant with Mitigation)*

Plants

San Joaquin Spearscale

San Benito County (Less Than Significant with Mitigation). As discussed in the environmental setting, H. T. Harvey & Associates conducted a special-status plants survey in the Project sites for the six special status plant species listed in Table 3.4-1. San Joaquin spearscale (*Extriplex joaquinana*) was detected near SCC 19 in San Benito County, and no other Project sites in either San Benito County or Santa Clara County were found to support rare plants at the time of the survey.

An updated site visit and field survey was conducted at SCC 19 by a Valley Water biologist on 7/3/19. While no spearscale plants were found directly in the proposed vault collar footprint, 13 plants were found adjacent to the Project area to the southeast and at the edge of the access road. San Joaquin spearscale, an annual plant, typically occurs in sparse numbers scattered over a wide area and may be more prevalent in some years than others. Based on the HTH survey in 2014, an additional Valley Water survey in 2017, and knowledge of the species' typical habitat preferences, the proposed project area near SCC 19 is suitable habitat for spearscale and is obviously occupied in some years.

A vault collar is anticipated to be constructed at SCC 19, which typically involves placing gravel over an approximately 1,024-square foot area surrounding the vault. Vegetation immediately surrounding the vault is more disturbed and of higher nonnative thatch cover than the surrounding grassland where San Joaquin spearscale currently occurs. Therefore, this area immediately surrounding this vault is unlikely to comprise suitable habitat for the species.

Placement of gravel for the vault collar could impact San Joaquin spearscale through permanent removal of suitable habitat where the gravel is placed and, if the work is done when the plant is above ground, death of individuals from being placed under gravel. The seed bank that occurs in the location of the vault collar would be prevented from germinating in the future. Other impacts could include crushing or trampling individual plants during collar installation, or coating avoided plants with dust from the gravel, which impairs normal gas exchange and photosynthetic processes. If the loss of suitable and occupied habitat, and the number of individuals lost by the Project were to cause the population to become extirpated, this would be a significant impact given the rarity of this species. Loss of a portion of a population of plants can lead to extirpation of the population in a number of ways, such as through loss of genetic diversity within

the population, reduction of the population to the point that pollination is reduced and seed set from remaining plants becomes progressively worse over time, or reducing the size of the population to the point that it is more susceptible to extirpation from random events or climactic variation. For a small population of a rare annual species such as this, loss of more than 10% of the occupied area or number of individuals could jeopardize the continued persistence of the population. Valley Water would implement BMP AQ-1, which requires dust control measures recommended by the BAAQMD, to minimize Project impacts on San Joaquin Spearscale. However, due to the rarity of this species, the species is considered significant for purpose of this analysis. Valley Water would also implement Mitigation Measure BIO-1, as described below, to further reduce Project-related impacts to San Joaquin spearscale.

Mitigation Measure BIO-1. The Project will avoid impacts to San Joaquin spearscale plants located near vault SCC 19 to the extent practicable by implementing the following design and protective measures:

1. The vault collar at SCC 19 will be substantially reduced to a 9 ft radius from the vault, rather than the standard 32 ft square area around a vault.

2. If construction activities are undertaken during a time that the plants are detectable, the Project's qualified botanist will flag any individuals and delineate a buffer of 75 feet around the individuals to assist crews' avoidance of the species during work.

3. The gravel will be placed carefully to avoid raising dust that could coat the protected plants. Water will be used as necessary to control the dust during placement. The Project's qualified biologist or botanist will monitor the placement of gravel to determine the effectiveness of the dust control measures including assessing whether nearby plants are being coated with dust. If needed, the plants will be protected during gravel placement through application of tarps, silt fence, or similar over affected plants in such a way so as not to crush them.

BMP AQ-1 and post Mitigation Measure BIO-1 would reduce the impact on San Joaquin spearscale to a less-than-significant level through design modification of gravel collar, dust control, and other avoidance measures including buffer and monitoring during construction near SCC 19. Reduction of the size of gravel collar at SCC 19 would also avoid or minimize impacts to an adjacent low flow wetland channel (vegetated by pickleweed (*Salicornia pacifica*), salt grass (*Distichlis spicata*) and alkali rye grass (*Elymus triticoides)*.

Wildlife

Impacts to special-status wildlife species are described separately for each species below. For each species, impacts are discussed separately for activities affecting only sites in San Benito County (SCC 11 through 19) and Santa Clara County (all other sites).

South-Central California Coast Steelhead

The South-Central California Coast steelhead occurs in the Project area within Pacheco Creek, and it uses Millers Canal to move between the Pajaro River and Pacheco Creek. However, no Project sites are located immediately adjacent to, or require impacts (e.g., for access) to, any of these waterbodies.

In the absence of water quality protection measures, there would be some potential for indirect impacts on steelhead from sediment mobilization into steelhead-bearing streams. However, Valley Water will implement a number of its standard BMPs during construction activities (a description of each BMP is provided in Section 2, the Project Description). Such BMPs include BMP WQ-6 (Prevent Water Pollution) to avoid adverse effects on water quality during construction. When working in Santa Clara County, the Project will also adhere to general conditions of the VHP, which will further help to avoid or minimize proposed project impacts on aquatic habitats. For example, VHP Condition 3 requires implementation of numerous aquatic avoidance and minimization measures, described in Table 6-2 of the VHP, which would avoid and minimize impacts on aquatic habitat for these species. San Benito County is not within the VHP plan area and thus work activities undertaken in San Benito County are not governed by VHP conditions; however, implementation of Valley Water BMPs for water quality would minimize any impacts on aquatic habitat for these species in San Benito County.

Implementation of Valley Water BMPs and compliance with VHP conditions will avoid indirect adverse effects of Project activities on creeks supporting steelhead, and therefore impacts on steelhead would be less than significant.

California Tiger Salamander

As discussed in the Environmental Setting section, no occupied breeding habitat for California tiger salamander is known or expected to be present within the Project footprint. Breeding habitat is present within 0.4 mile of the Project area. Undeveloped areas could be used as dispersal or refugial habitat for the species. Individual California tiger salamanders, if present within the Project activity footprints, could be adversely impacted by construction activities if such activities collapse their burrows or destroy soil desiccation cracks. In addition, individual California tiger salamanders adjacent to the Project activity footprints that are disturbed by construction activities could attempt overland movements to find alternative upland habitat; these individuals could be harassed, injured and/or killed by pedestrians, vehicles, and predators during overland movements. Salamanders could also be killed or injured on the access roads leading to the proposed project by vehicles driving to the proposed project. Although this species is not expected to breed in or very close to the Project area, Project-related ground disturbance has the potential to lead to sediment mobilization following rain events, potentially increasing turbidity in, and adversely affecting water quality in, California tiger salamander breeding habitat. However, as discussed in the Geology/Soil and Hydrology/Water Quality sections, the Project would not result in significant impacts relating to soil erosion or water quality.

Santa Clara County (Less Than Significant). No suitable breeding habitat for California tiger salamanders is present within Project work areas or will be impacted by the Project. However, potential non-breeding dispersal and refugial habitat for the species will be impacted. Within Santa Clara County, new travel routes for off-road access, in areas that are not currently developed, will be established within potential non-breeding California tiger salamander habitat to allow Valley Water to reach vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54 (new routes to reach other Santa Clara County vaults, including SCC 40, 43, and 60, are in developed or landscaped areas and will not be located in potential California tiger salamander habitat). Based on field habitat assessments, it was determined that the total linear length of the new travel routes in undeveloped areas providing potential non-breeding California tiger salamander habitat is approximately 16,432 feet. Assuming a vehicle path 12 feet in width and multiplying 12 feet by the 16,432 linear feet of new travel routes through potential California tiger salamander habitat, the total area of potential California tiger salamander habitat that would be permanently impacted by these new access routes is approximately 4.53 acres. Approximately 2.81 acres of the 4.53 acres of potential California tiger salamander habitat impacts are in areas dominated by agricultural uses; although California tiger salamanders could potentially occur in such areas, the potential for occurrence of California tiger salamanders (and the magnitude of any impacts on the species and its habitats) in those agricultural areas would be low. These impacts from establishment of new travel routes are considered permanent impacts for the sake of this analysis, due to the Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for California tiger salamander dispersal.

Installation of gravel collars would occur within potential California tiger salamander habitat, and would therefore result in the permanent loss of 0.45 acre of potential California tiger salamander habitat, at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56 (proposed installation of gravel collars at vaults 23, 43, and 57 are in developed or landscaped areas and will not be located in potential California tiger salamander habitat). Approximately 0.39 acre of the 0.45 acre of potential California tiger salamander habitat impacts is in areas dominated by agricultural uses, where the potential for occurrence of California tiger salamanders (and the magnitude of any impacts on the species and its habitats) would be low, as discussed in the previous paragraph. New gates will be installed to access SCC 21, 22, 24, 34, 50, 53, and 54 in areas potentially suitable for use by California tiger salamanders. However, habitat impacts at these areas will be negligible, due both to the extremely limited footprints of the gates and because all of the potential upland gates will be installed along existing fence lines, so that no substantive change in habitat conditions for the California tiger salamander would occur at the gate installation areas.

In summary, the Project activities within Santa Clara County would result in permanent impacts on 4.98 acres that provide potential non-breeding habitat for the California tiger salamander.

The Project falls within East Bay Unit 12 of designated critical habitat for the California tiger salamander. Only the northern end of the proposed access route to SCC 8 is within critical habitat. Construction of this access route would impact approximately 0.14 acre of potential California tiger salamander habitat within designated critical habitat. Given the very limited nature of these impacts, the Project will not result in substantial impacts to designated critical habitat of this species.

Valley Water will comply with all required VHP conditions and AMMs during construction in Santa Clara County, including VHP Condition 1 to avoid impacts on legally protected wildlife species, VHP Condition 7 to comply with rural development design and construction requirements, and VHP Condition 12 to avoid and minimize impacts on wetlands and ponds. Valley Water will also pay VHP impact fees for Project work in designated VHP habitat areas within Santa Clara County and the fees will contribute to the VHP's conservation program, which will aid in the conservation of protected wildlife species, including California tiger salamander. With the implementation of applicable VHP AMMs, conditions, and payment of VHP impact fees, Project impacts on the California tiger salamander within Santa Clara County will be less than significant.

San Benito County (Less Than Significant with Mitigation). No suitable breeding habitat for California tiger salamanders is present within Project work areas or will be impacted by the Project. However, potential non-breeding dispersal and refugial habitat for the species will be impacted. Within San Benito County, all new travel routes for off-road access, in areas that are not currently developed, will be established within potential non-breeding California tiger salamander habitat; these new access roads/driveways will be constructed to allow Valley Water to reach vaults SCC 11, 12, and 18. Based on field habitat assessments, it was determined that the total linear length of these new travel routes, in currently undeveloped areas providing potential non-breeding California tiger salamander habitat, is approximately 5,704 feet. Assuming a vehicle path 12 feet in width and multiplying 12 feet by the 5,704 linear feet of new travel routes through potential California tiger salamander habitat, the total area of potential California tiger salamander habitat that would be permanently impacted by these new access routes is approximately 1.57 acres. These impacts from establishment of new travel routes are considered permanent impacts for the sake of this analysis, due to Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for California tiger salamander dispersal.

Within San Benito County, all installation of new gravel collars would occur within potential California tiger salamander habitat, and would therefore result in the permanent loss of 0.14 acre of potential California tiger salamander habitat at vaults SCC 11, 17, 18, and 19. New gates will be installed to access SCC 11, 12, and 13 in areas potentially suitable for use by California tiger salamanders. However, habitat impacts at these areas will be negligible, due both to the extremely limited footprints of the gates and because all gates will be installed along existing fence lines, so that no substantive change in habitat conditions at the gate installation areas will occur.

In summary, the Project activities within San Benito County would result in permanent impacts on 1.71 acres that provide potential non-breeding habitat for the California tiger salamander. Due to the regional rarity of the California tiger salamander, these impacts would be considered significant.

Because San Benito County is not within the VHP plan area, VHP fees would not be assessed for Project impacts in San Benito County. Valley Water would obtain applicable federal and state Endangered Species Acts take authorizations, if required, from USFWS and CDFW and would comply with those permit requirements. Mitigation Measures BIO-2 and BIO-3 will also be implemented to address impacts from Project activities undertaken in San Benito County. These two measures would also reduce impacts to California red-legged frog, western pond turtle, and San Joaquin kit fox, as further discussed below) in San Benito County. As indicated below, Mitigation Measure BIO-2 requires preconstruction surveys and protocol to avoid or minimize impacts on protected species during construction in or adjacent to suitable habitat for such species. Mitigation Measure BIO-3 requires compensatory mitigation for the Project's temporary and permanent impacts on wildlife habitat in San Benito County. Implementation of Mitigation Measures BIO-2 and BIO-3 would reduce the Project impacts on California tiger salamander in San Benito County to a less-than-significant level.

Mitigation Measure BIO-2. The following measures will be implemented during all Project activities in San Benito County to avoid and minimize impacts on the California tiger salamander, California red-legged frog, western pond turtle, and San Joaquin kit fox, when working in or adjacent to any suitable habitats for these species:

1. Between 14 and 30 days prior to the start of construction, a qualified biologist approved by the USFWS and CDFW will conduct a pre-construction survey for the California red-legged frog, California tiger salamander, western pond turtle, and San Joaquin kit fox.

2. Equipment shall utilize existing levee surfaces for excavation and placement work, and avoid disturbance to channels, banks, and areas designated as wetlands, or riparian habitat, if possible; otherwise, notice shall be given prior to entering area and work shall be limited to established bounded area(s).

3. Work will not be performed during days that rain/surface runoff is expected to be generated.

4. Soil stockpile areas will be covered at night to prevent/discourage habitation by animals.

5. Excavation sidewalls will be covered to prevent runoff if rain occurs.

6. Before any heavy equipment stored overnight is moved, the qualified biologist shall inspect the area underneath and around the equipment to ensure that no California red-legged frogs, California tiger salamanders,

western pond turtles, or San Joaquin kit foxes are present and at risk of being harmed by moving equipment. If any tiger salamanders, western pond turtles, or kit foxes are present, the USFWS and CDFW will be contacted for further instructions, and if any red-legged frogs are present, the USFWS will be contacted for further instruction.

7. A qualified biologist will be on-site or on-call during all activities that could result in take of the California tiger salamander, California red-legged frog, or San Joaquin kit fox. The qualifications of the biologist(s) will be presented to the USFWS and CDFW for review and approval prior to any groundbreaking at the Project site. The biologist will have oversight over implementation of all components of Mitigation Measure BIO-2 and if any of the requirements associated with these measures are not being fulfilled, he/she will have the authority to stop Project activities through communication with the Project Manager. If the biologist(s) exercises this authority, the USFWS and CDFW will be notified by telephone and electronic mail within one (1) working day.

8. Prior to initiation of any on-site preparation/construction activities, the qualified biologist will conduct an education and training session for all available individuals who will be involved in the site preparation or construction, including the Project representative(s) responsible for reporting take to the USFWS and CDFW. Training sessions will be required for all new or additional personnel before they are allowed to access the Project site. Attendance sheets identifying attendees and the contractor/company they represent will be provided to the USFWS and CDFW with the post-construction compliance report. At a minimum, the training will include a description of the California red-legged frog, California tiger salamander, western pond turtle, and San Joaquin kit fox, and their habitat requirements. Additional information will include the general measures, as they relate to the Project, that are being implemented to conserve the species; penalties for non-compliance; travel within the marked Project site will be restricted to established access routes and boundaries (work area) within which the Project must be accomplished. To ensure that employees and contractors understand their roles and responsibilities, training may have to be conducted in languages other than English.

9. The limits of the construction area will be flagged, if not already marked by other fencing, and all activity will be confined within the marked area. All access to and from the Project area will be clearly marked in the field. Prior to commencing construction activities, the contractor will determine construction vehicle parking sites and all access routes. All construction activity will be confined within the Project site, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time will equipment or personnel be allowed to adversely affect habitat areas outside the Project site without authorization from the USFWS and CDFW.

10. No nighttime construction will be undertaken.

11. Permanent and temporary disturbances to habitats of the California red-legged frog, California tiger salamander, western pond turtle, and San Joaquin kit fox will be minimized to the maximum extent practicable. To minimize temporary disturbances, all Project-related vehicle traffic will be restricted to established access routes and other designated areas. These areas also will be included in pre-construction surveys and, to the maximum extent possible, will be established in locations disturbed by previous activities to prevent further adverse effects.

12. A 15-mile-an-hour speed limit will be required on unpaved access roads within listed species habitats.

13. To prevent harassment, injury or mortality of special-status animals, or destruction of their burrows, nests, or dens, no pets of any kind will be permitted on construction sites.

14. The onsite biological monitor will check for animals under all vehicles and equipment such as stored pipes before the start of work each morning.

15. To prevent inadvertent entrapment of California red-legged frogs, California tiger salamanders, western pond turtles, or San Joaquin kit foxes during construction, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps (with no greater than a 3:1 slope) constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a qualified biologist. If an individual of one of these species is trapped, then it shall be allowed to escape on its own. In addition, all construction pipe, culverts, or similar structures with a diameter of 7.6 centimeters (3 inches) or greater that are stored at the construction site for one or more overnight periods will be thoroughly inspected for listed animals before the pipe is subsequently moved, buried, or capped. If during inspection, one of these animals is discovered inside a pipe that section of pipe shall not be moved until the animal has escaped on its own. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape from the opening or will contact the USFWS and/or CDFW by telephone for guidance. The USFWS and CDFW will be notified of the incident by telephone and electronic mail within one (1) working day.

16. All equipment will be maintained in accordance with the manufacturer's directions, so there will be no leaks of fluids such as gasoline, oils, or solvents.

17. To eliminate the attraction of predators into the action area, all food-related trash items such as wrappers, cans, bottles, and food scraps will

be disposed of in closed containers. These containers will be removed at least once every day from the entire Project site.

Mitigation Measure BIO-3. For Project activities occurring in San Benito County, Valley Water will obtain necessary permits from applicable wildlife agencies for federal and state listed species, if required, and will comply with the permit requirements. In addition, Valley Water will provide compensatory mitigation for impacts to habitat of the California tiger salamander, California red-legged frog and/or riparian habitat. Mitigation may be satisfied through conservation and management of suitable habitat occupied by these species and/or the purchase of credits at a mitigation bank that has been approved by the USACE (if necessary, for jurisdictional waters and wetland mitigation), USFWS, and/or CDFW.

If compensatory mitigation is provided through conservation and management of suitable habitat, Valley Water will provide the mitigation at a 2:1 (mitigation: impact) ratio on an acreage basis for permanent impacts to suitable habitat, and at a 1:1 ratio for temporary impacts. If compensatory mitigation is provided through purchasing of credit at approved mitigation\conservation banks, mitigation will be provided at a 1:1 (mitigation: impact) ratio for both permanent and temporary impacts.

In the case where Valley Water will provide mitigation through conservation/management of suitable habitat, Valley Water will prepare a Habitat Mitigation and Monitoring Plan (HMMP) describing the proposed mitigation lands for conservation/management, and monitoring that will occur to ensure that those lands continue to provide suitable habitat conditions. If the mitigation lands are suitable for multiple species and habitats, then Valley Water may rely on such lands to mitigate impacts to multiple species and habitats. The HMMP will be prepared by a qualified ecologist and will include the following:

1. A summary of habitat impacts and proposed acres of habitat conservation;

2. The location of habitat conservation and enhancement site(s), and description of existing site conditions;

3. A monitoring plan (including performance criteria, methods, data analysis, reporting requirements, and schedule). At a minimum, performance\success criteria will include demonstration of the presence of suitable habitat for the California tiger salamander and California red-legged frog. Suitable habitat may include aquatic habitats that meet the requirements of jurisdictional Waters of the US, State, and wetlands.

Valley Water will also ensure adequate resources including funding to implement the mitigation, maintenance, and monitoring of the mitigation lands.

If compensatory mitigation is provided through purchase of mitigation credits, Valley Water will purchase the credits from a conservation bank in consultation

with the appropriate resource agencies prior to commencement of Project construction.

In summary, the Project will impact 6.69 acres of potential California tiger salamander habitat (4.98 acres in Santa Clara County and 1.71 acres in San Benito County). Compliance with VHP conditions and payment of VHP fees would reduce the impacts to California tiger salamander from activities occurring in Santa Clara County to a less-than-significant level. For impacts from activities occurring in San Benito County, implementation of Mitigation Measures BIO-2 and BIO-3 will reduce overall Project impacts to this species to a less than significant level through avoidance measures and compensatory mitigation.

California Red-legged Frog

As described in the Environmental Setting section, no occupied breeding habitat for California red-legged frog is known or expected to be present within Project areas. If California red-legged frogs were temporarily using burrows or crevices in upland habitat, they could be killed during path, driveway, or collar construction. In addition, individual red-legged frogs adjacent to the impact footprints that are disturbed by construction activities could attempt overland movements to find alternative upland habitat; these individuals could be harassed, injured and/or killed by pedestrians, vehicles, and predators during overland movements. Finally, California red-legged frogs could be killed or injured on the roads leading to the proposed project by vehicles driving to the proposed project. Although this species is not expected to breed in or very close to the Project area, Project-related ground disturbance has the potential to lead to sediment mobilization following rain events, potentially increasing turbidity in, and adversely affecting water quality in, California red-legged frog breeding habitat. However, as discussed in the Geology/Soil and Hydrology/Water Quality sections, the Project would not result in significant impacts relating to soil erosion or water quality.

Santa Clara County (Less Than Significant). No suitable breeding habitat for California red-legged frogs is present within Project work areas or will be impacted by the Project. However, potential non-breeding dispersal and foraging habitat for the species will be impacted. Within Santa Clara County, new travel routes for off-road access, in areas that are not currently developed, will be established within potential non-breeding California red-legged frog habitat to allow Valley Water to reach vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54 (new routes to reach other Santa Clara County vaults, including SCC 40 43, and 60, are in developed or landscaped areas and will not be located in potential California red-legged frog habitat). As described above for the California tiger salamander, the total area of potential California red-legged frog habitat that would be permanently impacted by these new access routes is approximately 4.53 acres. However, approximately 2.81 acres of the 4.53 acres of potential California red-legged frog habitat impacts are in areas dominated by agricultural uses; although California red-legged frogs could potentially occur in such areas, the potential for occurrence of California red-legged frogs (and the magnitude of any impacts on the species and its habitats) in those agricultural areas would be low. These impacts from establishment of

new travel routes are considered permanent impacts for the sake of this analysis, due to Valley Water's periodic use of these routes, even though most routes will remain dirt roads/, and therefore will continue to provide suitable conditions for California red-legged frog dispersal.

Installation/construction of gravel collars would occur within potential California red-legged frogs habitat, and would therefore result in the permanent loss of 0.45 acre of potential California red-legged frog habitat at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56 (proposed installation of gravel collars at vaults 23, 43, and 57 are in developed or landscaped areas and will not be located in potential California red-legged frog habitat). Approximately 0.39 acre of the 0.45 acre of potential California red-legged frog habitat impacts is in areas dominated by agricultural uses, where the potential for occurrence of California red-legged frogs (and the magnitude of any impacts on the species and its habitats) would be low, as discussed in the previous paragraph. New gates will be installed/constructed to access SCC 21, 22, 24, 34, 50, 53, and 54 in areas potentially suitable for use by California red-legged frogs. However, habitat impacts at these areas will be negligible, due both to the extremely limited footprints of the gates and because all gates will be installed along existing fence lines, so that no substantive change in habitat conditions at the gate installation areas will occur.

In summary, Project activities within Santa Clara County would result in permanent impacts on 4.98 acres that provide potential non-breeding habitat for the California red-legged frog. Considering approximately 3.2 acres are agricultural lands, the more likely potential impact to non-breeding habitat would be 1.78 acres.

Valley Water will comply with all required VHP conditions and AMMs during construction in Santa Clara County, including VHP Condition 1 to avoiding impacts on protected wildlife species, VHP Condition 7 to comply with rural development design and construction requirements, and VHP Condition 12 to avoid and minimize impacts on wetlands and ponds. Valley Water will also pay VHP impact fees for Project work within Santa Clara County and the fees will contribute to the VHP's conservation program, which will aid in the conservation of protected wildlife species including the California red-legged frog. With the implementation of applicable VHP AMMs, conditions, and payment of VHP impact fees, Project impacts on the red-legged frogs within Santa Clara County will be less than significant.

Santa Clara County Unit 2 (Wilson Peak) of designated critical habitat for the California red-legged frog overlaps the eastern part of the Project area, including proposed activities at PC 2, 15, 16, 17, 34, and 38. Implementation of the new access routes to PC 15, 16, 17, and 38, and installation/construction of gravel collars around vaults PC 2 and 34, would impact approximately 1.33 acres of potential California red-legged frog habitat within designated critical habitat (these 1.33 acres are included in the Santa Clara County impact total of 4.98 acres described above). Given the very limited nature of these impacts and given that Valley Water would comply with all required VHP conditions (including

payment of impact fees to compensate for habitat impacts), the Project will not result in substantial impacts to designated critical habitat of this species.

San Benito County (Less Than Significant with Mitigation). No suitable breeding habitat for California red-legged frogs is present within Project work areas or will be impacted by the Project. However, potential non-breeding dispersal and foraging habitat for the species will be impacted. Within San Benito County, all new travel routes for off-road access, in areas that are not currently developed, will be established within potential non-breeding California red-legged frog habitat; these new access roads/driveways will be constructed to allow Valley Water to reach vaults SCC 11, 12, and 18. As described above for the California tiger salamander, the total area of potential California red-legged frog habitat that would be permanently impacted by these new access routes is approximately 1.57 acres. These impacts from establishment of new travel routes are considered permanent impacts for the sake of this analysis, due to the District's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for California red-legged frog dispersal.

Within San Benito County, all installation/construction of gravel collars would occur within potential California red-legged frog habitat, and would therefore result in the permanent loss of 0.14 acre of potential California red-legged frog habitat at vaults SCC 11, 17, 18, and 19. New gates will be installed/constructed to access SCC 11, 12, and 13 in areas potentially suitable for use by California red-legged frogs. However, habitat impacts at these areas will be negligible, due both to the extremely limited footprints of the gates and because all gates will be installed along existing fence lines, so that no substantive change in habitat conditions at the gate installation/construction areas will occur.

In summary, the Project activities within San Benito County would result in permanent impacts on 1.71 acres that provide potential non-breeding habitat for the California red-legged frog. Due to the regional rarity of the California red-legged frog, these impacts would be considered significant.

Because San Benito County is not within the VHP plan area, VHP fees would not be assessed for Project impacts in San Benito County. The District would obtain federal Endangered Species Act take authorization from USFWS if required and would comply with the permit requirements. Implementation of Mitigation Measures BIO-2 and BIO-3 described above for Project activities undertaken in San Benito County would reduce impacts to the California red-legged frog to less than significant levels.

In summary, the Project will impact 6.69 acres of potential California red-legged frog habitat (4.98 acres in Santa Clara County and 1.71 acres in San Benito County). Compliance with VHP conditions and payment of VHP fees would reduce the impacts on California red-legged frog from activities occurring in Santa Clara County to a less-than-significant level. For impacts from activities occurring in San Benito County, implementation of Mitigation Measures BIO-2

and BIO-3 will reduce Project impacts to this species to less than significant levels through avoidance measures and compensatory mitigation.

Western Pond Turtle

As described in the Environmental Setting section, western pond turtles have known occurrences in the Project vicinity, with the nearest to Project work areas being approximately 0.9 miles from PC 38 (CNDDB 2019). Vaults PC 2, 15, 16, 17, 34, and 38 occur close enough to Pacheco Creek or suitable ponds that it is possible for pond turtles to occasionally disperse into the work areas for these vaults. Habitat near SCC 12, 13, 17, 18, and 19 provides suitable aquatic habitat for this species, and the species could occur in upland areas near these work locations, and near Pacheco Creek.

Western pond turtles may occur in the Project vicinity primarily in and along waterbodies, but they will readily escape into water when encountered. As a result, the likelihood of injury or mortality of individuals during Project activities is low. However, there is some potential for turtles to be dispersing across upland areas during Project work. If turtles were present in upland areas during construction, they could be killed or injured during path, driveway, or collar construction. In addition, individual turtles adjacent to the impact footprints that are disturbed by construction activities could attempt overland movements to find alternative upland habitat; these individuals could be harassed, injured, and/or killed by pedestrians, vehicles, and predators during overland movements. Turtles could be killed or injured on the roads by vehicles driving to the proposed project. There is also some potential for Project activities to impact turtle nests in upland areas, although the likelihood of impacts to active nests, given how small and well dispersed nests are on the landscape, is extremely low.

Santa Clara County (Less Than Significant). In Santa Clara County portions of the Project area, no suitable aquatic habitat for western pond turtles is present within Project work areas or will be impacted by the Project. However, potential upland habitat for the species will be impacted. Western pond turtles have a low probability of occurring in work areas in Santa Clara County due to the distance between such work areas and high-quality habitat for this species. Nevertheless, installation of gravel collars at PC 2 and 34, and implementation of new access roads/driveways to PC 15, 16, 17, and 38, would occur within potential upland habitat for the western pond turtle and would therefore result in the permanent loss of approximately 1.33 acres of undeveloped habitat that is close enough to Pacheco Creek or nearby ponds that it may occasionally be used by dispersing western pond turtles. Impacts from implementation of new travel routes are considered permanent impacts for the sake of this analysis, due to Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for western pond turtle dispersal.

Valley Water will comply with all required VHP conditions and AMMs during construction in Santa Clara County, including VHP Condition 1 to avoid impacts on l protected wildlife species, VHP Condition 7 to comply with rural development

design and construction requirements, and VHP Condition 12 to avoid and minimize impacts on wetlands and ponds. Valley Water will also pay VHP impact fees for work in VHP designated habitats within Santa Clara County and the fees will contribute to the VHP's conservation program, which will aid in the conservation of wildlife including the western pond turtle. With the implementation of applicable VHP AMMs, conditions and the payment of VHP impact fees, Project impacts on the western pond turtle in Santa Clara County will be less than significant.

San Benito County (Less than Significant). Within San Benito County, perennial marsh habitat near SCC 12 and 13, and aquatic habitat along pooled portions of the old Pajaro River alignment and at the Pajaro River Wetlands Mitigation Bank near SCC 17, 18, and 19, provide suitable aquatic habitat for this species, and the species could occur in upland areas near these work locations and near Pacheco Creek. As a result, implementation of new access roads/driveways to SCC 12 and 18, and installation of gravel collars at SCC 17, 18, and 19, would occur within potential upland habitat for the western pond turtle and would therefore result in the permanent loss of 1.62 acres of potential dispersal habitat. Impacts from implementation of new travel routes are considered permanent impacts for the sake of this analysis, due to Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for western pond turtle dispersal. Because no Project activities within San Benito County will occur near areas of known western pond turtle populations; because of the infrequency with which western pond turtles are expected to use these upland habitats; and because of the infrequency of Valley Water activities in these areas, the potential for (and magnitude of) impacts to individual turtles or their nests is very low. Further, the acreage of impacts to this species' potential habitat is very low relative to the regional extent of potential habitat. Therefore, impacts on western pond turtles from Project activities in San Benito County will be less than significant.

Although the Project impacts on western pond turtle will be less than significant and thus, no mitigation is necessary, compliance with VHP conditions and payment of VHP fees for Santa Clara County activities, and implementation of Mitigation Measures BIO-2 and BIO-3 for San Benito County activities to address impacts on California tiger salamander and California re-legged frog would further avoid/minimize Project impacts and likely benefit the western pond turtles.

Swainson's Hawk

As described in the Environmental Setting section, although Swainson's hawk occurs in Santa Clara and San Benito counties primarily as an uncommon migrant, small numbers are known to nest in the region, and a single nest is present near one Project site.

Santa Clara County (Less Than Significant). One of two nests known to be present in Santa Clara County is located in a valley oak tree 375 feet east of the new path and access route to SCC 8. Although new activities close to an active

nest could potentially disturb nesting hawks, the 375-foot distance between the nest and where the new access route would be constructed is sufficient to avoid disturbing these birds to the point of nest abandonment, particularly given the brief duration of gravel path construction. Similarly, occasional use of the access path to reach vault SCC 8 would not subject nesting Swainson's hawks to disturbance any greater than the existing traffic nearby on Highway 152. Grading of the access path to SCC 8 would result in the loss of approximately 0.45 acre of grassland that provides potential foraging habitat, but given the extensive grassland surrounding the nest site in all directions, this very limited habitat impact would not affect the survivorship or productivity of this single pair of Swainson's hawks, nor would it reduce the quality of the nesting territory to the point that the hawks would abandon the territory. Therefore, this impact would be less than significant.

Elsewhere within the Santa Clara County portion of the Project area, Swainson's hawks may occur as scarce migrants and possible foragers in grassland, wetland, or agricultural habitats. Up to 4.98 acres of these habitats would be lost as a result of access road construction and installation of gravel collars. However, given the scarce nature of this species in Santa Clara County, the low quality of habitat impacted (with most such habitat consisting of row crops providing little Swainson's hawk prey), and the limited use migrants make of the County's lowland habitats for foraging, the loss of potential foraging habitat would be less than significant.

Valley Water will implement a number of BMPs to avoid and minimize Project impacts. For example, BMP BI-5 will avoid impacts to active nests of protected bird species. Also, the VHP requires avoidance of impacts to legally protected wildlife species (VHP Condition 1) by implementing construction buffer zones, biological monitoring, and other requirements as needed. In the event that a new Swainson's hawk nest is established in an area close enough to Project activities that disturbance of nesting hawks is possible, implementation of BMP BI-5 would avoid disturbance of an active nest.

San Benito County (Less Than Significant). Although Swainson's hawks are known to nest in and south of the Hollister area in San Benito County, no nests are known to be present in or near the San Benito County portion of the Project area. As a result, nesting Swainson's hawks are not expected to be impacted by Project activities in San Benito County. Project activities within San Benito County would result in permanent impacts on 1.71 acres that provide potential foraging habitat for migrant Swainson's Hawks. However, given the scarce nature of this species in San Benito County, the low quality of habitat impacted, and the limited use migrants make of the County's lowland habitats for foraging, the loss of potential foraging habitat would be less than significant.

Valley Water will implement a number of BMPs to avoid and minimize Project impacts. For example, BMP BI-5 will avoid impacts to active nests of protected bird species. In the event that a new Swainson's hawk nest is established in an area close enough to Project activities that disturbance of nesting hawks is possible, implementation of BMP BI-5 would avoid disturbance of an active nest.

In summary, while the Project will impact potential Swainson's hawk foraging habitat, due to the regional abundance of suitable foraging habitat for this species, and the very limited degree to which Swainson's hawks actually use most of the potential habitat that will be impacted, impacts to this species' habitat will be less than significant. Implementation of BMP BI-5 would ensure that no active nests of this species are disturbed by Project activities, and overall Project impacts on Swainson's hawks will be less than significant.

Burrowing Owl

Burrowing owls are not expected to nest in Project sites. Rather, they are expected to occur in or near project site areas only as non-breeding individuals, particularly during migration and winter. If owls are present within Project impact footprints, individual owls could be killed or injured if burrows they are using collapse or are destroyed. Project activities may also disturb roosting owls to the point that they abandon their burrows. As described in the Environmental Setting section, the most likely habitat to be used by burrowing owl are annual grasslands and agricultural areas at and near PC 34 and 38 and SCC 8, 17, 18, 19, 20, and 52. However, there is a low probability that owls would be roosting within work areas themselves, given their low abundance in the Project vicinity and the regional abundance of suitable habitat.

Santa Clara County (Less Than Significant). Project sites near extensive grassland or agricultural lands provide suitable foraging habitat for burrowing owls, and possible roosting habitat where California ground squirrel burrows are present. However, intensively cultivated fields generally lack suitable burrows and therefore provide low-quality habitat for this species. The most likely habitat to be used by this species in the Santa Clara County portion of the Project would be the annual grasslands and agricultural areas at and near PC 34 and 38 and SCC 8, 20, and 52. Therefore, installation of gravel collars at PC 34 and SCC 20 and 52, and implementation of new access routes to PC 38 and SCC 8, would result in the permanent loss of approximately 1.04 acres of grassland or ruderal habitat that provides potential foraging and/or roosting habitat for this species. The remaining undeveloped habitat in Santa Clara County portions of the Project site, summarized for the California tiger salamander and California red-legged frog above, totals approximately 3.94 acres; these areas, consisting primarily of agricultural lands, provide potential burrowing owl foraging habitat but are of very low quality for use by this species. Impacts from implementation of new travel routes are considered permanent impacts for the sake of this analysis, due to the Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for use by foraging burrowing owls.

Valley Water will implement BMP BI-5 to avoid and minimize Project impacts on nesting birds and will also comply with VHP conditions during Project work in Santa Clara County, including VHP Condition 15 pertaining to burrowing owls, and pay the VHP impact fees for work within Santa Clara County. With the implementation of VHP AMMs, conditions, and payment of fees, Project impacts on the burrowing owl in Santa Clara County will be less than significant.

San Benito County (Less Than Significant). Within the San Benito County portion of the Project area, the highest-quality foraging (and potential roosting) habitat for burrowing owls consists of the upland grassland, hayfield, and ruderal habitat in the vicinity of SCC 17, 18, and 19. Implementation of a new access route to SCC 18, and installation of gravel collars at SCC 17, 18, and 19, would result in the permanent loss of 0.97 acre of potential burrowing owl habitat. The remaining undeveloped habitat in San Benito County portions of the Project site, summarized for the California tiger salamander and California red-legged frog above, total approximately 0.74 acres; these areas, consisting primarily of agricultural lands and wetlands, provide potential burrowing owl foraging habitat but are of lower quality for use by this species. Therefore, a total of approximately 1.71 acres of potential burrowing owl habitat would be permanently impacted in San Benito County. Because burrowing owls are not known or expected to be nesting in these impact areas, and because migrant or wintering owls are expected to make little use of this habitat (owing to their low populations and the regional abundance of similar habitat), the loss of 1.71 acres of little-used potential foraging habitat would be a less than significant impact. Impacts from implementation of new travel routes are considered permanent impacts for the sake of this analysis, due to Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for use by foraging burrowing owls.

Valley Water will implement a number of BMPs to avoid and minimize Project impacts. Implementation of general biological preconstruction surveys (BMP BI-5) for nesting birds conducted prior to commencement of work in San Benito County will avoid or minimize the potential for Project impacts on burrowing owls. Additionally, even though impact fees would not be paid for habitat impacts in San Benito County, the Valley Water's VHP impact fees for work within Santa Clara County would contribute to the VHP's conservation program, which would aid in the conservation of the burrowing owl. Project impacts on the burrowing owl in San Benito County will be less than significant.

White-tailed Kite and Loggerhead Shrike

Both the white-tailed kite and loggerhead shrike occur in and around grasslands, and agricultural lands to some extent, in the Project area. Although white-tailed kites are somewhat more widely distributed, these two species are addressed together because they may be impacted in similar ways by Project activities. The Project does not propose to remove any trees in which these species may nest, so no loss of nesting habitat will occur. However, work conducted in close proximity to nests could potentially disturb birds to the point of nest abandonment. As described in the Environmental Setting section, the most likely habitat to be used by white-tailed kite or loggerhead shrike are annual grasslands and agricultural lands at PC 2, 15, 16, 17, 34, and 38 and SCC 8, 11, 12, 13, 17, 18, 19, 20, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, 50, 52, 54, and 56.

Santa Clara County (Less Than Significant). No suitable nesting habitat for the white-tailed kite or loggerhead shrike will be impacted by the Project. However, grassland, wetland, and agricultural habitats that may serve as potential foraging

habitat for this species will be impacted. Within Santa Clara County, new travel routes for off-road access, in areas that are not currently developed, will be established within potential foraging habitat for these species to allow Valley Water to reach vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54 (new routes to reach other Santa Clara County vaults, including SCC 40 43, and 60, are in developed or landscaped areas and will not be located in potential habitat for these species). Therefore, establishment of these access routes would result in impacts to approximately 4.53 acres of potential foraging habitat, as calculated in the California tiger salamander impact assessment above. Installation of gravel collars would result in the permanent loss of 0.45 acre of potential foraging habitat at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56 (proposed installation of gravel collars at vaults 23, 43, and 57 are in developed or landscaped areas and will not be located in potential habitat for these species). In summary, the Project activities within Santa Clara County would result in permanent impacts on 4.98 acres that provide potential foraging habitat for the white-tailed kite and loggerhead shrike. Given the abundance of suitable foraging habitat for these species regionally, the loss of potential foraging habitat would be a less than significant impact.

Valley Water will implement a number of BMPs to avoid and minimize Project impacts. For example, BMP BI-5 will avoid impacts to active nests of these and other protected bird species. The VHP requires avoidance of impacts to legally protected wildlife species (VHP Condition 1) by implementing construction buffer zones, biological monitoring, and other requirements as needed. As a result of the limited nature of habitat impacts to these species and the avoidance of impacts to their nests, Santa Clara County Project impacts on the white-tailed kite and loggerhead shrike will be less than significant.

San Benito County (Less Than Significant). Within San Benito County, new travel routes for off-road access, in areas that are not currently developed, will be established within potential foraging habitat for these species to allow Valley Water to reach vaults SCC 11, 12, and 18. Although no nesting habitat for white-tailed kites or loggerhead shrikes would be impacted by establishment or use of these access routes, these travel routes provide potential foraging habitat for these two bird species. Therefore, establishment of these access routes would result in impacts to approximately 1.57 acres of potential foraging habitat, as calculated in the California tiger salamander impact assessment above. Installation of gravel collars would result in the permanent loss of 0.14 acre of potential foraging habitat at vaults SCC 11, 17, 18, and 19. In summary, the Project activities within San Benito County would result in permanent impacts on 1.71 acres that provide potential foraging habitat for the white-tailed kite and loggerhead shrike. Given the abundance of suitable foraging habitat for these species regionally, the loss of potential foraging habitat would be a less than significant impact. As is the case for Santa Clara County, Valley Water will implement a number of BMPs in San Benito County to avoid and minimize Project impacts. For example, BMP BI-5 will avoid impacts to active nests of these and other protected bird species.

Least Bell's Vireo

As described in the Environmental Setting section, there is a very low probability of this species' occurrence anywhere near the Project area, and there is no suitable nesting habitat close enough to Project activities for impacts to this species to occur during Project implementation due to the absence of dense, woody riparian vegetation at most vault locations. Surveys conducted along nearby areas of prior occurrence (lower Llagas Creek) by Valley Water biologists have not detected any Least Bell's Vireos in or near the Project area since 2001. Therefore, there is a very low probability of this species' occurrence anywhere near the Project area, and there is no suitable nesting habitat close enough to Project activities for impacts to this species to occur during Project implementation.

Implementation of standard Valley Water BMPs, including BMP BI-5 to avoid impacts to active nests of protected birds, would ensure that any nesting least Bell's vireos are avoided, in the unlikely event that the species were to be nesting in the Project area when construction occurs. As a result, no injury, mortality, or disturbance of least Bell's vireos will result from the Project, and Project impacts on this species will be less than significant.

Yellow Warbler

As discussed in the Environmental Setting section, yellow warblers breed in riparian woodland at a number of locations in southern Santa Clara County and northern San Benito County. However, potential nesting habitat for this species is scarce in the Project area, with willow riparian habitat near PC 2 and PC 34 providing the most suitable nesting habitat. However, in both areas, suitable habitat is far enough from work areas that no impacts to nesting habitat will occur, and disturbance of nesting pairs is unlikely. Willow riparian habitat is present in the San Felipe Lake area, but there is not suitable riparian habitat for this species here. Elsewhere in the Project area, yellow warblers are expected to occur only as migrants. Implementation of standard Valley Water BMPs, including BMP BI-5 to avoid impacts to active nests of protected birds, would ensure that any nesting yellow warblers are avoided, in the unlikely event that the species were to be nesting in the Project area when construction occurs. As a result, no injury, mortality, or disturbance of yellow warblers will result from the Project, and Project impacts on this species will be less than significant.

Tricolored Blackbird

Tricolored blackbirds are not known to nest in or very close to Project work areas, and nearby preconstruction surveys and monitoring during the replacement of culverts under the CFI/CFO access road, between sites SCC 13 and 17, in 2016 did not detect any evidence of this species' breeding colonies. Therefore, no loss of occupied nesting habitat is expected to occur. As discussed in the Environmental Setting section, within the Project vicinity, the most likely location for occurrence of a breeding colony is in marshes around San Felipe Lake (near SCC 12 and 13) and where emergent vegetation or tall thistles or

mustard are located (near SCC 17, 18, and 19). If Project activities occur close to active colonies, work could potentially disturb birds to the point of nest abandonment.

Santa Clara County (Less Than Significant). No suitable nesting habitat for tricolored blackbirds is present within Project work areas or will be impacted by the Project. However, grassland, wetland, and agricultural habitats that may serve as potential foraging habitat for this species will be impacted. Within Santa Clara County, new travel routes for off-road access, in areas that are not currently developed, will be established within potential foraging habitat for tricolored blackbirds to allow Valley Water to reach vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54 (new routes to reach other Santa Clara County vaults, including SCC 40 43, and 60, are in developed or landscaped areas and will not be located in potential habitat for this species). Therefore, implementation of these access routes would result in impacts to approximately 4.53 acres of potential foraging habitat, as calculated in the California tiger salamander impact assessment above. Installation of gravel collars would result in the permanent loss of 0.45 acre of potential foraging habitat at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56 (proposed installation of gravel collars at vaults 23, 43, and 57 are in developed or landscaped areas and will not be located in potential habitat for these species). In summary, the Project activities within Santa Clara County would result in permanent impacts on 4.98 acres that provide potential foraging habitat for the tricolored blackbird. Given the abundance of suitable foraging habitat for this species regionally, and the absence of any known or long-used nesting sites in the immediate vicinity of work areas, the loss of potential foraging habitat would be less than significant.

Valley Water will comply with VHP conditions during Project work in Santa Clara County, including VHP Condition 17 pertaining to tricolored blackbirds, and the Valley Water's VHP impact fees for work within Santa Clara County will contribute to the VHP's conservation program, which will aid in the conservation of the tricolored blackbird. As a result of the limited nature of impacts to this species' habitat, the low use of such habitat expected to occur, the avoidance of impacts to tricolored blackbird nests due to compliance with VHP Condition 17, and the payment of VHP impact fees, Santa Clara County Project impacts on the tricolored blackbird will be less than significant.

San Benito County (Less Than Significant). Within San Benito County, new travel routes for off-road access, in areas that are not currently developed, will be established within potential foraging habitat for these species to allow Valley Water to reach vaults SCC 11, 12, and 18. Although no nesting habitat for tricolored blackbirds would be impacted by establishment or use of these access routes, these travel routes provide potential foraging habitat for this species. Therefore, access through the new routes would result in impacts to approximately 1.57 acres of potential foraging habitat, as calculated in the California tiger salamander impact assessment above. Installation of gravel collars would result in the permanent loss of 0.14 acre of potential foraging habitat at vaults SCC 11, 17, 18, and 19. In summary, the Project activities

within San Benito County would result in permanent impacts on 1.71 acres that provide potential foraging habitat for the tricolored blackbird. Given the abundance of suitable foraging habitat for this species regionally, the impact would be considered less than significant.

Valley Water will implement BMP BI-5 to avoid impacts to active nests of the tricolored blackbird and other protected bird species by making sure they are not present before construction commences via a preconstruction biological survey. Additionally, even though impact fees would not be paid for habitat impacts in San Benito County, Valley Water's VHP impact fees for work within Santa Clara County would contribute to the VHP's conservation program, which would aid in the conservation of the tricolored blackbird.

American Badger

The American badger typically occurs in and around grasslands, though the species will use agricultural lands to some extent, particularly when dispersing. Due to this species' occurrence at very low densities, the regional abundance of suitable habitat, and this species' aversion to areas of high human activity, this species is highly unlikely to den in or near Project work areas, and it most likely occurs in the Project alignment only as an occasional dispersant. Project activities therefore are unlikely to disturb or destroy this species' dens or result in injury or mortality of individual badgers. As discussed in the Environmental Setting section, American badgers, if present near the Project areas, most likely would occur in or near PC 2, 15, 16, 17, 34, and 38 and SCC 8.

Santa Clara County (Less Than Significant). Within Santa Clara County, new travel routes for off-road access, in areas that are not currently developed, will be established in suitable foraging and dispersal habitat for the American badger to allow Valley Water to reach vaults PC 15, 16, 17, and 38 and SCC 8, 21, 22, 24, 25, 26, 30, 31, 32, 34, 35, and 54 (new routes to reach other Santa Clara County vaults, including SCC 40 43, and 60, are in developed or landscaped areas and will not be located in potential habitat for this species). These travel routes provide potential foraging and dispersal habitat for the American badger. Therefore, implementation of these access routes would result in impacts to approximately 4.53 acres of potential foraging and dispersal habitat, as calculated in the California tiger salamander impact assessment above. Impacts from establishment of new travel routes are considered permanent impacts for the sake of this analysis, due to the Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for use by dispersing badgers. Installation of gravel collars would result in the permanent loss of 0.45 acre of potential foraging and dispersal habitat at vaults PC 2 and 34 and SCC 20, 21, 22, 24, 25, 26, 30, 31, 35, 52, and 56 (proposed installation of gravel collars at vaults 23, 43, and 57 are in developed or landscaped areas and will not be located in potential habitat for these species). In summary, the Project activities within Santa Clara County would result in permanent impacts on 4.98 acres that provide potential foraging and dispersal habitat for the American badger. Given the abundance of suitable foraging habitat for this species regionally, the impact would be considered less

than significant.

San Benito County (Less Than Significant). Within San Benito County, new travel routes for off-road access, in areas that are not currently developed, will be established in suitable foraging and dispersal habitat for the American badger to allow Valley Water to reach vaults SCC 11, 12, and 18. Therefore, access through the new routes would result in impacts to approximately 1.57 acres of potential foraging and dispersal habitat, as calculated in the California tiger salamander impact assessment above. Installation of gravel collars would result in the permanent loss of 0.14 acre of potential foraging and dispersal habitat at vaults SCC 11, 17, 18, and 19. In summary, the Project activities within San Benito County would result in permanent impacts on 1.71 acres that provide potential foraging and dispersal habitat for the American badger. Given the abundance of suitable foraging and dispersal habitat for this species regionally, the loss of 1.71 acres of potential foraging and dispersal habitat would be a less than significant impact.

San Joaquin Kit Fox

According to the VHP, kit foxes are expected to occur in the Project vicinity only in the Pacheco Creek/Highway 152 corridor and around San Felipe Lake. As discussed in the environmental setting section, the most likely habitat to be used by the kit foxes would be the annual grassland and scrubland at PC 2, 15, 16, 17, 34, 38 and SCC 8. Agricultural lands at SCC 17, 18, 19 and 20 could also be used by kit foxes for dispersal. This species has not been recorded and is not expected to occur along the portion of the Project alignment north of these areas. Kit foxes apparently occur in the Project vicinity very infrequently and thus, there is a low potential for Project impacts to this species. Nevertheless, in the absence of protective measures, there is some potential for individuals to be killed or injured due to collapse of their dens during construction, or due to being struck by construction vehicles. Individuals could also be subject to harassment (e.g., disturbance) during Project activities.

Santa Clara County (Less Than Significant). Within Santa Clara County, new travel routes for off-road access, in areas that are not currently developed and that are considered by the VHP to be within the potential range of the San Joaquin kit fox, will be implemented to allow Valley Water to reach vaults PC 15, 16, 17, and 38 and SCC 8. These travel routes provide potential foraging and dispersal habitat for the San Joaquin kit fox. Therefore, access through these new routes would result in impacts to approximately 1.72 acres of potential foraging and dispersal habitat. Impacts from access through the new travel routes are considered permanent impacts for the sake of this analysis, due to the Valley Water's periodic use of these routes, even though most routes will remain dirt roads and therefore will continue to provide suitable conditions for use by dispersing kit foxes. Additionally, installation of gravel collars would result in the permanent loss of 0.06 acre of potential foraging and dispersal habitat, in areas that are not currently developed and that are considered by the VHP to be within the potential range of the San Joaquin kit fox, at vault PC 2. In summary, the Project activities within Santa Clara County would result in total

permanent impacts on 1.78 acres that provide potential foraging and dispersal habitat for the San Joaquin kit fox. The species is unlikely to den in these limited areas, though the possibility of impacts to a den cannot be eliminated.

Valley Water will comply with all required VHP conditions during construction in Santa Clara County, including VHP Condition 1 to avoid impacts on protected wildlife species, VHP Condition 7 to comply with rural development design and construction requirements, and VHP Condition 18 which covers the San Joaquin kit fox. Valley Water will also pay VHP impact fees for work within Santa Clara County and the fees will contribute to the VHP's conservation program, which will aid in the conservation of wildlife including the San Joaquin kit fox. As a result, impacts of Project activities in Santa Clara County on the San Joaquin kit fox will be less than significant.

San Benito County (Less Than Significant with Mitigation). Within San Benito County, new travel routes for off-road access, in areas that are not currently developed, will be implemented to allow Valley Water to reach vaults SCC 11, 12, and 18. These travel routes provide potential foraging and dispersal habitat for the San Joaquin kit fox. Therefore, implementation of these access routes would result in impacts to approximately 1.57 acres of potential foraging and dispersal habitat, as calculated in the California tiger salamander impact assessment above. Installation of gravel collars would result in additional permanent loss of 0.14 acre of potential foraging and dispersal habitat at vaults SCC 11, 17, 18, and 19. In summary, the Project activities within San Benito County would result in total permanent impacts on 1.71 acres that provide potential foraging and dispersal habitat for the San Joaquin kit fox. Given the abundance of suitable foraging and dispersal habitat for this species regionally, coupled with the very low probability that kit foxes would use this impacted habitat, the loss of 1.71 acres of potential foraging and dispersal habitat would not result in adverse effects on the species' population or distribution and would therefore be a less than significant impact. The species is unlikely to den in these limited areas, though the possibility of impacts to a den cannot be eliminated. Because Project activities in San Benito County are not subject to VHP conditions or payment of fees, the Project impacts on kit fox from the San Benito County activities are considered significant (before mitigation) for purpose of this analysis.

Implementation of Mitigation Measure BIO-3 above will reduce the potential for impacts to kit foxes. In addition, Mitigation Measure BIO-4 would be implemented to further reduce impacts on kit foxes when Project activities are undertaken in San Benito County.

Mitigation Measure BIO-4. The following measures will be implemented during all Project activities in San Benito County to avoid and minimize impacts on the San Joaquin kit fox:

1. Within 15 days prior to any ground disturbance, a qualified biologist will conduct a preconstruction survey in areas identified in the field evaluation as being suitable breeding or denning habitat. The surveys will evaluate

use of dens by kits foxes using methods appropriate for the northern edge of the species' range, such as placing a tracking medium in the Project area where suitable dens occur. Surveys will conclude no more than two calendar days prior to construction. To avoid last minute changes in schedule or contracting that may occur if a kit fox or active den is found, the qualified biologist may also conduct a preliminary survey up to 14 days before construction. The survey area will include the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or suitable dens. The status of all dens will be determined and mapped. Written results of the preconstruction surveys will be submitted to USFWS and CDFW within two calendar days after survey completion, and before the start of ground disturbance. If San Joaquin kit foxes and/or suitable dens (i.e., dens greater than 5 inches in diameter) are identified in the survey area, the following measures will be implemented:

a. If a San Joaquin kit fox den is discovered in the survey area, the den will be monitored for three days by a USFWS and CDFW-approved biologist using a tracking medium, or an infrared beam camera to determine if the den is currently being used.

b. Unoccupied dens will be destroyed immediately to prevent subsequent use.

c. If a natal or pupping den is found, USFWS and CDFW will be notified immediately. The den will not be destroyed until the pups and adults have vacated, and then only after further consultation with USFWS and CDFW.

d. If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional five consecutive days from the time of the first observation to allow any resident animals to move to another den while den use is actively discouraged. For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil, such that any resident animal can easily escape. Once the den is determined to be unoccupied, it may be excavated under the direction of the biologist. Alternatively, if the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated by hand when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities). If at any point during excavation a kit fox is discovered inside the den, the excavation activity shall cease immediately, and monitoring of the den as described above will be resumed. Destruction of the den may be completed when, in the judgment of the biologist, the animal has escaped from the partially destroyed den.

e. If active or suitable dens are identified within the proposed disturbance footprint or outside the proposed project footprint, but within a 250-foot buffer, exclusion zones around each den entrance, or cluster of entrances will be demarcated. The configuration of exclusion zones will be circular with a radius measured outward from the den entrance(s). No covered activities will occur within the exclusion zones. Exclusion zone radii for atypical dens and suitable dens will be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zone radii for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den, or cluster of dens, but does not prevent access to the den by the foxes.

f. If construction takes place while kit fox dens are occupied, a qualified biologist will be present to ensure compliance with the AMMs listed above. The frequency of monitoring will be approved by USFWS and CDFW based on the frequency and intensity of construction activities, and the likelihood of disturbance to the active dens. In most cases, monitoring will occur at least weekly, but in some cases daily monitoring may be appropriate to ensure that disturbance of San Joaquin kit fox is minimized.

g. If a San Joaquin kit fox is found in the Project area during construction activities, the on-site biologist will halt construction, and allow the animal to disperse on its own.

In summary, approximately 3.49 acres of potential foraging and dispersal habitat for the San Joaquin kit fox would be permanently impacted within Santa Clara and San Benito Counties. Implementation of VHP measures and Mitigation Measure BIO-4 will avoid impacts to individual kit foxes and active dens, and payment of VHP fees in Santa Clara County will contribute to a regional conservation program that will benefit the species. With implementation of these measures, overall Project impacts on the San Joaquin kit fox will be less than significant.

Pallid Bat

Although potential roost sites for pallid bats are widespread, pallid bats are scarce and local, and there is no high-quality habitat (e.g., very large trees with large cavities, or large barns) close enough to any Project work areas: (a) to support a large colony of pallid bats; and (b) to be disturbed by Project activities. Although Project activities will result in the loss of grassland, wetland, and agricultural habitats that are ostensibly suitable for use by foraging pallid bats, these habitats likely receive little or no use by the species due to the absence of high-quality roost sites nearby. Therefore, Project impacts on the pallid bat would not result in a substantive reduction in regionally available habitat that is actually used by the species, and would not affect the species populations, and Project impacts are less than significant.

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the US Fish and Wildlife Service? (*Less than Significant Impact with Mitigation*)

Impacts to sensitive riparian habitats, consisting of the grassy areas below top of bank and above the ordinary high-water marks of two ephemeral streams regulated by the CDFW would occur at SCC 57, 54, 43, and 8, all located in Santa Clara County, and SCC 12 in San Benito County. Impacts would occur from stabilization and installation/construction of a permanent gravel path crossing at SCC 8, implementation of new, unimproved travel routes at SCC 12 and 54, and from installation of gravel collars at SCC 57 and 43. These impacts are expected to permanently alter the banks of these ephemeral streams by placing stabilizing materials, such as gravel, in a keyed-in area of the bank. Though none of these areas supports tree cover, the placement of these materials will preclude the reestablishment of grassy vegetation below top of bank. At a third location, PC 2, the Project has avoided impacts to sycamore alluvial woodland, a sensitive habitat type tracked by CNDDB, and considered regulated by the CDFW as riparian, through vault collar redesign. Across all sites, impacts to banks will be very minor and comprise approximately 0.04 acres over 287 linear feet (approximately 0.007 acres or 96 linear feet of permanent and temporary impacts combined in Santa Clara County, and approximately 0.03 acres and 191 linear feet of only temporary impacts in San Benito County).

This Project is subject to Section 1602 of the Fish and Game Code which requires a Lake or Streambed Alteration Agreement (LSAA) with CDFW. Fish and Game Code Section 1602 requires an entity to notify CDFW prior to commencing any activity that may (1) substantially divert or obstruct the natural flow of any river, stream or lake; (2) substantially change or use material from the bed, channel, or bank of any river, stream or lake; or (3) deposit debris, waste, or materials that could pass into any river, stream or lake. Valley Water will obtain an LSAA agreement from CDFW and comply with the conditions in the LSAA. Compliance with the LSAA conditions would avoid or minimize Project impacts on riparian habitat, or other sensitive natural community. In addition, for Project activities within Santa Clara County, Valley Water will pay riparian fees pursuant to the VHP, and the Project's impacts on riparian habitat or sensitive natural community would be reduced to a less-than-significant level. In San Benito County (route between SCC 11 and 12), the estimated 0.03 acres and 191 linear feet of potential impacts would be mitigated to a less than significant level through implementation of Mitigation Measures BIO-2 and 3, which include measures to minimize impacts to sensitive habitats and require compensatory mitigation of impacts on habitats and waters/wetlands through conservation/management of habitats, or purchasing of credits at approved mitigation banks.

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? *(Less than Significant Impact with Mitigation*)

H. T. Harvey & Associates biologists surveyed the proposed project sites for jurisdictional features that may be subject to regulation under the Clean Water Act, administered by the US Army Corps of Engineers (USACE) (HT Harvey 2019). These aquatic habitats are also regulated by the CDFW and RWQCB.

Wetlands or other Waters of the US and State were identified at eleven vaults, or Project impact locations. Of these, eight vaults (SCC 57, SCC 54, SCC 52, SCC 43, SCC 22, SCC 21, SCC 8, and PC 2) are located within Santa Clara County and the HCP/NCCP Plan area for the VHP. An additional three vault impact sites with wetlands occur at locations SCC 11, 12, and 13 in San Benito County, outside of the Plan area. These Waters of the US and wetland features would also be considered Waters of the State. The study area for the wetland delineation included the proposed vault improvement area, which would include the installation/construction of a gravel collar, as well as the footprint for any access improvements such as gravel path construction at SCC8, or gates, or implementation of new travel routes through wetlands. Some areas will be subject to fill placement to install gravel collars (PC 2 and SCC 11, 21, 22, 43, 52, and 57), to install a new gravel path crossing for site access (SCC 8), and to install a driveway (SCC 11 and 12). These impacts to wetlands or other Waters of the US/State would be considered permanent. The gravel collars, path constructed at SCC 8, or asphalt driveways constructed at SCC 11, 12, 13, and 54 will preclude the re-establishment of wetland vegetation, and in the case of the unnamed ephemeral drainages at SCC 8 (new path construction), substrate of the bed and banks would be permanently altered through placement of the pathway materials. Impacts on waters/wetland from gate installation (SCC 13), a new sign (SCC 12), a new gravel path (SCC 8), and implementation of new driveways (SCC 11, 12, and new unimproved routes at SCC13, 21, 22, and 43) are considered temporary because these activities would not place fill in or cause permanent loss of wetlands or aquatic features. The extent of impacts on waters/wetlands at each site is described below in Table 3.4-3.

The above described impacts represent a small surface area of wetland loss or impacts to streams at each location, both in terms of actual acreage and unimpacted wetlands and stream areas surrounding each vault location. Total impacts to wetlands or Waters of the US and State would include approximately 0.55 acre of permanent impacts and 0.51 acre of temporary impacts. Of these, 0.065 acre of permanent impact and <0.001 acre of temporary impact would occur within Santa Clara County in the VHP Plan Area. Compliance with VHP conditions and AMMs and payment of VHP stream and wetland fees would mitigate these impacts to a less than significant level. In addition, Valley Water

will comply with requirements in the USACE Regional General Permit which was issued for the VHP[2] and the associated Section 401 water quality certification.

In San Benito County, outside the VHP Plan area, Project activities would result in approximately 0.48 acre of permanent impact and 0.51 acre of temporary impact. Valley Water will comply with requirements in the Clean Water Act Nationwide Permit 12 (Utility Line Activities) and the associated Section 401 water quality certification. Temporary impacts in San Benito County will be related to minor, infrequent access on unimproved roads and is expected to be limited to minor crushing of wetland plants. Temporary and permanent impacts within San Benito County, outside the VHP area, will be mitigated through implementation of Mitigation Measure BIO-3 which requires compensatory mitigation. The Project impacts for activities occurring in San Benito County would be reduced to a less-than-significant level.

Category 16 of the USACE Regional General Permit (contained in VHP) for Santa Clara County allows utility repair, removal, replacement, and installation activities required for the construction, maintenance, repair, removal of utility lines and associated facilities in Waters of the US. This category includes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all Waters of the US and wetlands, provided there is no change in preconstruction contours. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication.

TABLE 3.4-3
Impacts to Waters of the US/State at Each Impact Site by Activity and Habitat

Pipeline	Vault No.	Activities Impacting Waters of the US/State	Impacted Habitat Type	Area of Impact Acreage (ac)
Santa Clara County				
Pacheco Conduit (PC)	2	Installation/construction of new gravel collar	Seasonal Wetland	< 0.001 Perm.
Santa Clara Conduit (SCC)	8	Installation/construction of an improved gravel path to the vault, stream crossing and Implementation of this new route	Ephemeral Stream	< 0.001 Perm. (12 linear feet)

[2] The US Army Corps of Engineers (USACE), San Francisco District (District), has issued Regional General Permit 20 for implementation of covered activities in the VHP (an Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) (US Fish and Wildlife Service Native Endangered and Threatened Species Habitat Conservation Plan; Endangered and Threatened Wildlife; Migratory Birds, permit number TE94345A-O and California Natural Community Conservation Planning Act, permit number 2835-2012-002-03) in Waters of the US in Santa Clara County, California. The CDFW is also a partner in VHP under the NCCP.

Pipeline	Vault No.	Activities Impacting Waters of the US/State	Impacted Habitat Type	Area of Impact Acreage (ac)
	21	Installation/construction of new gravel collar, implementation of new unimproved route	Seasonal Wetland	0.015 Perm.
	22	Installation/construction of gates (2) and new gravel collar, and implementation of a new unimproved route	Perennial Marsh	<0.001 Perm.
	43	Implementation of new unimproved route, installation/construction of new gravel collar and a new gate.	Ephemeral Stream	<0.001 Temp. (12 linear feet)
	52	Installation/construction of new gravel collar	Seasonal Wetland	0.037 Perm.
	54	Installation/construction of new driveway and 2 new gates, and implementation of new route	Ephemeral Stream	0.004 Perm. (33 linear feet)
	57	Installation/construction of new gravel collar	Seasonal Wetland in bed of Ephemeral Stream, Non-wetland portion of Ephemeral Stream	SW: <0.001 Perm. (12 linear feet) ES: 0.002 Perm. (39 linear feet)
SANTA CLARA COUNTY TOTALS		Permanent Aquatic Impacts: 0.065 ac	Temporary Aquatic Impact: 0.005 ac	County Aquatic Impact Total: 0.066 ac
San Benito County				
Santa Clara Conduit (SCC)	11	Implementation of new unimproved route installation/construction of new gate and new driveway	Seasonal Wetland	0.018 Perm.
	12	Implementation of new unimproved route Installation /construction of new driveway, and new gravel collar	Perennial Marsh, Ephemeral Stream	PM: 0.465 ES: 0.03 (191 linear feet)
	13	Implementation of new unimproved route	Perennial Marsh, Seasonal Wetland	0.509 Temp.
SAN BENITO COUNTY TOTALS		Permanent Aquatic Impacts: 0.483 ac	Temporary Aquatic Impacts: 0.509 ac	County Aquatic Impact Total: 0.992 ac
TOTALS	**Permanent Aquatic Impacts: 0.548 ac**		**Temporary Aquatic Impacts: 0.510 ac**	

Source: HT Harvey 2019.

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? (*Less than Significant Impact)*

In both the Santa Clara and San Benito County portions of the Project area, the Project does not involve the construction of any features that will restrict fish or wildlife movement. All movement by fish and wildlife that currently occurs through and around the Project site will continue unimpeded following Project implementation. For example, in all areas that are considered permanently impacted due to establishment and use of new access routes or installation of gravel collars around vaults, wildlife movement will be able to continue over/through the permanently impacted areas much as it currently does. Further, the Project will not result in impacts to any important breeding areas or other wildlife nursery sites, and implementation of BMPs will reduce impacts on wildlife breeding efforts (e.g., nesting birds) through preconstruction surveys and buffers around occupied nests. Therefore, the Project will have a less than significant impact on wildlife movement, corridors, and wildlife nursery sites. Furthermore, Valley Water's VHP impact fees for work within Santa Clara County will contribute to the VHP's conservation program, which will aid in conservation and enhancement of wildlife corridors and native wildlife nursery sites.

E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (*No Impact*)

Valley Water would comply with applicable local policies and ordinances protecting biological resources. No tree removals are anticipated as part of the proposed project. No conflicts with local policies or ordinances are therefore anticipated for this Project.

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? (*No Impact*)

All the Project vaults within Santa Clara County occur within the area subject to compliance with the Santa Clara Valley Habitat Plan. Valley Water will comply with all applicable VHP AMMs and conditions listed in Section 2, and Valley Water would pay applicable VHP impact fees. Therefore, this Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.5 CULTURAL RESOURCES

3.5.1 Environmental Setting

A records search was conducted at the request of Valley Water in 2013 by the Sonoma State University Northwest Information Center for the proposed project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural

resources records and reports, historic period maps, and literature for San Benito and Santa Clara Counties. The use of the term cultural resources includes archaeological resources and historical buildings and/or structures. Review of this information indicates that 28 cultural resources studies combine to cover nearly all of the proposed project sites (See Appendix C).

At the time of Euro American contact, the Native Americans that lived throughout the area were speakers of a Costanoan/Ohlone language, part of the Utian language family (Levy, Richard. 1978). Using Milliken's study of various mission records, the proposed project area crosses numerous tribal areas, generally outlined as follows from north to south (Milliken, Randall.1995). The Matalan were based in the Santa Clara Valley corridor, south to the present-day Morgan Hill area; the Pitac held the San Martin area; the Unijaima were located in the Gilroy area; the Chipuctac tentatively located in the hills north of the Gilroy area; and the Ausaima were located on the east side of the San Felipe sink.

The Muwekma are the aboriginal inhabitants of the southern, eastern and western regions of the San Francisco Bay Area, including all of what is now San Francisco, San Mateo, Alameda, and Contra Costa Counties, much of what is now Santa Clara County, and parts of Santa Cruz, San Joaquin, Napa, and Solano Counties. The Muwekma Indians formed from the following aboriginal tribes: Passasimia/Yatikumne, Tamcan, Josemite, Lacquismne, Julpun, Napian/Karkin, Jalquin/Yrgin, Alson/Tamien, Suenen, Chupcan, Choquoime, and Nototomne.

Spanish missionaries forced the ancestors of the Muwekma Tribe into the Missions Dolores, San Jose, and Santa Clara in the late 18th and early 19th centuries. In the 1830's the Mexican Government secularized the missions and distributed their lands. Many Muwekma left the missions and resettled in other parts of the Bay Area, including a number of rancherias in Alameda County, including the Alisal Rancheria near Pleasanton, the Del Mocho Rancheria in Livermore, the El Molino Rancheria in Niles, as well as on rancherias in Sunol and San Leandro/San Lorenzo until the early part of the 20th century. The Muwekma people continue to reside in their aboriginal territory in the San Francisco Bay Area.

3.5.1.1 Project Site

Cultural Resources

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Santa Clara and San Benito Counties have been found near sources of fresh water (including perennial and intermittent springs and streams), near the interface between the valleys and adjacent uplands, along ridgelines and related spurs, and near ecotones or other productive resource environments.

The proposed project area is primarily located along the margin of Santa Clara Valley, on alluvial deposits of Pleistocene and Holocene origin. The southern portion of the alignment crosses a principal travel corridor (Pacheco Pass) from the southern

Santa Clara Valley to the Central Valley. In addition, the proposed project area crosses numerous perennial and intermittent streams and various ecotones.

Paleontological Resources

San Francisco Bay Area has a rich fossil history, especially from the Pleistocene age. Mammals such as elephants, camels, rhinos, sloths, and saber-toothed cats roamed through the region tens of thousands of years ago. Mammoths migrated to North America about 2 million years ago, lived in the Bay Area during the Pleistocene and went extinct around the world about 11,000 years ago; there are likely other fossils within Santa Clara/San Benito Counties.

3.5.2 Cultural Resources Impacts

3.5.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
C. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
D. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

3.5.2.2 Discussion

A. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? (*Less than Significant*)

B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? (*Less than Significant*)

National Historic Preservation Act (NHPA) Section 106 requires federal agencies to consider the effects of projects they carry out, approve, or fund on historical properties. To complete the Section 106 review, a federal agency generally must gather information to decide which properties in the area that may be affected by the Project are listed, or are eligible for listing, in the National Register of Historic

Places (referred to as historic properties), determine how those historic properties might be affected, explore measures to avoid or reduce the adverse effect, and reach agreement with the State Historic Preservation Officer on such measures. Through its Section 106 review process, the Reclamation concluded in September 6, 2013 that the proposed project would not result in significant effects on properties listed, or eligible for listing, on the National Register of Historic Places (Tracking Number: 13-SCAO-161). See Appendix C.

In March 2013, the Northwest Information Center (NWIC) at Sonoma State University conducted a records search for the proposed project by reviewing maps, reports and literature for San Benito and Santa Clara counties. The State Office of Historic Preservation Historic Property Directory (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places) includes an address in the vicinity of the proposed project, the Ousley-Hoey House and Farm, 2485 SR 152 (FHWA 931021A). This site is an individual property determined eligible for the National Register and is listed in the California Register that is included in the Historic Properties Directory. However, this site is located west of US 101, on SR 152 over 4 miles from the Project work sites, and thus is not expected to be impacted by proposed project activities. The Caltrans Bridge inventory lists one bridge located in the vicinity of the proposed project, but this bridge is determined to be ineligible for the National Register. The NWIC base maps also show six recorded buildings or structures (P-35-000182, P-43-000332, P-43-001428, P-43-001811, P-43-001839, and P-43-002621); none of these have been listed or determined eligible for the National or California Register. No other historical sites were identified within the Project area. Based on the research results, it is determined that the proposed project would not result in significant impacts on known historical resources.

With respect to archaeological resources, the records search in 2013 identifies six archaeological resources, all of which are Native American archaeological resources typical of short-term activity sites and long-term habitation sites. None of these are determined to be an historical resource as defined by section 15064.5(a) or unique archeological resource as defined in Section 21083.2 of the Public Resources Code. Thus, the proposed project's impact on these known archeological resources would not be considered significant.

Project construction activities would occur in areas consisting mostly of fill material or high disturbance from previous conduit and roadway construction, and thus the likelihood of encountering unrecorded archeological resources is low. However, in the unlikely event that unknown historical resources or unique archeological artifacts are encountered during construction, implementation of BMP CU-1 would avoid or minimize such impact. BMP CU-1 requires that if historical or archeological resources are encountered during construction, work in the affected areas would be restricted or stopped until protocols are met; such protocols include establishing a "no work" zone, consulting archeologist visiting the site to identify and evaluate the resource before any work can proceed, and if the resource is determined to be significant, the archeologist would develop a

plan to avoid or minimize impact on the resource. With implementation of BMP CU-1, impacts to unknown historical resources or unique archaeological artifacts would be less than significant.

C. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (*Less than Significant Impact with Mitigation*)

The proposed project area is primarily located along the margin of Santa Clara Valley, on alluvial deposits of Pleistocene and Holocene origin. No unique paleontological resources or unique geologic features have been identified at the Project site. Further, no major excavation activities are proposed as part of the Project except for pathway grading activities at SCC 8 (maximum depth from 6-inches to 2 feet in depth). Only minor ground disturbance would occur during gravel collar, gate, fencing, or sign installation activities.

Due to the limited amount of grading and ground disturbance in previously disturbed soils, it is unlikely that the proposed project would encounter sensitive paleontological resources at the Project sites. If a unique paleontological resource is encountered during construction, exposure of the resource could lead to its destruction, which would constitute a significant impact. Valley Water would implement Mitigation Measure CU-1 to address this impact. By implementing Mitigation Measure CU-1, these potential impacts would be reduced to a less than significant level by immediately halting work should a discovery be made during construction and enacting appropriate avoidance, preservation, or data recovery actions.

Mitigation Measure CU-1: Unanticipated Paleontology Discovery
If fossils are encountered during construction, work shall be halted immediately within 100 feet of the discovery. Valley Water shall then retain a qualified paleontologist to determine the significance of the discovery. Based on the significance of the discovery, the qualified paleontologist shall present options to Valley Water for protecting the resources. Appropriate action may include avoidance, preservation in place, excavation, documentation, and/or data recovery, and shall always include preparation of a written report documenting the find and describing steps taken to evaluate and protect significant resources.

D. Disturb any human remains, including those interred outside of dedicated cemeteries? *(Less than Significant)*

Based on Valley Water's record search at Northwest Information Center of Sonoma State University and Reclamation's archeological assessment (Appendix C), there are no known human burial locations within the Project area. Although no known burial locations were identified, during Project construction there is a potential of discovering unrecorded human remains, including those interred outside of dedicated cemeteries, in the proposed project area. However, Valley Water would implement its BMP CU-1 which requires that in the event burial finds are discovered during construction, Valley Water would notify the County coroner, and no further excavation and disturbance would be allowed within 100 feet of the discovery unless authorized by the County coroner,

California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs. With implementation of BMP CU-1, impacts to human remains would be less than significant.

3.6 GEOLOGY AND SOILS

3.6.1 Environmental Setting

The Project sites are in the San Francisco Bay Area, an active seismic region. The major earthquake fault and fault rupture zones in the Project area are the San Andreas, Hayward and Calaveras faults (see Figure 3.6-1). Figure 3.3-1 shows serpentine soils and ultramafic rock locations in the Project area. Figure 3.6-2 shows Landslide Hazards in the Project Area, and Figure 3.6-3 shows Liquefaction Potential in the Project area.

The Project site in Santa Clara County and San Benito Counties lies at the southern end of San Francisco Bay in the central Coast Range of California. The County has four distinct physiographic regions or landscape units: (1) Santa Cruz Mountain uplands, (2) Diablo Range uplands, (3) foothills, and (4) bay plains and alluvial valleys. These units reflect the relations of landscape evolution to dominant geomorphic processes, such as the erosion of uplifted mountainous areas and broad, flat plains of recent sediment deposition along San Francisco Bay. GIS mapping indicates a potential for ultramafic rock near some vaults on the SCC.

Santa Clara County is transected by the San Andreas and Calaveras Fault Zones, as well as other potentially active faults. The San Andreas Fault Zone is located near the west edge of the county in the Santa Cruz Mountains. The Calaveras Fault Zone bisects the county along the northwest-southeast trend through the Diablo Range. Faults in the region have been the source of several large historic earthquakes that have subjected the county to strong shaking and are considered sources of future large earthquakes. Along the San Andreas Fault, a magnitude 8+ earthquake is possible with associated horizontal displacement of a few tens of feet. An earthquake of magnitude 7+ is possible along the Calaveras Fault with lateral displacements of several feet (Santa Clara County 1994). The SCC and PC cross Fault Rupture Hazard Zones. These segments of faults may be capable of generating a maximum strength earthquake of magnitude 6.75 (Valley Water 2002).

Landslide Hazard Zones and Compressible Soil Hazard Zones have been identified within the Project area. Steep slopes, active earthquake faults and areas of geologic instability are prevalent (General Plan 1994). The SCC transects a Landslide Hazard Zone. The section of pipeline within San Benito County is in the valley and does not have a high potential for landslide hazard.

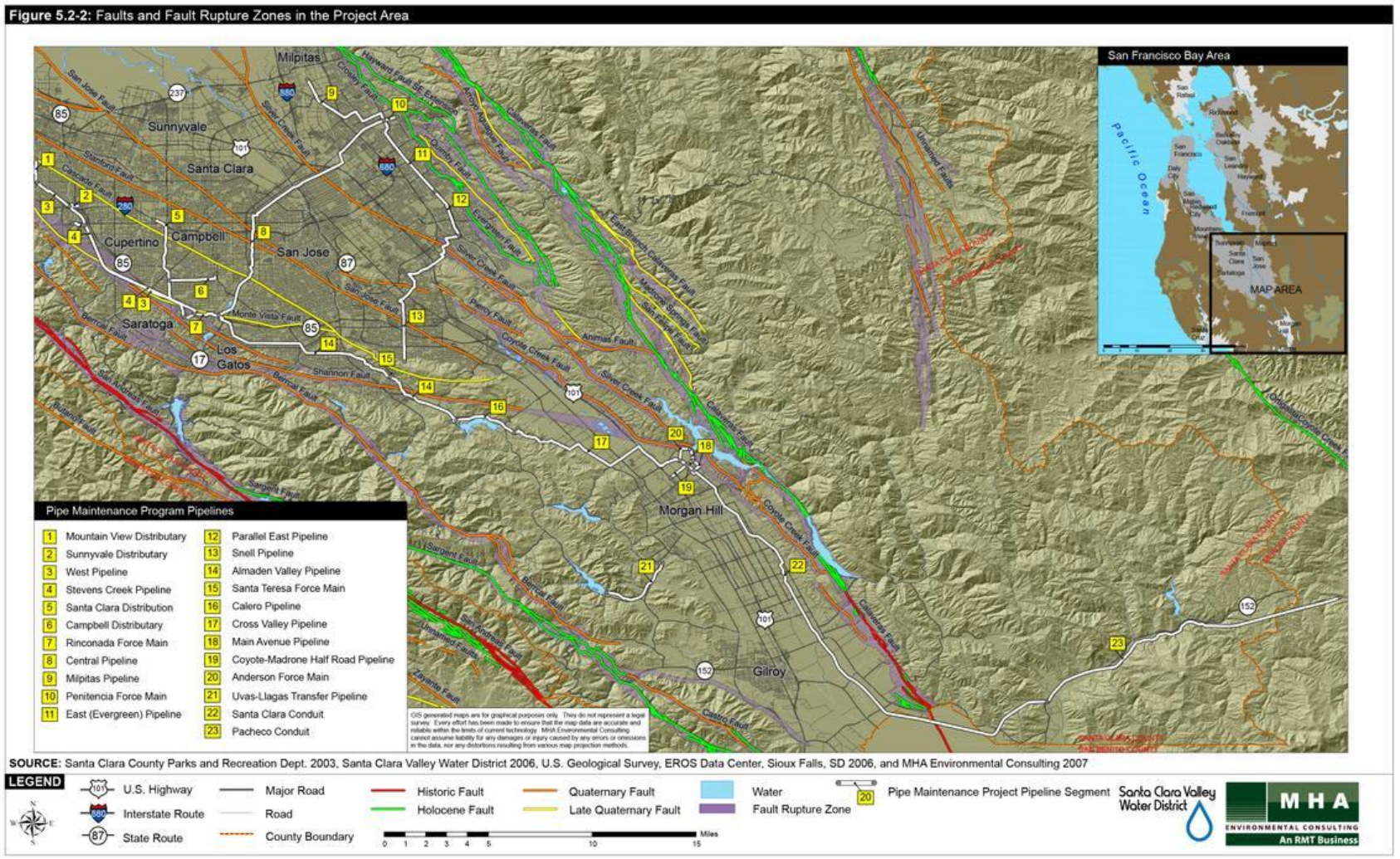

FIGURE 3.6-1
Faults and Fault Ruptures Zones in the Project Area

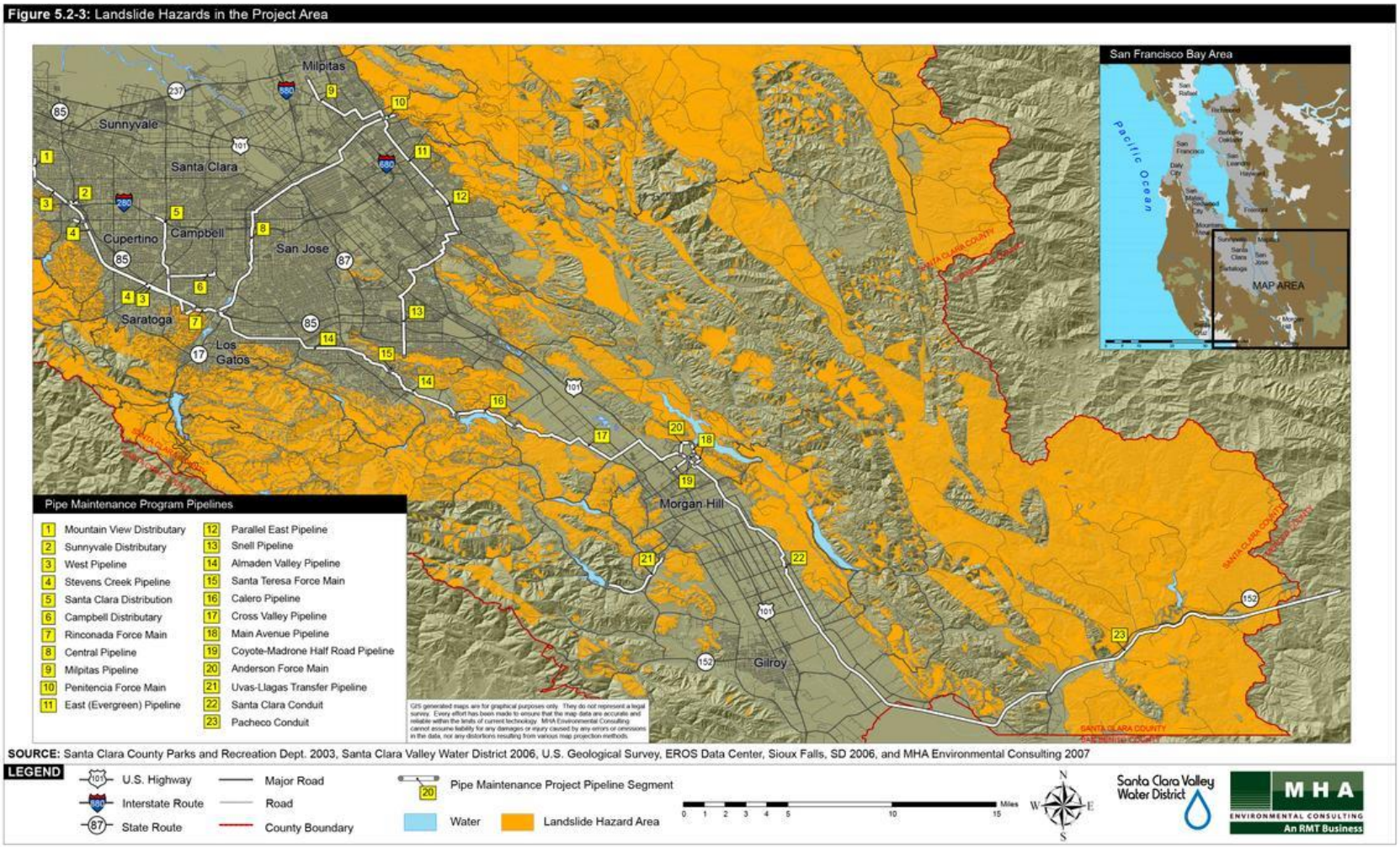

FIGURE 3.6-2
Landslide Hazards in the Project Area

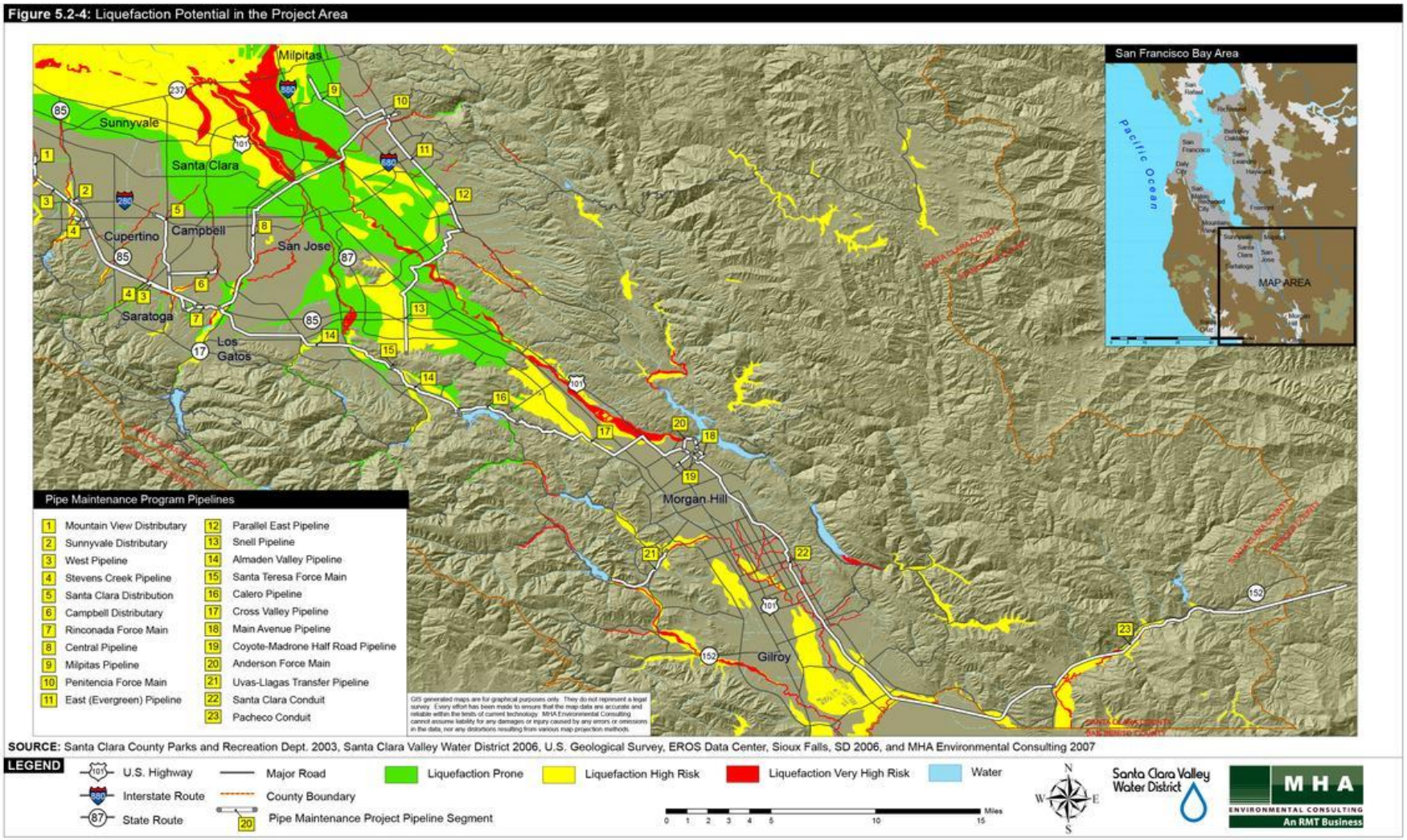

FIGURE 3.6-3
Liquefaction Potential in the Project Area

3.6.2 Geology and Soils Impacts

3.6.2.1 Checklist

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

3.6.1.2 Discussion

A. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. *(No Impact)*

The Project sites would be at existing structures already in place near known faults such as the Calaveras Fault. There may be some potential for rupture effects to the pipelines; however, these are previously existing effects and not a result of the proposed project. The limited small-scale construction activities would not exacerbate existing seismic hazards. Therefore, there would be no impact.

2. Strong seismic ground-shaking? *(No Impact)*

The Project sites may experience strong ground shaking. The Project sites would be predominantly unoccupied during operation, and staff would be on site for short periods of time for maintenance; therefore, in the event of ground shaking, the risk to public safety would be slight. The limited small-scale construction activities would not exacerbate existing seismic hazards. Therefore, there would be no impact.

3. Seismic-related ground failure, including liquefaction? (*No Impact*)

The Project sites would be at existing structures already in place near known faults. The limited small-scale construction activities would not exacerbate existing seismic ground failure hazards including liquefaction. Therefore, there would be no impact.

4. Landslides? (*No Impact*)

While some of the Project areas and various areas along the pipelines are prone to landslide potential (see Figure 3.6-3) the limited small-scale construction activities would not exacerbate existing landslide hazards. Therefore, Valley Water has determined there would be no impact from the Project.

B. Result in substantial soil erosion or the loss of topsoil? *(Less Than Significant)*

Vegetation clearing and grading activities would be limited at the Project sites, and only a minor amount of topsoil loss could occur during gravel collar and path construction activities. The proposed project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) construction

general permit, which requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) to protect water quality and reduce erosion. The SWPPP is a site-specific, written document that: (1) Identifies potential sources of stormwater pollution at the construction site; (2) Describes practices to reduce pollutants in stormwater discharges from the construction site; and (3) Identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit. In addition, Valley Water would implement soil erosion and stormwater BMPs including BMP WQ-9 (Use Seeding for Erosion Control, Weed Suppression, and Site Improvement) and BMP WQ-16 (Prevention of Stormwater Pollution) during construction to further reduce impact associated with erosion. The Project impacts associated with soil erosion or loss of topsoil would therefore be less than significant.

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? (*Less Than Significant*)

The proposed project would include grading (for construction of the path to access SCC 8) and ground disturbance at vault locations, where new gravel collar would be constructed, and for driveway construction. No grading is anticipated for fence gate installation. Grading and ground disturbance created by the proposed project would be relatively shallow at a depth of less than one foot in depth. The proposed project would not include features that could affect on-site or off-site soil's potential for landslide, lateral spreading, subsidence, liquefaction, or collapse. Thus, no significant soil instability is expected to result from proposed project. This impact would therefore be less than significant.

D. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? *(Less Than Significant)*

Expansive soils shrink and swell with moisture and can damage foundations and other structures. Because the Project would not include habitable structures, any significant risk to public safety due to structural failure from expansive soils would be minimized. This impact therefore is less than significant.

E. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? *(No Impact)*

The proposed project would not involve use of septic tanks or alternative wastewater disposal systems. There would be no impact.

3.7 GREENHOUSE GAS EMISSIONS

3.7.1 Environmental Setting

Greenhouse gas emissions (GHGs) are of concern because they cause global climate change. Global climate change results in several effects. Effects include increased temperatures; changes in snow and rainfall patterns; and an increase in droughts, tropical storms, and heavy rain events. These effects have positive and negative ramifications. Warmer temperatures may reduce demand for heating and may result in favorable conditions for certain crops.

Conversely, increased temperatures can be disadvantageous for vulnerable populations and can damage certain crops. Precipitation can increase water supplies, but concentrated precipitation can cause death and infrastructure damage.

Pursuant to AB 32, the CARB prepared and adopted the Climate Change Scoping Plan, which was updated in 2013 and 2017. The Climate Change Scoping Plan and 2013 update outline the State's strategy to achieve the year 2020 GHG emissions limits specified in AB 32 (1990 levels by 2020). The 2017 Scoping Plan Update is guided by the 2030 GHG emissions limits specified in AB 32 (40% below 1990 levels by 2030). The Climate Change Scoping Plan and updates include a comprehensive set of actions designed to reduce overall GHG emissions in California. The principal GHGs contributing to global climate change are CO_2, methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. Fossil fuel combustion is the main source of CO_2 emissions. The EPA, CARB, BAAQMD and MBUAPCD are the regulating agencies for GHGs.

GHG emissions are typically measured in terms of tons of CO_2 equivalents (CO_2e). The BAAQMD has not developed GHG significance thresholds for construction related GHG emissions. The BAAQMD has identified an annual threshold of 1,100 metric tons of CO_2e for operations related GHG emissions as a threshold consistent with meeting AB 32 GHG reduction goals. Although the BAAQMD does not set a quantitative threshold for construction emissions, it recommends that lead agencies quantify these emissions and determine their significance in relation to meeting AB 32 GHG reduction goals. For this analysis, AB 32 GHG reduction goals are considered to be met if a Project construction generates less than the operations significance threshold, 1,100 MMT CO_2 annually.

An MBARD Advisory Committee as of February 2014 recommended the GHG significance threshold of 10,000 metric tons CO_2e per year be established within its CEQA Guidelines for operational GHG emissions; because MBARD has no construction emissions threshold, the operational threshold is appropriate to use for this analysis.

3.7.2 Greenhouse Gas Emissions Impacts

3.7.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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 an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

3.7.2.2 Discussion

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? *(Less Than Significant)*

Construction

Construction equipment would generate minor amounts of greenhouse gases, such as CH_4, CO_2, and oxides of nitrogen emissions estimates generated by the CalEEMod model as part of the Air Quality analysis indicate GHG emissions from construction to be 76 metric tons per year of eCO_2 (66 metric tons in Santa Clara County and 10 tons in San Benito County, see Table 3.7-1 below as calculated by Environmental Science Associates (ESA) from the CalEEMod Emissions Model and in Appendix B (detail). The emissions from construction of the Project would be far below the significance threshold of 10,000 metric tons CO_2e/year (MBARD[3]) or 1,100 metric tons CO_2e/year (BAAQMD) and determined to be less than significant.

TABLE 3.7-1
Greenhouse Gas Emissions

County	Air District	CO_2	CH_4	NO_2	Total as eCO2
Santa Clara	BAAQMD	67.03 MT/yr.	0.02 MT/yr.	<0.001 MT/yr.	**65.7 MT/yr.**
San Benito	MBARD	9.97 MT/yr.	0.003 MT/yr.	10.05 MT/yr.	**10.05 MT/yr.**

Source: CalEEMod model run by ESA, Inc.

[3] MBARD recommends that lead agencies use the Bay Area Air Quality Management District (BAAQMD) GHG threshold of 1,100 metric tons CO2e/year (BAAQMD, 2017)

Operations and Maintenance

Basic operational activities would remain essentially unchanged as described in the Project Description and continue to require a relatively small maintenance fleet (less than 10 vehicles). No additional trips or vehicle traffic would result from the proposed changes in operational methods. The contribution of pollutants from ATVs relative to the contribution from current maintenance fleet vehicles would be indiscernible. Therefore, operational changes included in the proposed project would not generate greenhouse gas emissions that may result in a significant impact on the environment. The impact from operational changes is considered less than significant.

B. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? *(No Impact)*

The proposed project would be consistent with the BAAQMD's 2017 Clean Air Plan and the MBARD's 2008 AQMP and Triennial Plan Revision 2009 – 2011 because the total construction GHG emissions estimated for the proposed project would be below the BAAQMD and MBUAPCD significance thresholds (see Table 3.7-1 above). There would also be no conflict with the 2017 Scoping Plan Update because the small amount of greenhouse gases emission as a result of the Project would not impair the state's ability to achieve the Scoping Plan's goal to achieve its emission reduction target. Therefore, no impacts related to conflicts with applicable plans, policies, or regulations would occur.

3.8 HAZARDS AND HAZARDOUS MATERIALS

3.8.1 Environmental Setting

The proposed project is located at sites that are owned by Reclamation. Surrounding land uses include urban residential developments, rural residential, ranchlands, agricultural and open space. The State Water Resources Control Boards GeoTracker database was reviewed and does not list any active Federal Superfund, state response, corrective action, or cleanup sites within 0.25 mile of either the SCC or PC.

The State of California Department of Toxic Substances EnviroStore database shows four voluntary cleanups in operation including one corrective action site, one school cleanup site in operation, and one school cleanup site not in operation within the general Project vicinity. None of the sites would conflict with the proposed work locations.

There are one public elementary (Nordstrom Elementary), one k-12 school (Jackson Academy of Math and Music), and two public high schools (Live Oak High and Blue Ridge High) within one-mile of the Project.

There is one County of Santa Clara public use airport, San Martin Airport (aka South County Airport), located on the west side of US 101 about 1 mile from the nearest Project site. This County airport has an adopted Comprehensive Land Use Plan (CLUP). This CLUP is intended to safeguard the general welfare of the inhabitants within the

vicinity of South County Airport and the aircraft occupants. This CLUP is also intended to ensure that surrounding new land uses do not affect the Airport's continued operation.

In San Benito County, there are three airports in proximity to the Project area: (1) Frazier Lake Airpark, a public use airport located within two miles of the nearest Project site; (2) Hollister Municipal Airport, a public use airport located within 9 miles of the nearest Project site; and (3) Christensen Ranch Airport, a private airport located in Hollister area 22 miles from the nearest Project site.

3.8.2 Hazards and Hazardous Materials Impacts

3.8.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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, or disposal of hazardous materials?	☐	☐	☒	☐
B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☐	☒
D. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment?	☐	☐	☐	☒
E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the Project corridor?	☐	☐	☒	☐
F. For a Project located within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the Project corridor?	☐	☐	☐	☒
G. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
H. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

3.8.2.2 Discussion

A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? *(Less Than Significant)*

The construction phase of the Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, and other similar materials. The proposed project would not change the types or amounts of hazardous materials used during operations and maintenance activities. All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the construction, operation, and maintenance of the Project would comply with all federal, state, and local laws regulating the management and use of hazardous materials. In addition, Valley Water would implement Hazardous Materials BMPs HM-7, HM-9, and HM-10 (described in Section 2) to minimize impacts associated with transport, use or disposal of hazardous materials on the public and the environment. BMP HM-7 restricts vehicle and equipment cleaning to appropriate locations. BMP HM-9 includes measures to ensure that hazardous materials are properly handled and water resources are protected by all reasonable means. BMP HM-10 includes measures to prevent accidental release of chemicals, fuels, lubricants, and non-storm drainage water. In addition, Valley Water would comply with any required BMPs during construction as part of the SWPPP.

Implementation of BMPs HM-7, HM-9, and HM-10 as applicable, along with compliance with applicable laws and regulations would minimize the hazard risk to the public and environment.

Based on the above, impacts from the transport, use, and disposal of hazardous materials during Project construction, operation, and maintenance would be less than significant.

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? (*Less Than Significant*)

As discussed above, the proposed project would require use of some hazardous materials, such as diesel fuel. The potential release of hazardous materials to the environment would be minimized through the implementation of BMPs HM-7 (Vehicle and Equipment Cleaning), HM-9 (Hazardous Materials Management, and HM-10 (spill prevention). Compliance with VHP AMM No. 7 also reduces risks of accidental release of chemicals or spills. The proposed project would not 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. Therefore, this impact would be less than significant.

C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school? (*No Impact*)

There are no schools located within 0.25 mile from the Project site. Thus, there would be no impact relating to emission of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

D. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment? (*No Impact*)

There are no hazardous material sites identified within 0.25 mile of the Project sites. No impact would occur.

E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the Project corridor? (*Less Than Significant*)

There is one Santa Clara County public airport (San Martin or South County Airport) located one mile west of the nearest proposed project site and one San Benito County public use airport (Frazier Lake Airpark) located within 2 miles of the nearest proposed project site. San Martin Airport has adopted a CLUP with built-in safety factors. The proposed project activities would not conflict with guidelines and policies of the San Martin Airport CLUP. Given that proposed project activities would be small scale and temporary, they would not interfere with the Frazier Lake Airpark operations. Therefore, the safety hazard for people residing or working in the Project corridor would be less than significant.

F. For a Project located within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the Project corridor? (*No Impact*)

There are no private airstrips located in Santa Clara County in proximity to the Project Site. In San Benito County, there is one private airstrip in proximity to the Project area: Christensen Ranch Airport, a private airport located in Hollister area 22 miles from the nearest Project sites. Due to the relatively long distance between the Project sites and this private airstrip, there would be no safety hazard impacts.

G. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (*No Impact*)

Proposed project activities are located within Santa Clara and San Benito Counties. The County of Santa Clara Emergency Operations Plan (2017) and the San Benito County Operational Area Emergency Operations Plan (2015) provide the needed foundation for the management of emergencies and disasters and addresses the integration and coordination with other governmental levels when

required. There are no known designated emergency evacuation routes within the Project areas.

Valley Water would coordinate with the applicable counties and/or cities to ensure that access for emergency vehicles is maintained at all times during construction activities. Based on the above analysis, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. impede emergency access to the Project area and/or surrounding area. This impact is therefore less than significant.

H. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (*Less Than Significant*)

The California Department of Forestry maps of designated Very High Fire Hazard Severity Zones places the Project site in a Local Responsibility Area (California Department of Forestry and Fire 2007; 2008). The Project sites are surrounded by grassy hillsides, which could present the potential for wildfires. The Project sites are within the confines of San Felipe System pipe corridor boundaries. BMP HM-12, which incorporates fire prevention measures, would be implemented to minimize potential of fire hazards. Risk of loss, injury, or death involving wildland fires would be less than significant.

3.9 HYDROLOGY AND WATER QUALITY

3.9.1 Environmental Setting

The major watersheds for the SCC and PC are Llagas, Pacheco, and Pajaro Watersheds (Figure 3.9-1). Figure 3.9-2 shows the SCC and PC with creeks, streams and water bodies in the region. The Project area is generally rural and generally drains southward to the Pajaro River, which discharges to Monterey Bay. Channel slopes are steep in the headwaters but lessen through the foothills and are relatively flat in downstream reaches where most of the residential and urban development is located. In rural environments, particularly those with low relief, many creeks have been rerouted in an effort to drain and accommodate adjacent farmland. In urban areas, channelization and numerous culverts are common features that were installed to reduce flooding in adjacent uplands.

Llagas Creek flows east of Morgan Hill through the Paradise Valley, before joining the Pajaro River southeast of Gilroy.

With headwaters in the Diablo Range, Pacheco Creek drains an area of about 169 square miles. Land uses in the watershed transition from open space and rangeland in the headwaters to rural residential and agriculture in the foothills. There are industrial and suburban land uses through Hollister and agricultural/rural residential uses in the area surrounding its confluence with Tequisquita Slough. Formerly seasonal, the lower reach of Pacheco Creek can flow all summer, possibly as a result of restored

groundwater levels. The Pajaro River watershed drains southwest to the Monterey Bay and covers approximately 1,300 square miles of which about 40 percent is in Santa Clara County. This predominantly (76 percent) agricultural watershed has headwaters in the Santa Cruz Mountains, the Diablo Range, and the Gabilan Range.

Flows in the Pajaro River and its tributaries vary from year to year in response to rainfall and follow the same seasonal pattern with high flows recorded in January and February following major storm events and low flows recorded during the dry season. Flows in the Pajaro and some of its tributaries are partially regulated by reservoir operations, two of which (Uvas Reservoir and Chesbro Reservoir) are located in Santa Clara County. San Felipe Lake (sometimes known as Soap Lake), a natural sag pond formed by the Calaveras fault, is the source of the Pajaro River via Miller's Canal in San Benito County. The lake is filled by inflows from Pacheco Creek and Tequisquita Slough.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) locates portions of the San Felipe Water Conveyance System (the Project) within an area of zone A flood hazard (see Figure 3.9-3).

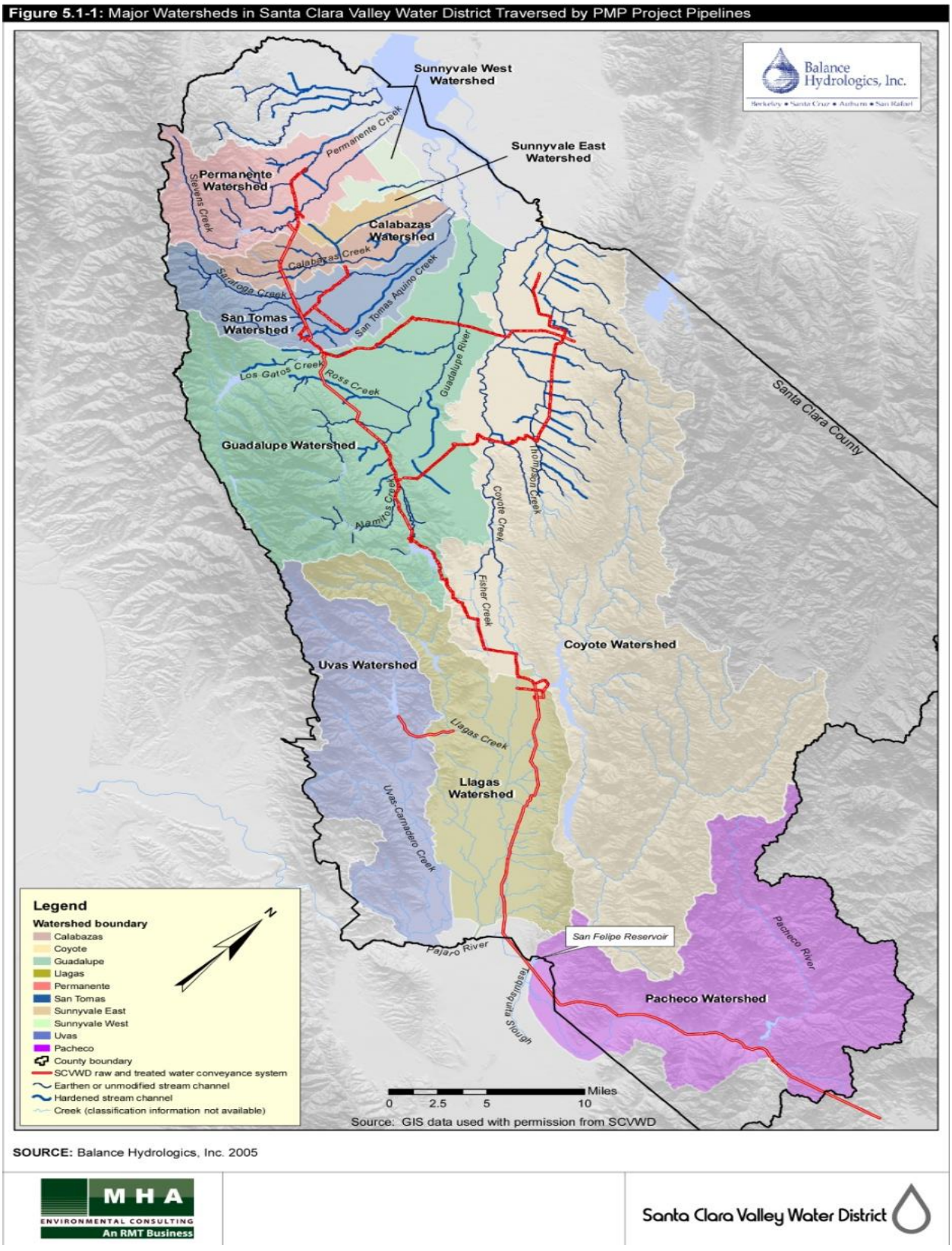

FIGURE 3.9-1
Major Watersheds

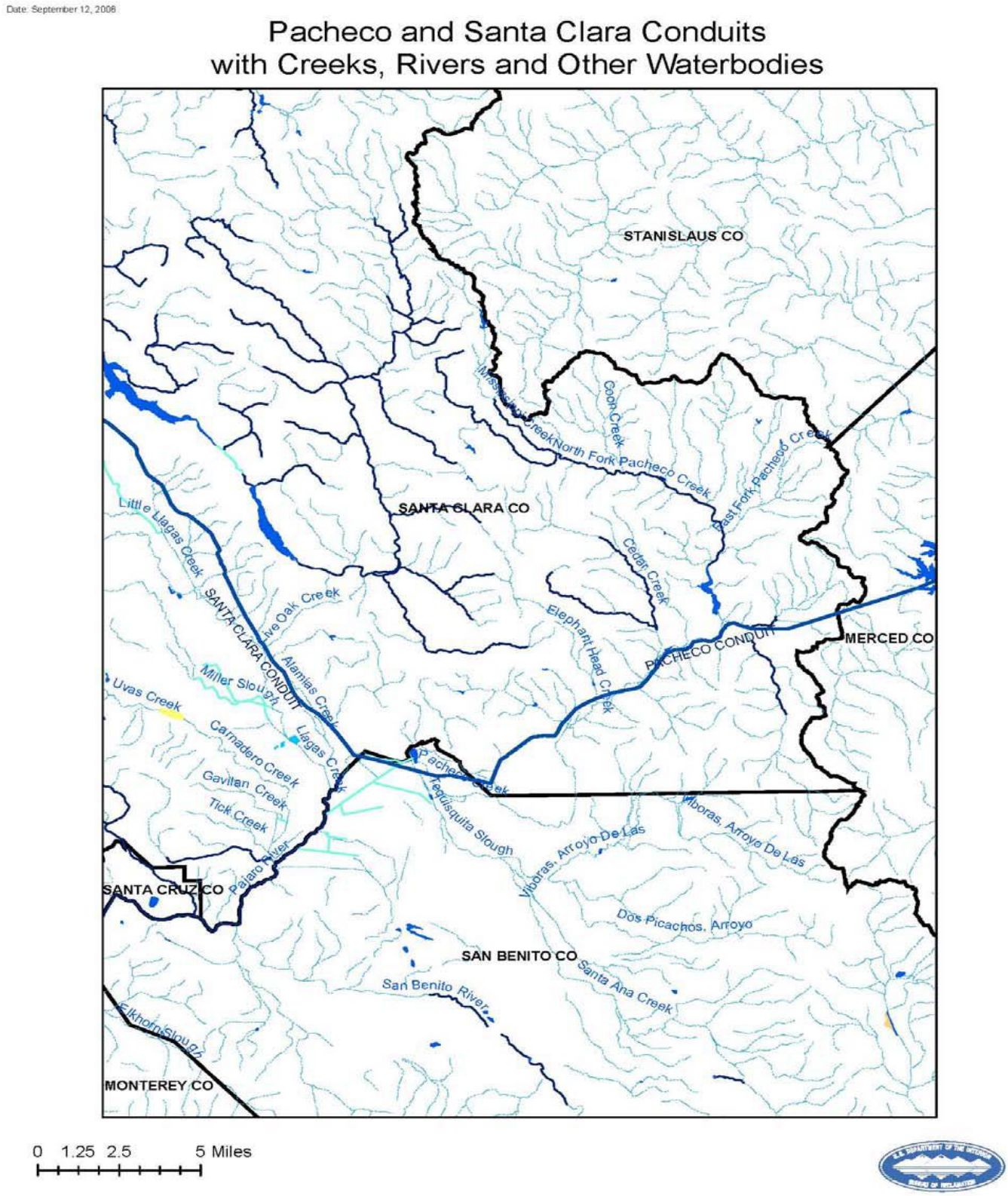

FIGURE 3.9-2
Creeks, Rivers, and Other Water Bodies

FIGURE 3.9-3
FEMA Flood Zones for the Project Site

3.9.2 Hydrology and Water Quality Impacts

3.9.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
B. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐
D. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?	☐	☐	☒	☐
E. 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?	☐	☐	☒	☐
F. Otherwise substantially degrade water quality?	☐	☐	☒	☐
G. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
H. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
I. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
J. Cause inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

3.9.2.2 Discussion

A. Violate any water quality standards or waste discharge requirements? *(Less Than Significant)*

Construction activities would be localized at individual path, driveway, gate, sign, and gravel collar Project construction sites. Proposed site clearing, grading, and excavation activities would involve ground disturbing activities that have the potential to contribute to erosion and subsequent increased input of fine sediments to nearby creeks. Potential pollutants such as fuel, grease, and solvents typically used in construction activities would also have the potential to degrade water quality in nearby creeks.

In total, the proposed project would have ground disturbance of approximately one-acre. The State of California requires that any construction activity affecting 1 acre or more obtain coverage under the General Construction Activity Stormwater Permit (General Permit, SWRCB Order 2009-0009-DWQ) to minimize the potential effects of construction runoff on receiving water quality. The Project sites would be subject to the General Permit requirements, including preparation of a SWPPP. Valley Water will prepare a single SWPPP covering all construction sites with specific measures to prevent or minimize pollutants in runoff and manage flows such that the proposed project would not cause increased runoff. A stormwater pollution prevention plan (SWPPP) is a fundamental requirement of stormwater permits. A SWPPP:

- identifies all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site
- describes practices to be used to reduce pollutants in storm water discharges from the construction site, and
- helps assure compliance with the terms and conditions of the permit (when the plan is designed for the individual site, and is fully implemented)

Valley Water has also incorporated VHP AMMs 1, 2, 3, 4, 6, 7, 8, 11, 12, 13, 21, 26, 35, 39, 58. 61, 76, 89 and 90 and BMPs WQ-5, WQ-9, and WQ-16 into the Project to ensure that the proposed project would not create or contribute to any violations of water quality standards or waste discharge requirements. Based on the above analysis, the proposed project would have a less-than-significant impact related to water quality standards and waste discharge requirements.

B. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? (*Less Than Significant*)

The proposed project would not use groundwater sources for construction or maintenance. Water for construction would be obtained from the existing water available at existing hydrants with permit.

The proposed project would create small impervious areas at the driveway, gravel collar and path construction locations. These new impervious areas would be small in extent and would not constitute a substantial increase in impervious area that could interfere with groundwater recharge.

Based on the above, the Project's impact on groundwater would be less than significant.

C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site? (*Less Than Significant*)

D. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site? (*Less Than Significant*)

E. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (*Less Than Significant*)

The proposed project would not alter the course of any waterways. New features would be installed at existing grades, thereby leaving existing drainage patterns unchanged. The new path to be constructed from SR 152 to SCC 8 would be designed with responsible drainage design. Runoff from the path would be directed onto adjacent vegetated areas to reduce the amount and flowrate of stormwater runoff. Similarly, runoff from gravel collars would also be directed onto adjacent vegetated areas. As discussed above, construction of the proposed project features would have the potential to expose site soils to erosion and mobilize sediments in stormwater. However, with implementation of Valley Water BMPs WQ-9 and WQ-16 and VHP AMMs 3, 4, 5, 6, 13, 39, 58 and 61, and compliance with the SWPPP requirements, the proposed project would not substantially alter the drainage pattern that would result in substantial erosion, siltation, or flooding on or off site. The proposed project would also not create or contribute runoff that would exceed the capacity of existing drainage systems or provide substantial additional sources of polluted runoff. This impact would be considered less than significant.

F. Otherwise substantially degrade water quality? (*Less Than Significant*)

The proposed project would improve site conditions and would have a beneficial effect on water quality. Construction of a gravel path and collars would stabilize routinely accessed areas and reduce potential soil track-out onto local roads. Implementation of a 24-hour rain delay for maintenance activities, if practicable, would reduce the disturbance to wet soils when they are most pliable. The use of lighter all-terrain vehicles with smaller travel footprints would reduce or minimize the ground disturbance from larger, heavier vehicles during periods of wet conditions.

As discussed above, compliance with the AMMs, BMPs, and SWPPP during construction of the proposed project would ensure that the proposed project would not otherwise substantially degrade water quality. This impact would be less than significant.

G. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (*No Impact*)

The proposed project would install improvements and provide greater maintenance access to the San Felipe water system. No housing would be associated with the proposed project. There would be no impact.

H. Place within a 100-year flood hazard area structures that would impede or redirect flood flows? (*No Impact*)

While some of the vaults and Project sites are located in a 100-year flood hazard area, the proposed project would not place structures that would impede or redirect flood flows. There would be no impact to existing flood flows.

I. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? (*No Impact*)

The proposed project would not involve placement of any features that could expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a levee or dam failure. There would be no impact or change in risk level.

J. Cause inundation by seiche, tsunami, or mudflow? (*Less Than Significant)*

Project activities would not affect hazards of inundation by seiche, tsunami, or mudflow. The Project sites are well inland of coastal areas and would therefore not be subject to inundation by tsunami. Several of the proposed project sites would be located in the vicinity of San Felipe Lake; however, due to the shallowness of San Felipe Lake, no seiches that could cause substantial inundation of the Project sites would form. There are no additional water bodies near the proposed project sites that could cause inundation by seiche.

Mudflows at the Project sites could occur as landslide hazards are prevalent throughout the Project area. The Project however would not change or increase mudflow potential as the ground disturbance and grading would be so limited. The mudflow impact would be less than significant.

3.10 LAND USE AND PLANNING

3.10.1 Environmental Setting

Project sites are located within unincorporated Santa Clara and San Benito Counties. Separate General Plans are established for Santa Clara (Adopted 2014-15) and San Benito Counties (2035 General Plan Adopted 2015). The General Plan Land Use designations for the Project site are shown below in Table 3.10-1.

Santa Clara County General Plan

The Santa Clara County General Plan contains three major areas of geographic focus: (a) countywide; (b) the rural unincorporated areas; and (c) the urban unincorporated areas. The unincorporated areas outside of Gilroy are addressed within the "Rural Unincorporated Area Issues and Policies" section of the Santa Clara County General Plan. The unincorporated lands surrounding Gilroy consist primarily of mountain foothills and agricultural areas. The fundamental policy of the Santa Clara County General Plan with respect to these areas is that only agricultural, open space, and low density residential remain the primary permitted land uses.

San Benito County General Plan

A small portion (about 2 miles) of the SCC is located in the northeast portion of unincorporated San Benito County and would be subject to the land use policies and regulations as outlined in the San Benito County General Plan. In San Benito County the land use in the vicinity of the pipeline or conduit is Agricultural under the General Plan.

TABLE 3.10-1
Pipelines by Land Use Jurisdiction

Pipeline	Type of Water	Pipeline Length	Land Use Jurisdiction	Land Use
Santa Clara Conduit (SCC)	Raw	20 miles	Unincorporated Santa Clara County & San Benito County	Agriculture-Medium Scale, Agriculture-Large Scale, Regional Park, Rural Residential, Ranchland, Roadside Services
Pacheco Conduit (PC)	Raw	13.3 miles	Unincorporated Santa Clara County & (Merced County – not a part of this Project)	Ranchland, Roadside Services, Wildlife Area

3.10.2 Land Use and Planning Impacts

3.10.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Physically divide an established community?	☐	☐	☐	☒
B. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
C. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.2.2 Discussion

A. Physically divide an established community? (*No Impact*)

The proposed project would include obtaining easements or access agreements from landowners and constructing physical improvements to existing vaults and above-ground maintenance sites along the PC and SCC, which would not physically divide an established community. Once construction is completed, Valley Water would continue to maintain the facilities, and future operational changes would also not physically divide an established community. No impact would occur.

B. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (*No Impact*)

Utility systems are an allowable use under Zoning and General Plan land use designations within Santa Clara and San Benito County. The proposed project would not change the existing land use at the Project sites or result in development of land uses that would be incompatible to surrounding land uses. There would be no conflict with the General Plan and Zoning ordinances. No impact would occur.

C. Conflict with any applicable habitat conservation plan or natural community conservation plan? (*No Impact*)

As described in Section 3.4.2 Biological Resources, many of the Project sites are located within the plan area of the Santa Clara VHP. For reasons discussed under Section 3.4.2 the proposed project would comply with applicable conditions and AMMs in the Santa Clara VHP; therefore, the proposed project would not conflict with the plan. No impact would occur.

3.11 MINERAL RESOURCES

3.11.1 Environmental Setting

The Surface Mine and Reclamation Act of 1975 (Public Resources Code§§ 2710 et seq., as amended, hereinafter referred to as "SMARA") was enacted by California Legislature to address the need for supply of mineral resources and to prevent or minimize negative impacts of surface mining to public health, property, and the environment. City and county lead agencies adopt ordinances for land use permitting and reclamation procedures under which local mining and reclamation activities are conducted.

Section 2728 of the Public Resources Code defines a lead agency as a city, county, San Francisco Bay Conservation and Development Commission (BCDC), or the State Mining and Geology Board (SMGB) which has the principal responsibility for approving a surface mining operation or reclamation plan.

The County of Santa Clara Planning and Development Department is the lead agency for all quarries located within the unincorporated portion of Santa Clara County. San Benito County Planning and Land Use Department is the lead agency for SMARA within San Benito County.

The Office of Mine Reclamation periodically publishes a list of mines regulated under SMARA that meet provisions set forth under California's Public Resources Code, Section 2717(b). This list is generally referred to as the AB 3098 List, in reference to the 1992 legislation, that established it. As of July 2016, the AB 3098 list shows nine active mines in Santa Clara County and ten in San Benito County. Per this list, there are no known locally important mineral resource recovery sites located along the route of the SCC and PC.

The County of Santa Clara has only one new application for surface mining located near the general region of the Project site. This SMARA application currently processing through the County of Santa Clara is known as the Sargent Ranch. The proposed surface mining site is located approximately 4 miles south of Valley Water conduits, and west of Highway 101 in Santa Clara County. The proposed mining site is accessed via Old Monterey Road south of the City of Gilroy. Sargent Ranch contains mineral deposits which are of regional significance as a source of construction aggregate materials. There are no known SMARA applications in process with the County of San Benito.

3.11.2 Mineral Resources Impacts

3.11.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒

3.11.2.2 Discussion

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? (*No Impact*)

There are no known mineral resources of value to the region or state located along the route of the SCC and PC. The proposed project would not result in the loss of a known mineral resource or a locally important mineral resources recovery site. No impact would occur.

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? (*No Impact*)

Per the AB 3098 List, there are no known locally important mineral resource recovery sites located along the route of the SCC and PC. No impact would occur from this Project.

3.12 NOISE

3.12.1 Environmental Setting

Noise is defined as unwanted and objectionable sound. Sound levels are usually measured and expressed in decibels (dB) with 0-3 dB corresponding roughly to the threshold of hearing. The method commonly used to quantify environmental sounds consists of evaluating all frequencies of a sound in accordance with a filter that reflects the fact that human hearing is less sensitive at very low and very high frequencies compared to mid-range frequencies. This is called “A” weighting, and the dB level measurement is called the A-weighted sound level (dBA).

A-weighted sound level is expressed on a logarithmic scale using a frequency-weighted pattern that duplicates the human ear's sensitivity to sound. A 70 dBA sound level is approximately twice as loud as a 60 dBA sound level and four times as loud as a 50 dBA sound level.

The SCC and PCC are primarily located within the valleys and hills of the South County where agricultural and ranching uses predominate. While these areas are not frequently sensitive to noise impacts, there are occasional residences, open spaces, and trails along these routes. Portions of both conduits are located near freeways with evident traffic noise. There is one County of Santa Clara public airport (San Martin Airport aka South County Airport) located within one mile of Project sites, on the west side of US 101. The South County Airport flight patterns intersect with a very small length of the SCC. South County Airport has an approved comprehensive land use plan (CLUP) which aims to attenuate sound issues.

One public use airport, Frazier Lake Airpark, is located in San Benito County, approximately two miles away from the nearby San Felipe Lake.

3.12.1.1 Noise Sensitivity Varies with Different Land Uses

Ambient noise levels in urban areas are typically high from vehicle traffic, other construction activities, and in some cases airport noise. Sensitive noise receptors, especially parks and trails, hospitals, and senior facilities, are often located in the urban environments (e.g., City of Morgan Hill) near to a few of the Project sites.

Ambient noise levels (normal or existing level of environmental noise) at neighborhood residential areas such as at the Project sites are typically around 50 to 60 dBA. Noise sources at the Project sites are primarily from US 101 traffic and the San Martin (South County) Airport located one mile west of the Project.

3.12.1.2 Regulatory Setting

Portions of the SCC and PC fall within the jurisdictions of unincorporated Santa Clara County and unincorporated San Benito County. The General Plans of the two jurisdictions address noise policies to minimize exposure of residents to noise. Noise sensitive receptors in the Project rural environments are generally not within immediate vicinity of Project work areas because most SCC and PC vaults are located in fields and away from land uses occupied by people. Limited Project work areas (those near the City of Morgan Hill), however, are located closer to residential homes, schools, and institutions. The ambient noise level in rural environments is usually lower, making construction and maintenance noise more prominent and noticeable.

Santa Clara County

Chapter VIII of the Santa Clara Municipal Code regulates noise and vibration in unincorporated Santa Clara County. In Santa Clara County, except for emergency work of public service utilities or by variance, construction activities are only allowed weekdays and on Saturdays between 7 am and 7 pm (Section B11-154(b)(6). In addition, where technically and economically feasible, construction activities are required

to be conducted in a manner that the maximum noise levels at affected properties would not exceed in accordance to the following: 75 dBA for single- and two-family dwelling residential areas, 80 dBA for multi-family residential areas, and 85 dBA for commercial areas. With respect to vibration, Section B11-154(b)(7) prohibits operation of devices that would create a vibration or quivering effect that (a) endangers or injures safety or health of human or animals, (b) annoys or disturbs a person of normal sensitivities, or (c) endangers or injures personal or real properties.

San Benito County

Chapter 19.39 of the San Benito County Municipal Code regulates noise in unincorporated San Benito County. Section 19.39.051 exempts from the noise regulations a number of activities or facilities including (a) temporary construction, demolition or maintenance of structures between the hours of 7 am and 7 pm except Sundays and federal holidays, (b) facilities owned or operated by or for a government agency, (c) capital improvement projects of a governmental agency, and (d) maintenance or repair of public properties. Similarly, Section 25.37.035 of the Municipal Code exempts temporary construction activities between 7 am and 7 pm except Sundays and federal holidays from complying with noise level standards.

FTA Guidance

The Federal Transportation Agency (FTA) has established guidance on noise and vibration impact assessments for construction equipment (FTA 2016). This includes a table of typical construction equipment noise levels at 50 feet from the source shown in Table 3.12-1. The FTA recommends that for a rough estimate of construction noise levels that the noisiest two pieces of equipment be used to analyze the anticipated noise levels at sensitive receptors assuming the following:

- full power operation for a full one hour is assumed,
- there are no obstructions to the noise travel paths, and
- typical noise levels from Table 3.12-1 are used.

Using these simplifying assumptions, the noise levels at specific distances can be obtained using the following equation:

$$L_{eq}(equip) = EL_{50ft} - 20log_{10}(D/50)$$

Where:

L_{eq} (equip) = the noise emission level at the receiver at distance D over 1 hour.

EL_{50ft} = noise emission level of a particular piece of equipment at reference distance of 50 feet.

D = the distance from the receiver to the piece of equipment in feet.

In order to add the two noisiest pieces of equipment together, the following equation applies:

$$L_{total} = 10\ log_{10}(10^{\frac{L1}{10}} + 10^{\frac{L2}{10}})$$

Where:

L_{total} = The noise emission level of two pieces of equipment combined

L_1 = The noise emission level of equipment type 1

L_2 = The noise emission level of equipment type 2

These standard industry equations are used to compare to the noise emission limits established by the County of Santa Clara.

TABLE 3.12-1
Construction Equipment Noise Emission Levels

Equipment	Roadway Construction Noise Model – Actual Measured Samples Noise Level (dBA) 50 feet from Source
Air Compressor	78
Backhoe	78
Compactor	83
Dozer	82
Generator	81
Grader	85
Loader	85
Paver	77
Pneumatic Tool	85
Pump	81
Roller	80
Saw	76
Truck	76

Source: FTA 2016

3.12.2 Noise Impacts

3.12.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒	☐
B. Expose persons to or generate excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
C. Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐
D. Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐
E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the Project corridor to excessive noise levels?	☐	☐	☐	☒
F. For a Project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

3.12.2.2 Discussion

A. Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? *(Less Than Significant)*

Construction Hours Restriction

Santa Clara County and San Benito County municipal codes both contain restrictions on days and hours during which construction activities may occur. As described in Section 2.3.2 Project Construction, construction of the proposed project would generally occur from 7 am to 5 pm on weekdays. While unlikely, occasionally construction may occur after 5 pm during weekdays and on Saturdays, but construction hours would be limited to those permissible under applicable county ordinances. Therefore, construction of the proposed project would not violate any applicable construction hours restriction established by the counties.

Noise Standards

As described above in Regulatory Setting, Santa Clara County municipal code includes noise standards that would apply to construction of the proposed project.

Construction noise generated by the proposed project would vary depending on the activity. Fence, gate, and sign installation activities would not result in violation of applicable noise standards as construction of these facilities would not require the use of noisy heavy construction equipment.

However, driveway, collar, and path construction would require equipment including dump truck, compact track loader, and asphalt paver as described in the Project Description; the use of this type of equipment, especially if they are used concurrently, could increase the noise levels experienced in adjacent or nearby areas.

Generally, the Project sites are extremely rural, and most residents near the pipeline vault work sites are distant. A number of vaults (SCC 11, 12, 34, 40, 43, 50, 53, 54, and 57) proposed for Project elements involving construction are located within 200 feet from residences. Specifically, construction of gravel collar is proposed at SCC 11, 43, and 57; driveway construction is proposed at SCC 12, 34, 43, and 54. At SCC 34, 40, 50 and 53, only gate construction is being proposed.

According to Table 3.12-1, the two noisiest pieces of equipment that would operate at the same time would be the grader and loader; this equipment would be used during driveway or gravel collar construction, and both have a noise level of 85 dBA at 50 feet. It is possible that both pieces of equipment would be operated concurrently at a given site. Table 3.12-3 was used to calculate the combined noise level of the two pieces of equipment. Following the methodology shown on Table 3.12-2, when a grader and loader are both operated at the same time, the combined noise level would be 88 dBA.

The following table can be used to estimate a sum of various sound levels:

TABLE 3.12-2
Combining and Averaging Sound Levels

Difference of Sound Levels Between Two Equipment to Be Used Together	Amount of Noise Level Added to Determine the Combined Noise Level
0-1 dB	3 dB
2-4 dB	2 dB
5-9 dB	1 dB
10 dB	0 dB

Source: https://www.osha.gov/dts/osta/otm/new_noise/appendices_all.pdf

Example: There are three noise sources immediately adjacent to one another, each producing a sound level of 95 dB. The combined sound level can be found using the table above. The difference between the first two noise sources is 0 dB, which means the sum will be 95 + 3 = 98 dB. The difference between 98 dB and the remaining noise source (95 dB) is 3, which means the sum will be 98 + 2 = 100 dB.

As described above, the most noise generating activities (specifically driveway or gravel collar construction) with nearby residences are proposed at SCC 11, 12, 43, 54, and 57, with residences locating at approximately 180 feet, 100 feet, 95 feet, 60 feet and 60 feet respectively. Noise levels attenuate approximately 6 dB for every doubling of distance. Using the tables and equations described above, the temporary construction noise level generated from driveway or gravel collar construction would be approximately 88 dBA at 50 feet, 82 dBA at 100 feet, and 76 dBA at 200 feet from the construction site. Therefore, the residences near SCC 43, 54 and 57 would experience noise level of 82-88 dBA, and the residences near SCC 11 and 12 would experience noise level of 76-82 dBA.

Only construction of gates is proposed at SCC 34, 40, 50, and 53. From these locations, the closest residences are approximately 115 feet, 115 feet, 190 feet, and 105 feet away. According to Table 3.12-1, the equipment used for gate construction (backhoe with auger) would generate noise level of 78 dBA at 50 feet from the source. Using the noise attenuation formula, the noise level from gate construction would be 78 dBA at 50 feet, 72 dBA at 100 feet, and 66 dBA at 200 feet. Therefore, the residences near SCC 34, 40, 50, and 53 would experience noise level of below 72 dBA.

As described in the regulatory setting discussion above, there are no numerical noise standards in the San Benito County municipal code. For SCC 34, 40, 43, 50, 53, 54, and 57 which are located in Santa Clara County, the county municipal code provides that where technically and economically feasible, construction activities are required to be conducted in a manner that the maximum noise levels at single residence properties would not exceed 75 dBA. Based on the analysis above, the noise level generated from Project activities near SCC 43, 54, and 57 would exceed 75 dBA. However, it would be technically and economically infeasible for Valley Water to reduce the noise level at these vault locations to below the noise limit. Valley Water has considered the possibility of using portable sound walls or other methods to reduce the noise levels at these locations. Due to the extremely limited space available at these locations, it would be impracticable to install additional devices such as sound walls without compromising Valley Water's ability to construct the driveway or gravel collar. Obtaining additional land rights (for example, in the form of temporary construction easement) for adequate space to install a sound wall would add substantial cost to the Project may not be accomplished within a reasonable time. The cost of installing a sound wall would also substantially increase the Project cost at these vault locations. Based on this analysis, the impact relating to exceedance of noise standard would be considered less than significant.

B. Expose persons to or generate excessive ground borne vibration or ground borne noise levels? (*Less Than Significant*)

Construction activities may result in minor ground vibration and ground borne noise generation during installation of: driveways near SCC 32, 43, and 54 in Santa Clara County and driveway near SCC 11 and 12 in San Benito County; gravel collars around the vaults at PC 2 and PC 34, SCC 20-26, SCC 30-31, SCC 52, and SCC 57 in Santa Clara County as well as gravel collars around vaults SCC 11 and 12 and SCC 17-19 in San Benito County. One gravel path is to be constructed at SCC 8 located in Santa Clara County. Table 3.12-3 lists vibration amplitudes for typical construction equipment. The equipment used for construction of the proposed project would generate vibration level similar to that of the equipment in Table 3.12-3 below. The California Department of Transportation (Caltrans) states that it takes at least 0.9 inch/sec of PPV for human response to be strongly perceptible or 0.25 inch/sec to be distinctly perceptible.

TABLE 3.12-3
Vibration Source Amplitudes for Construction Equipment

Equipment	Reference Peak Particle Velocity (PPV) at 25 feet (inches per second)
Vibratory roller	0.210
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozer	0.003

Source: FHWA 2015

Vibration from nonimpact construction activity and truck traffic is typically below the threshold of perception when the activity is more than 50 feet from the receiver (FTA 2006). The residences nearest to the Project sites where driveway, or gravel collar construction are proposed would be about 60 feet from SCC 54 and 57, about 100 feet from SCC 12 and 43. At these distances, ground borne vibrations and ground borne noise would not be perceived by sensitive receptors.

Additionally, vibration from these activities would be short-term and would end when construction is completed. This impact would be less than significant.

C. Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project? (*Less Than Significant*)

As described in Item A, the proposed project involves minor construction elements at Project sites, and while ambient noise level would temporarily increase during construction, once the construction activities are completed, noise levels would return to pre-Project conditions as the nature and frequency of future operational/maintenance activities would remain similar. The impact

relating to permanent increase in ambient noise levels would be less than significant.

D. Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project? (*Less Than Significant*).

As discussed in the Project Description, construction of the proposed project would generally occur from 7 am to 5 pm on weekdays. While unlikely, occasionally construction may occur after 5 pm during weekdays and on Saturdays, but construction hours would be limited to those permissible under applicable county ordinances. In addition, construction duration at any given site would be very short, in the range of 1 to 5 days. For purpose of this analysis, a project would be considered to result in a substantial temporary or periodic increase in ambient noise if the Project would result in exceedance of applicable noise standards. As discussed in Item A above, the Project would not result in exceedance of local noise standards; thus, the Project's impact related to temporary increase in ambient noise would also be less than significant.

E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels? (*Less than Significant Impact*)

There are two airports located within two miles of the Project sites: San Martin Airport (aka South County Airport) and Frazier Lake Airpark. San Martin Airport has an approved comprehensive land use plan (CLUP) with operational plan policies to safeguard general welfare of residences and businesses in the vicinity of the airport. The proposed project activities would not conflict with guidelines and policies of the San Martin Airport CLUP. In addition, the proposed project does not involve residential development and thus would not increase residences' exposure to airport related noises. Construction of the proposed project would occur over two 6-months periods in 2 years so is not expected to involve long-term exposure of people working in the Project area to excessive airport related noises. The impact would therefore be less than significant.

F. For a Project within the vicinity of a private airstrip, expose people residing or working in the corridor to excessive noise levels? (*No Impact*)

There are no private airstrips located in Santa Clara County in proximity to the Project Site. In San Benito County, there is one private airstrip in proximity to the Project area: (1) Christensen Ranch Airport, a private airport located in Hollister area 22 miles from the Project vaults. Due to distance involved from the Project sites and low frequency of private use there would be no excessive noise impacts on people working in the area.

3.13 POPULATION AND HOUSING

3.13.2 Population and Housing Impacts

3.13.2.1 Checklist

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

3.13.2.2 Discussion

A. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? *(No Impact)*

B. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (*No Impact*)

C. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (*No Impact*)

The proposed project would create no new population or housing needs. The proposed project would not involve construction of new homes or commercial units and would not require removal of any existing homes or businesses within the Project areas and would not alter the Santa Clara and San Benito County housing stock in any way. In addition, the proposed project would not construct new or extend any existing infrastructure that could indirectly induce population growth in the area. While driveways and one new gravel path would be constructed to access several vault locations, they would not allow or foster public access. Thus, the proposed project would not directly or indirectly induce substantial population growth nor would the Project displace any housing or persons. There would be no impact on population and housing.

3.14 PUBLIC SERVICES

3.14.1 Environmental Setting

The Project area is served by a variety of public agencies for the provision of fire and police protection, emergency medical services via paramedic services (a subset of the various fire protection agencies and districts), schools, and parks. The provision of these services is by a combination of cities and counties, as well as by special districts such as fire and school districts.

Fire, emergency medical services, and police service agencies maintain mutual aid agreements which allow those agencies to share their facilities and services across jurisdictional lines when such assistance is needed.

3.14.2 Public Services Impacts

3.14.2.1 Checklist

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

3.14.2.2 Discussion

A. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

1. Fire protection? *(No Impact)*

2. Police protection? *(No Impact)*

3. Schools? *(No Impact)*

4. Parks? *(No Impact)*

5. Other public facilities? *(No Impact)*

The proposed project would create no new public services demand. The Project would include obtaining easements from private property owners and small-scale physical improvements to vaults and above-ground maintenance sites. There would be no impact on public services that would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities.

3.15 RECREATION

3.15.1 Environmental Setting

The Project sites are located in areas with recreational facilities located nearby at the City of Morgan Hill, and Santa Clara County (Coyote Lake Harvey Bear Park), and state parks (Henry Coe and Pacheco State Parks) and the Santa Clara Valley Open Space Authority.

3.15.2 Recreation Impacts

3.15.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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 that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.15.2.2 Discussion

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? (*No Impact*)

B. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? (*No Impact*)

The Project would create no increase in recreational demand for services or generate any new park site requirements. The proposed project activities would not affect the public's use of existing recreational facilities including nearby trails. The Project would have no impact on Recreation.

3.16 TRANSPORTATION AND TRAFFIC

3.16.1 Environmental Setting

Regional Overview

Santa Clara County has a well-developed transportation network that includes Interstate and State Highways and surface streets ranging from regional arterials to local roads serving individual residential neighborhoods. Traffic congestion is most prominent in urban centers and suburban centers close to cities. Refer to Figure 3.16-1 for a map of the major highways and roads in the region. The Project sites in San Benito County have more limited road networks in the largely rural areas.

State and Interstate Highways

Several Interstate and State highways are located near where project activities could occur. The major highways near the Project include US 101 (a four- to six-lane divided highway that serves interregional traffic) and SR 152 (a two- to four-lane highway).

Local (Surface) Roads

Throughout the Project area there is a complex and interrelated network of surface streets and roads that serve a wide variety of land use types including commercial, industrial, manufacturing, government, academic, residential, and recreation. The network spans from major arterial freeways to road networks that are often narrow and sometimes in disrepair. Several unpaved (gravel or dirt) roads connect pipeline vaults. The roads can also function as rancher access ways.

3.16.2 Regulatory Setting

Level of Service Standards

Level of Service (LOS) is a scale of values, with designations "A" through "F," that describes degrees of street congestion, or interference with the normal free flow of

traffic. LOS “A” indicates free traffic flow at design speed or the absence of congestion, while LOS “F” indicates a congested condition where traffic flow is seriously restricted and travel speeds are significantly below design speed. Level of service is sometimes expressed in terms of a street volume to capacity (v/c) ratio. LOS ratings vary by roadway. Major roads closer to urban centers tend to have higher peak hour volumes and worse LOS ratings. Table 3.16-1 provides a general description of the various LOS and corresponding v/c for signalized street and intersection. Table 3.16-2 shows various LOS and corresponding delayed time per vehicle for unsignalized intersection.

Congestion Management Programs

Congestion Management Agencies are designated by Counties. The Santa Clara Valley Transportation Authority (VTA) is the Congestion Management Agency (CMA) for Santa Clara County.

California's Congestion Management Plan (CMP) statute requires that all CMAs develop a uniform program for evaluating the transportation impacts of land use decisions on the designated CMP System. The VTA’s 2017 CMP requires that agencies use the VTA Transportation Impact Analysis (TIA) Guidelines to evaluate transportation impacts of all land use decisions within the agency’s jurisdiction that are projected to generate 100 or more net new weekday (a.m. or p.m. peak hour) or weekend peak hour trips, including both inbound and outbound trips; the proposed project’s trip generation is well below this threshold for TIA preparation. The CMP statute states that “in no case shall the LOS standards established be below level of service E or the current level, whichever is farthest from level of service A.” If the baseline LOS for a roadway is LOS F, then the LOS must be maintained as LOS F.

No congestion management programs are administered by the County of San Benito that would be applicable to the Proposed project (San Benito County, 2010). However, the San Benito County 2035 General Plan requires that the County coordinate with Council of San Benito County Governments (SBCOG) and the Association of Monterey Bay Area Governments (AMBAG), the cities, adjacent counties and Caltrans to monitor traffic volumes and congestion on the roadway system in San Benito County.

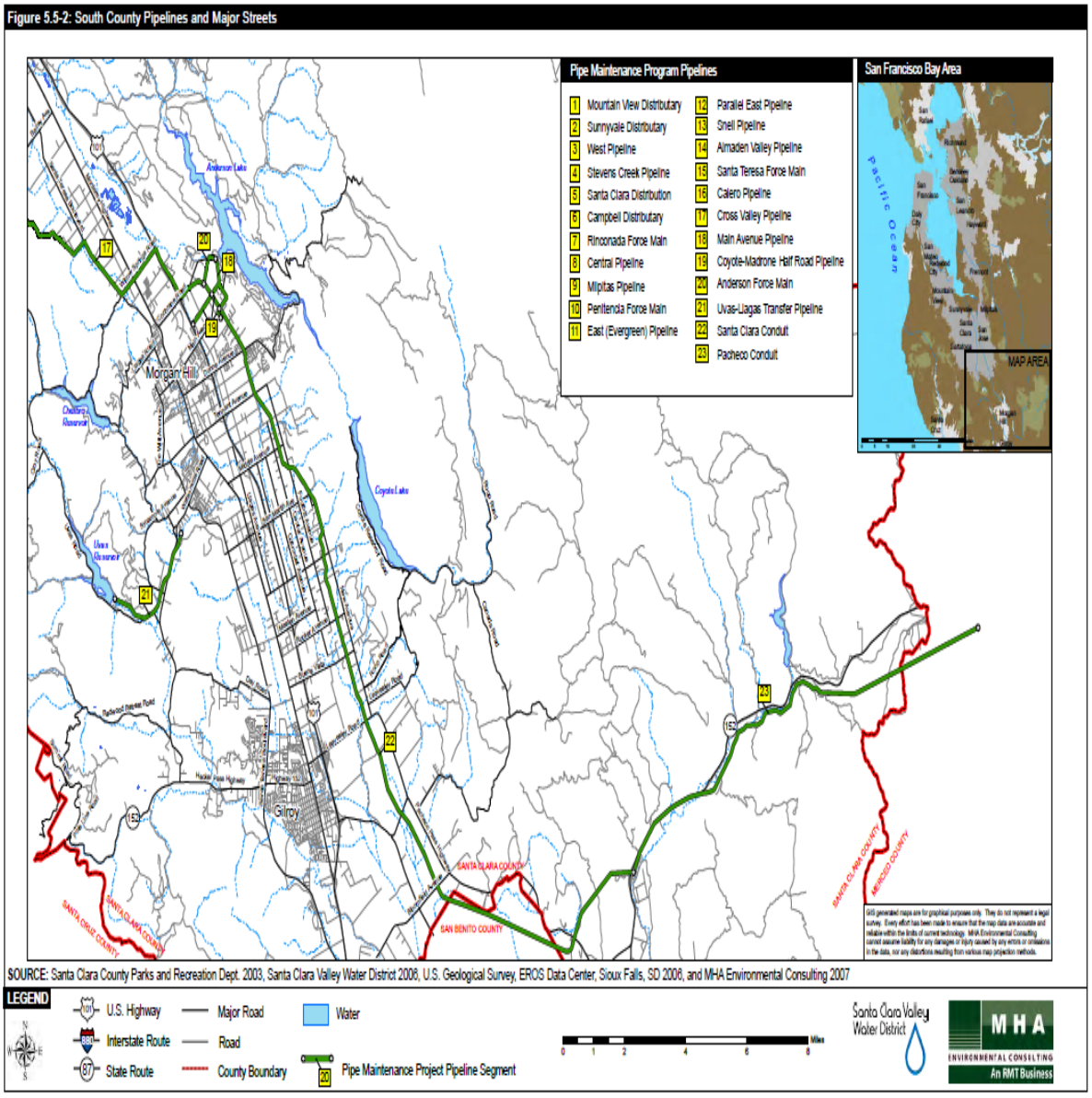

FIGURE 3.16-1
South County Pipelines and Major Streets

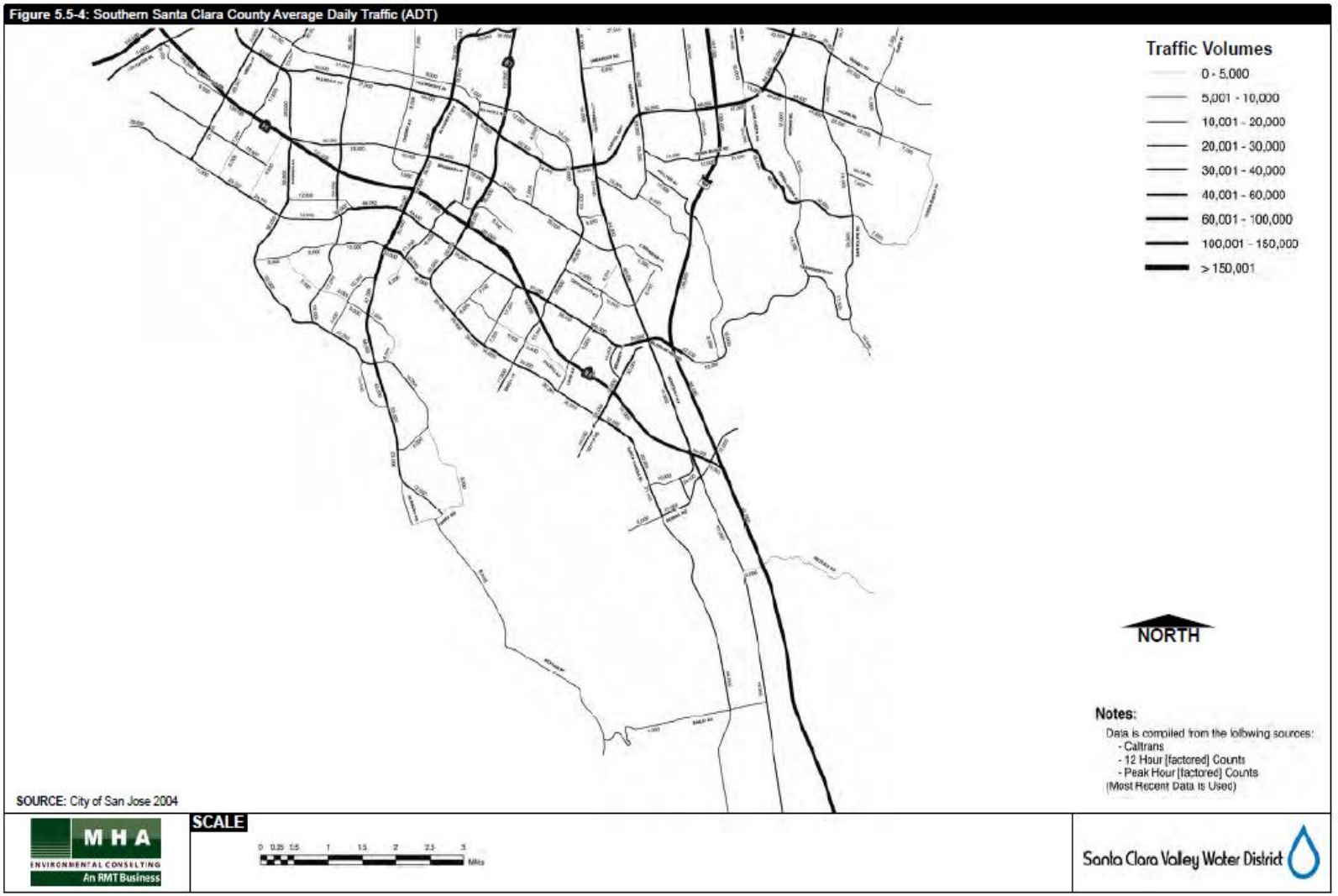

FIGURE 3.16-2
Southern Santa Clara County Average Daily Traffic

TABLE 3.16-1
Signalized Street and Intersection LOS Criteria

LOS Level	Description	V/C or ICU[1]
LOS A	LOS "A" conditions are characterized by free flow operations. Vehicles are unimpeded in their ability to maneuver within the traffic stream and stopped delay at intersections is minimal.	0 - 0.60
LOS B	LOS "B" conditions are characterized by travel speeds which are within 70% of free flow operational speeds. Vehicles are slightly restricted in their ability to maneuver within the traffic stream and stopped delay at intersections is not bothersome to most drivers.	0.61-.0.70
LOS C	LOS "C" conditions are characterized as stable operations. The ability to maneuver and change lanes is somewhat restricted, and travel speeds may drop to 50% of free flow speeds. Some queuing typically occurs at signalized intersections; however, all vehicles clear the intersection on all or nearly all cycles.	0.71 - 0.80
LOS D	LOS "D" conditions are characterized by high-density traffic flows. Travel speeds may range as low as 40% of free flow operational speeds. Vehicles are restricted in their ability to maneuver within the traffic stream, and one or more vehicles may not clear the intersection within a single signal cycle on a regular basis.	0.81 - 0.90
LOS E	LOS "E" conditions are characterized as operations at or near capacity. There is little or no freedom to maneuver within the traffic stream. Comfort and convenience levels are low, and driver frustration is generally high. Operations at this level are generally unstable, with even minor disturbances or disruptions resulting in the breakdown of operations and substantially increased delays. The failure of vehicles to clear an intersection in a single cycle is a regular occurrence.	0.91 - 1.00
LOS F	LOS "F" conditions represent forced breakdown flow. The traffic volume approaching location exceeds the capacity of the system at that location. Intersections often become the focal point for street system failure. Operations are characterized by extensive queues and long delays. Some or all vehicles fail to clear the intersection during every signal cycle.	>1.00

[1] V/C is the Volume/Capacity ratio; ICU is the Intersection Capacity Utilization

Source: Transportation Research Board Highway Capacity Manual 2000

TABLE 3.16-2
Unsignalized Intersection Level of Service

LOS	Delay Per Vehicle (sec)	LOS	Delay Per Vehicle (sec)
A	≤ 10	D	> 25 and ≤ 35
B	> 10 and ≤ 15	E	> 35 and ≤ 50
C	> 15 and ≤ 25	F	> 50

Source: Transportation Research Board Highway Capacity Manual 2000

3.16.2 Transportation and Traffic Impacts

3.16.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
B. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
C. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
D. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
E. Result in inadequate emergency access?	☐	☐	☒	☐
F. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

3.16.2.2 Discussion

A. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? *(Less than Significant)*

B. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? *(Less Than Significant)*

Construction

The proposed project would not conflict with plans, ordinance or policies on the traffic circulation system. The Project would generate limited traffic during construction activities. Construction is expected to generate a total of ten trips per day at each Project site. For each Project site per day of construction there would be six vendor (construction contractor) truck trips per day (two 1-way delivery trips per day for gravel (collars) or base rock materials (driveway) and two 1-way trips for water truck and two 1-way trips for a dump truck. The Project would also generate a total of four worker tips per day (two 2-way worker trips per day) in addition to trucks. All trip lengths are assumed to be average of 20 miles. Construction duration will over the two, 6-month dry season construction periods.

Phase	Worker Trips/day	Vendor Truck Trips/day
Gravel Collars	4	6
Marker Installation	4	6
Gate Installation	4	6
Driveway	4	6
SCC 8 Path	4	6

Valley Water construction workers would arrive at Project sites no earlier than 7:00 a.m. each weekday and depart from Project sites at the end of the work day by 5:00 p.m. Project sites would be accessed via US 101, SR 152, a network of public surface streets and roads, and dedicated PG&E roads.

Traffic generated by the small-scale construction activities would be minimal, involving less than ten vehicles (example two Valley Water pickup trucks, two vendor semi-trucks [rock or materials delivery to site] two Valley Water semi-trucks for on-site delivery of one roller, one loader, one skip steer loader, and one paver). It is possible crews could travel to and from a Project site for up to a few weeks, but in most circumstances' construction activities would be completed at each separate Project location within a few days. The minimal short-term

increases in traffic related to Project construction are not considered substantial, even though the trips could involve large vehicles carrying heavy equipment. The number of construction-generated trips would contribute a very small increase to the existing traffic and would not substantially increase the volume of traffic on neighboring roads and freeways.

The proposed project would not introduce any new land uses or change existing land uses within the Project area. As such CMP's TIA requirements do not apply. In addition, the traffic generated from construction would fall below CMP TIA thresholds of 100 or more net new weekday (a.m. or p.m. peak hour) or weekend peak hour trips, including both inbound and outbound trips.

Due to its minimal traffic generation, the proposed project would have minimal potential to conflict with any congestion management program or other applicable plan or policy establishing effectiveness measures for performance of circulation systems such as LOS, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The Project would have no impact on pedestrian, bicycle paths, and mass transit as the Project is so rural that these elements are largely absent. The proposed project construction activities would have a less than significant impact.

Operations

The proposed use of ATVs and implementation of wet-weather delays would not alter current practices in a manner that would increase trips to Project sites for routine operations and maintenance activities. Operational changes would have no effect on existing traffic conditions as operational traffic would not increase. Where and when ATV's are used, these vehicles would replace a truck normally used for the same route.

C. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? *(No Impact)*

The Project sites are not located in close proximity to airports. The closest airport to the Project, South County Airport, has an approved Comprehensive Land Use Plan (CLUP), adopted by the County of Santa Clara November 19, 2008, that reduces safety risks. The proposed project would not conflict with any provisions of the CLUP. There would be no change in air traffic patterns or increase in traffic levels that result in substantial safety risks. The Project would have no impact related to air safety or traffic.

D. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? *(Less Than Significant)*

The proposed project would not include a design feature that would increase hazards. No new facilities or obstructions within public roadways, or alteration of existing features (e.g., road realignment), are proposed as part of the Project. Valley Water construction crews would be relatively small, and construction vehicles and equipment would be confined to publicly inaccessible areas at each of the Project sites. Mobilization and demobilization of the proposed project would result in large construction vehicles (graders, loaders, etc.) accessing various Project sites via local roadways. The presence of large, slow-moving equipment could result in temporary safety hazards. However, given the minimal amount of equipment needed to implement the proposed project, and the implementation of BMP TR-1 (Incorporate Public Safety Measures), traffic safety hazards would not be substantially increased, and impacts would be less than significant.

E. Result in inadequate emergency access? *(Less Than Significant)*

The proposed project would not include any permanent changes to existing emergency access. Slow moving construction vehicles entering and exiting the Project sites during construction could potentially delay emergency vehicles. However, because Valley Water construction crews on this small-scale construction Project would have little impact on any major road, it is unlikely that construction vehicles would obstruct emergency vehicles. Access for emergency vehicles would be maintained at all times during construction. Therefore, impacts would be less than significant.

F. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? *(No Impact)*

The proposed project would not conflict with plans or programs regarding public transit, bicycle, or pedestrian facilities. There would be no impact.

3.17 TRIBAL CULTURAL RESOURCES

3.17.1 Regulatory Setting

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require (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, i.e., tribal cultural resources. Section 21074(a) of the Public Resource Code defines Tribal Cultural Resources as:

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. above) 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.

AB 52 consultation requirements went into effect on July 1, 2015 for all projects that had not already published a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration or published a Notice of Preparation of an Environmental Impact Report.

3.17.2 Environmental Setting

3.17.2.1 Ethnographic, Religious, and Cultural Context

The ethnographic, religious, and cultural context for Tribal Cultural Resources was drawn from the Archaeological Resource Management report (Cartier 2002). The Project site is located in the Ohlone Region. The Ohlone Indians inhabited the San Francisco Bay regions from the Golden Gate south to Monterey. It is believed that the Ohlone Indians inhabited the area since A.D. 500. The first firmly recorded habitation site of the Santa Clara Valley dates to approximately 6400 years B. P. (before present). The earliest radiocarbon date that is available for the Ohlone Region is 12,000 B.P. (years before present). However, it is unclear when the earlier Paleo-Indians first came to the area (Cartier 2002).

The Ohlone were gatherers and hunters who utilized only the native flora and fauna with the exception of the dog. The abundant natural resources, year-round, ranging from the mountains to the bay area regions in the Santa Clara Valley, allowed these hunter gatherers to settle in semi-sedentary villages. The Ohlone generally had permanent villages with smaller villages in outlying areas to gather a variety of resources. Trading with other groups took place as far away as the Great Basin of Nevada. Items traded included shell beads, ornaments, and tools.

Ethnographic accounts have revealed repeated burning of the woodlands grass belt to reduce scrubby growth and encourage the growth of grasses and other plants. The plant growth succession after a burning is also rich in grains and legumes that were major food sources for Native Californians. Burning also created better hunting conditions since the vegetation after a burn is appealing to grazers such as deer and elk. Burning was not the only resource management practice that is close to agricultural practices. Plants were pruned and reseeded seasonally for optimal production, and foods such as acorns were stored for many months at a time.

The vast majority of prehistoric sites in the Santa Clara Valley are located along the waterways and date to the Middle Period which extended from approximately 3000 to 1000 years B. P. Fewer sites date to the Late Period, which extended between 1000 B. P. to the eighteenth century.

The Muwekma are the aboriginal inhabitants of the southern, eastern and western regions of the San Francisco Bay Area, including all of what is now San Francisco, San Mateo, Alameda, and Contra Costa Counties, much of what is now Santa Clara County, and parts of Santa Cruz, San Joaquin, Napa, and Solano Counties. The Muwekma Indians formed from the following aboriginal tribes: Passasimia/Yatikumne, Tamcan, Josemite, Lacquismne, Julpun, Napian/Karkin, Jalquin/Yrgin, Alson/Tamien, Suenen, Chupcan, Choquoime, and Nototomne.

Spanish missionaries forced the ancestors of the Muwekma Tribe into the Missions Dolores, San Jose, and Santa Clara in the late 18th and early 19th centuries. In the 1830's the Mexican Government secularized the missions and distributed their lands. Many Muwekma left the missions and resettled in other parts of the Bay Area, including a number of rancherias in Alameda County, including the Alisal Rancheria near Pleasanton, the Del Mocho Rancheria in Livermore, the El Molino Rancheria in Niles, as well as on rancherias in Sunol and San Leandro/San Lorenzo until the early part of the 20th century. The Muwekma people continue to reside in their aboriginal territory in the San Francisco Bay Area.

3.17.2.3 Tribal Cultural Resources within the Project Area

No Tribal Cultural Resources were identified by Reclamation or Valley Water within or adjacent to the Project sites.

In response to the Muwekma Ohlone Indian Tribe's request for AB 52 consultation, the consultation process began in late February 2019. Valley Water met with the tribe in March 2019 to share information on the Project sites and the nature/extent of Project activities and to address concerns that the tribe might have relating to potential existence of cultural resources and cemeteries and the Project's impacts on those resources. In April 2019, Valley Water and the tribe reached mutual agreement that the Project would not result in significant impacts on tribal cultural resources and that no mitigation measures other than Valley Water BMP CU-1 would be required, thus concluding the AB 52 consultation process.

3.17.3 Tribal Cultural Resources Impacts

3.17.3.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1. 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	☐	☐	☒	☐
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

3.17.3.2 Discussion

A. Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. 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

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (*Less Than Significant*).

Valley Water and Reclamation found no Tribal Cultural Resources listed or eligible for listing in the California Register of Historical Resources or on a local register of historical resources identified in the Project vicinity.

The cultural resources records research at Sonoma State University also did not identify presence of Tribal Cultural Resources at the proposed project sites.

Project construction activities would occur in areas consisting mostly of fill material or high disturbance from previous conduit and roadway construction, and thus the likelihood of encountering unrecorded archeological resources is low. However, in the unlikely event that unknown tribal cultural resources are encountered during proposed project construction, Valley Water would implement BMP CU-1 (Accidental Discovery of Archeological Artifacts, Tribal Cultural Resources, or Burial Remains) to avoid or minimize such impact.

In the event that unknown tribal cultural resources are encountered during construction, this BMP requires that work at the location of the find to be halted immediately within 100 feet and a “no work” zone would be established utilizing appropriate flagging to delineate the boundary of the area. An archeologist will visit the discovery site to evaluate the resources. If the archeologist determines that the artifact is significant, the archeologist will determine if the artifact can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archeologist will develop an Action Plan which will include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery.

Therefore, the proposed project would not cause a substantial adverse change in the significance of a Tribal Cultural Resource. With implementation of BMP CU-1 impacts to unknown tribal cultural resources would be less than significant. As discussed above, Valley Water has concluded AB 52 consultation with the Muwekma Ohlone Indian Tribe who agreed with Valley Water that the Project would not result in significant impact on tribal cultural resources.

3.18 UTILITIES AND SERVICE SYSTEMS

3.18.1 Environmental Setting

3.18.1.1 Water Supply

Valley Water receives water from federal, state, and local sources for treatment and delivery to water retailers. South County is supplied by locally developed water, recycled water, and CVP water imported via the San Felipe Division (including the PC and SCC). Both groundwater and imported water are sold to retailers. Valley Water also manages the groundwater basin to the benefit of agricultural users and other independent groundwater users. Valley Water sells water to 12 local municipalities and private retailers which in turn deliver drinking water directly to end users.

The Project vicinity is also served by the San Benito County Water District (SBCWD), which owns two surface water treatment plants in the Hollister Urban Area that deliver

drinking water to Sunnyslope County Water District and the City of Hollister. SBCWD also manages local and imported surface water through the San Benito River System and the San Felipe Distribution System.

The San Felipe System delivers imported CVP water to irrigation, municipal and industrial customers. The drinking water that the SBCWD delivers to Sunnyslope County Water District and the City of Hollister ultimately becomes recycled water from the City of Hollister's Reclamation Plant. This reclaimed water is then used for irrigation water by local farmers.

The local San Felipe distribution system is comprised of eight pressure reducing turnouts, four pumping facilities, eleven percolation sites, and the 10,000-acre foot San Justo Reservoir. Reclamation assets that the SBCWD shares with Valley Water are: The Pacheco Tunnel, Pacheco Pumping Plant and Pacheco Conduit.

SBCWD underground aquifers have a storage capacity of approximately 500,000 acre-feet of water. The three above-ground reservoirs in San Benito County (Hernandez, San Justo and Paicines) hold approximately 31,000 acre-feet combined. San Justo is used to store imported water and Hernandez Reservoir captures water from the highest peak in the county (San Benito Mountain) and helps to recharge the urban groundwater basin by releasing water from the reservoir into the San Benito River. The river makes its way from South County to the northwestern edge of San Benito County where it converges with the Pajaro River. Along the way, water is diverted off the San Benito River into the Paicines Reservoir where this water is also used to help with recharge efforts.

3.18.1.2 Wastewater

South County Regional Wastewater Authority (SCRWA) is a joint powers authority established to manage the treatment of wastewater for the Cities of Gilroy and Morgan Hill. In partnership with the Valley Water, SCRWA also operates a recycled water facility co-located at the treatment plant site. The SCRWA plant was built in 1990 and is a model of energy efficiency and cost-effective operation. The SCRWA reliably meets the steadily increasing demand for recycled water to irrigate local parks, golf courses, sports complex, landscape medians, agricultural and industrial uses. The plant's remaining effluent is disposed of in percolation ponds. The ponds allow the water to soak into the soil and eventually add water to the underground aquifer. This is different from many other treatment plants in the Bay Area that discharge effluent directly to the Bay. Discharge to ponds requires a more stringent level of treatment than is required for Bay discharge.

Rural residential properties outside the urban boundaries of Morgan Hill and Gilroy typically rely on septic systems approved by the respective County.

3.18.1.3 Stormwater

Storm water collection systems are discussed in Section 3.10 Hydrology and Water Quality.

3.18.1.4 Gas and Electricity

Pacific Gas and Electric and the Northern California Power Agency provide electricity to Santa Clara, San Benito and Merced Counties. Utility lines are often found along the same easements as the Project pipelines, often underneath roadways especially in the urban areas of Santa Clara or San Benito Counties. In rural areas, electricity is usually provided through aboveground utility lines. In some areas, utility lines are located directly above vaults.

3.18.1.5 Landfills

Santa Clara County the Department of Environmental Health (DEH) Solid Waste Program is certified by the California Department of Resources, Recycling and Recovery (CalRecycle) as the Local Enforcement Agency (LEA) for the unincorporated areas of including all cities except the City of San Jose, which serves as its own LEA. The LEA regulates solid waste facilities to ensure compliance with state minimum standards. The closest Santa Clara County waste facility to the proposed project sites would be the San Martin Transfer Station located at 14070 Llagas Avenue in San Martin.

In San Benito County, the Integrated Waste Management Department is responsible for oversight of landfill operations and the county refuse/recycling contract. In addition, this department serves as lead agency for the San Benito County Integrated Waste Management Regional Agency, which consists of the unincorporated county and cities of Hollister and San Juan Bautista and is responsible for compliance with State of California mandated waste diversion goals of 50% (AB 939). This department also implements the county-wide Household Hazardous Waste program and Small Quantity Generator program for qualifying business hazardous waste.

The San Benito County Integrated Waste Management Regional Agency is primarily responsible for ensuring compliance with federal and state mandated regulations that ensure public health and safety related to refuse and household hazardous waste.

Activities consist of the following:

1. Landfill operations oversight and regulatory compliance.
2. Refuse and recycling contract oversight.
3. Household Hazardous Waste program.
4. Small Quantity Generator program.
5. Public education on waste diversion and household hazardous waste.

Recology holds an exclusive franchise agreement for the collection of waste and recycling in the City of Hollister, the city of San Juan Bautista, and most parts of Unincorporated San Benito County.

The John Smith Road Landfill is owned by the County of San Benito and operated by Waste Connections, Inc. The facility is located at 2650 John Smith Road in Hollister. The site accepts municipal solid wastes, construction/demolition wastes and special wastes with proper approval. The landfill can provide transportation and disposal services for municipal solid waste, industrial waste, and special wastes including asbestos, and non-hazardous contaminated soils. The landfill can provide transportation and disposal services for construction and demolition wastes including transportation of large demolition projects using walking floor trailers. The facility also accommodates scrap tire hauling and processing.

3.18.2 Utilities and Service Systems Impacts

3.18.2.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
B. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
C. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
D. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
E. Result in a determination by the wastewater treatment provider that 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?	☐	☐	☐	☒
F. Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
G. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

3.18.2.2 Discussion

A. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? *(No Impact)*

B. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects*? (No Impact)*

The proposed project would not generate wastewater that requires treatment. As discussed in Item D below, water from existing water service at hydrants via permits would be sufficient in serving the demand of water during construction of the Project. Thus, the proposed project would not exceed wastewater treatment requirements of the RWQCB or result in the construction of new or expanded water or wastewater treatment facilities. There would be no impact.

C. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? *(Less Than Significant)*

The proposed project would not result in the construction of new stormwater drainage facilities or expansion of existing facilities. The proposed project would also not substantially increase impervious surfaces or alter drainage patterns on the Project sites. The proposed project would create highly localized impervious features at the driveway, gravel collar, and path construction Project sites. These impervious areas would be small in extent and would not constitute a substantial increase in impervious area that could substantially contribute to stormwater flows. Further, runoff from the impervious features would be directed onto adjacent vegetated areas to reduce the amount and flowrate of stormwater runoff. However, none of the other Project sites would require construction of new stormwater drainage facilities or expansion of existing facilities off the Project sites. Minimal impervious surfaces currently exist on the Project sites. The Project would be designed to ensure there would be no increase in stormwater runoff. As previously stated in the Section 3.9 Hydrology and Water Quality, implementation of Valley Water BMPs and compliance with the SWPPP would limit runoff. There would be less than a significant impact from the Project.

D. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed? *(Less Than Significant)*

The proposed project would not generate any substantial new water demand. Proposed path, driveway, and gravel collar construction would require water for dust control. Dust control for gravel collar construction sites would require approximately one water truck load (approximately 2,000 gallons) per vault site for a total of 18 collars to be constructed. Dust control for driveway construction sites would require approximately one water truck load per driveway site for a total of five driveways to be installed. Dust control for construction of the new gravel path to SCC 8 would require approximately 20 water truck loads for path

construction. Water for construction activities would be obtained by connecting to existing sources of water (hydrants by permit) near the Project sites. Existing hydrant sources would adequately serve the water needs for proposed construction without requiring new or expanded entitlements. The Project would have less than a significant impact on water supply.

E. Result in a determination by the wastewater treatment provider that 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? *(No Impact)*

As discussed in Items A and B above, the proposed project would not generate wastewater that would need to be treated by a wastewater treatment plant. There would be no impact.

F. Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs? *(Less Than Significant*)

As described in the Project Description, any soil removed from the Project sites would be recycled on other Valley Water projects if possible or disposed of at landfill facilities. Any vegetation or shrubs removed during construction would be taken to a composting facility. The minor amounts of soil and vegetative waste generated by the Project would not exceed the permitted capacity of nearby available solid waste disposal facilities. There would be less than a significant impact on landfill capacity.

G. Comply with federal, state, and local statutes and regulations related to solid waste? (*No Impact*)

The proposed project would not generate any significant level of solid waste needing disposal during the construction or operation of the Project. The Project would comply with applicable federal, state, and local laws and regulations related to solid waste during construction, operation and maintenance. No impacts related to compliance with federal, state or local statues and regulations to solid waste would occur from the Project.

3.19 ENERGY

3.19.1 Environmental Setting

3.19.1.1 Gas and Electricity Energy Resources

Pacific Gas and Electric and the Northern California Power Agency provide electricity to Santa Clara, San Benito and Merced Counties. Utility lines are often found along the same easements as the Project pipelines, often underneath roadways especially in the urban areas of Santa Clara or San Benito Counties. In rural areas, electricity is usually provided through aboveground utility lines. In some areas, utility lines are located directly above vaults.

3.19.2 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. Result in 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?	☐	☐	☐	☒

3.19.3 Discussion

A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

The Project is a relatively small construction project focusing on improving access to an existing water transmission line for future maintenance by acquiring easements and implementing new travel routes and constructing improvements on and/or near 37 vaults on the existing Santa Clara Conduit and Pacheco Conduits identified in Table 2.1-1 and Figure 2.1-1. Some of the vaults have more than one project element (e.g., any combination of easement, gravel collar, driveway construction, fences, gates, or sign installation) as listed in Section 2 of this document.

The Project scale is “de minimis” in relation to:

1. The Project’s energy requirements and its energy use efficiencies in terms of fuel amount used and fuel type for each stage of the Project’s life cycle including construction, operation, maintenance.

2. The effects of the Project on local and regional energy supplies and on requirements for additional capacity.

3. The effects of the Project on peak and base period demands for electricity and other forms of energy.

4. The degree to which the Project complies with existing energy standards.

5. The effects of the Project on energy resources.

Therefore, the Project would not result in significant 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?

The small-scale construction Project related to existing water line and appurtenances will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.20 WILDFIRE

3.20.1 Environmental Setting

3.20.1.1 Hazard Severity Zones

The California Department of Forestry maps of designated Very High Fire Hazard Severity Zones places the Project site in a Local Responsibility Area (California Department of Forestry and Fire 2007; 2008). The Project sites are surrounded by grassy hillsides, which could present the potential for wildfires.

3.20.2 Checklist

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

3.20.3 Discussion

A. Substantially impair an adopted emergency response plan or emergency evacuation plan? (Less Than Significant)

Answered in Checklist, See Section 3.8.2.2, Section G which reads as follows:

Proposed project activities are located within Santa Clara and San Benito Counties. The County of Santa Clara Emergency Operations Plan (2017) and the San Benito County Operational Area Emergency Operations Plan (2015) provide the needed foundation for the management of emergencies and disasters and addresses the integration and coordination with other governmental levels when required. There are no known designated emergency evacuation routes within the Project areas.

Valley Water would coordinate with the applicable counties and/or cities to ensure that access for emergency vehicles is always maintained during construction activities. Based on the above analysis, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. impede emergency access to the Project area and/or surrounding area. This impact is therefore less than significant.

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? (Less Than Significant with Mitigation)

The Project sites are within the confines of San Felipe System pipe corridor boundaries. BMP HM-12, which incorporates fire prevention measures, would be implemented to minimize potential of fire hazards.

Valley Water in 2017 adopted its Local Hazard Plan which identifies fire hazard history, risk, and climate change considerations as discussed below.[4]

HAZARD HISTORY

Except for some parts of the Central Valley and the Colorado Desert, all of California has experienced wildfire disasters. From 1950 to 2012, Santa Clara County saw five declared wildfire disasters, more than any other Bay Area county except for Napa County (Cal OES 2013). Most wildfires in Valley Water's service territory have occurred near the eastern border with Stanislaus County, although some have occurred in the Santa Cruz Mountains in the southwestern part of Valley Water's service territory (ABAG 2014). Past notable fires in Valley Water's service territory include the 2008 Summit Fire, which burned 4,270 acres along with 35 residences, and 64 outbuildings along the border with Santa Cruz County (Cal Fire 2008b); 2009 Pacheco Fire, which burned 1,650 acres; 2014 Curie Fire

[4] 2017. Santa Clara Valley Water District Local Hazard Plan

which burned 125 acres off Curie Drive south of San Jose; 2015 Pacheco Fire, which burned 215 acres off Highway 152, 3 miles west of the San Luis Reservoir; 2016 Sierra Fire, which burned 114 acres off Sierra Road and Calaveras Road; 2016 Bailey Fire, which burned 100 acres off highway 101 and Bailey Road; 2016 Oak Fire, which burned 25 acres off Oak Glen Avenue, 2 miles west of Morgan Hill; and the 2016 Loma Fire, which burned 4,474 acres and destroyed 12 residences and 16 outbuildings off Loma Prieta Road and Loma Chiquita Road, 10 miles northwest of Morgan Hill.

RISK OF FUTURE HAZARDS

Wildfires are often caused by humans, intentionally or accidentally. There is no way to predict when one might break out. Low precipitation and high temperatures increase the possibility of wildfires throughout the county. According to the State of California Multi-Hazard Mitigation Plan and the California Department of Forestry and Fire Protection, Santa Clara County experiences wildfires every two to three years, and all indications are that such events will continue to occur. Wildfires are likely to continue to affect the more mountainous areas of the Valley Water's service territory and the communities in these locations, although more urbanized areas near the Wildland Urban Interface (WUI)may be threatened in some circumstances. Based on the analysis identified in Figure 3.20-1, Wildfire Hazard Zones, from Valley Water's Local Hazard Mitigation Plan areas, where high or very high wildfire hazard zones and landslide hazard zones intersect will be most prone to soil instability post wildfire and should be a focus for future mitigation.

CLIMATE CHANGE CONSIDERATIONS

Climate change is expected to cause an increase in the risk of wildfires as a result of warmer temperatures, decreases in precipitation, and increases in the frequency and severity of drought conditions. While the greatest increases in risk are expected to occur in the Sierra Nevada and the mountains of northwestern California (potentially up to a twelvefold increase in burnt areas by the 2080s), other parts of California are expected to see mild to moderate increases. In Valley Water's service territory, the wildlands and WUI lands may see a 10–20 percent increase in the amount of land burned by wildfires by the end of the century (CEC 2017)

The impacts of climate change on wildfires are already being felt. On October 30, 2015, Governor Brown declared a state of emergency for all of California due to increased tree mortality brought on by ongoing drought conditions. In the proclamation, Governor Brown noted that the US Forest Service estimated that 22 million trees had already died, and tens of millions more were likely to die by the end of 2015. The proclamation also declared that the increased tree mortality was large enough to elevate the fire risk in large parts of California, as well as posing other hazards (Office of the Governor 2015b). In multiple recent disaster proclamations, the governor has noted the impacts of the drought and its related effects on escalating wildfire risk in the state (Office of the Governor 2014b, 2015c, 2015d, 2015e).

Because several Project locations have been identified as high wildfire zones as shown on Figure 3.20-1, construction of the Project could exacerbate wildfire risks and the impact is considered significant. Valley Water would implement Mitigation Measure WF-1 to address this significant impact. Mitigation Measure WF-1 would require preparation and implementation of a health and safety plan, which typically would not be required if construction would occur over a single project site that meets wildland-urban interface requirements from CALFIRE or otherwise a site not located within a high wildfire hazard zone.

Mitigation Measure WF-1: CONSTRUCTION FIRE MANAGEMENT

1. A Health and Safety Plan shall be developed by Valley Water or its contractor and reviewed by all Project staff prior to the start of any work. The Plan will contain the following measures:

    a. Spark arresters or turbo charging (which eliminates sparks in exhaust) and fire extinguishers shall be required for all heavy equipment.

    b. Construction crews shall be required to park vehicles away from flammable material, such as dry grass and brush.

    c. At the end of each workday, heavy equipment shall be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.

    d. A Site Maintenance Plan, will be prepared prior to construction and shall contain procedures, techniques, and timing of fuel modification and fire prevention activities in upland habitat areas.

    e. No Project construction work shall take place during periods of designated “extreme” fire danger, as established by CalFIRE.

    Preparation of a Health and Safety Plan and implementation of fire management practices during construction would reduce the risk of loss, injury, or death involving wildland fires to a less than significant level.

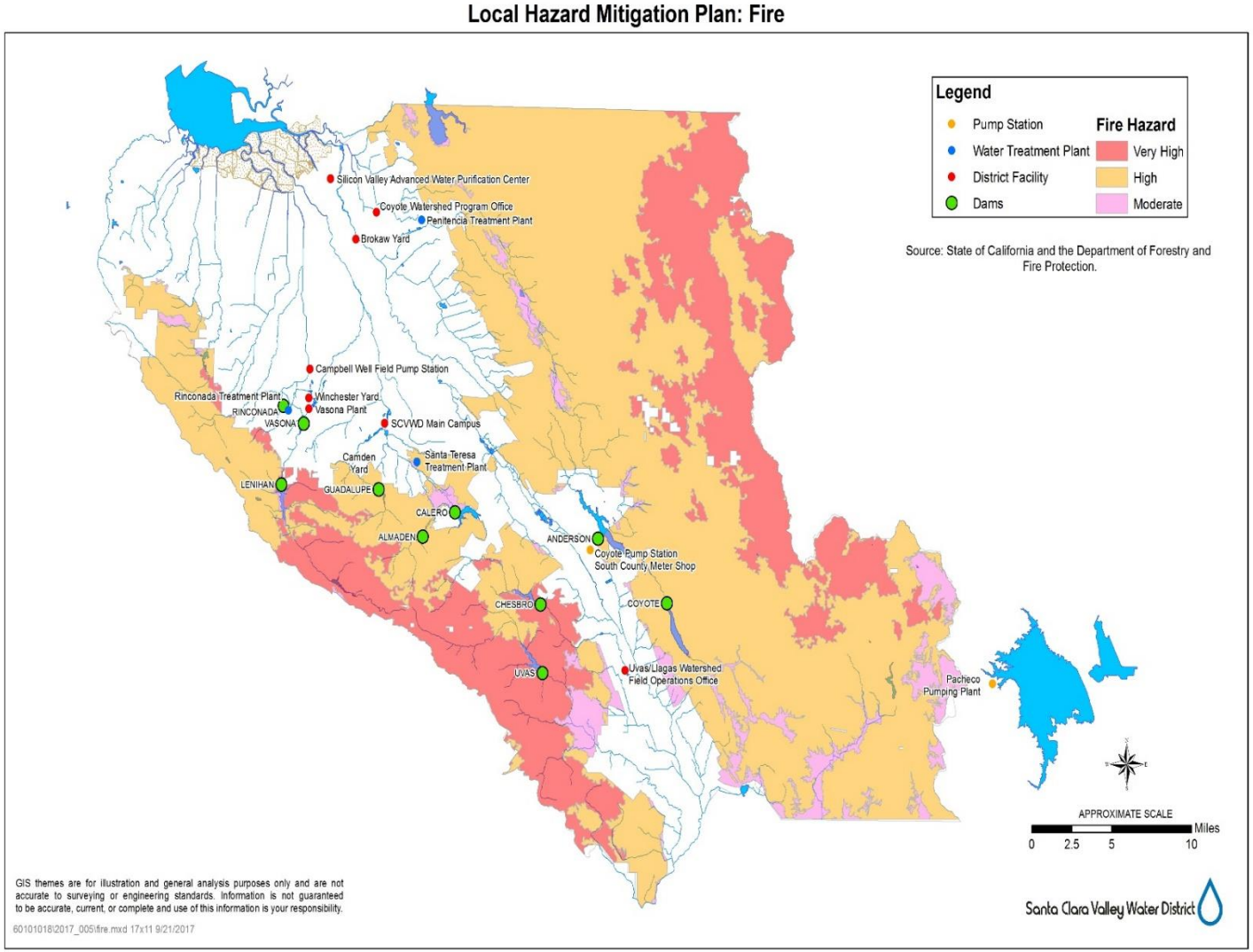

FIGURE 3.20-1
Wildfire Hazard Zones

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? (Less Than Significant with Mitigation)

As described above, several Project locations have been identified as high wildfire zones. Project construction could exacerbate wildfire risks and the impact is considered significant for purpose of this analysis. Valley Water would implement Mitigation Measure WF-1 to address this significant impact. Mitigation Measure WF-1 requires preparation and implementation of a health and safety plan and fire prevention practices which would reduce the impact to a less-than-significant level.

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? (Less Than Significant)

The proposed project would not 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 as the Project will not:

1. Alter the course of any waterways. New features would be installed at existing grades, thereby leaving existing drainage patterns unchanged. The new path to be constructed from SR 152 to SCC 8 would be designed with responsible drainage design. Runoff from the path would be directed onto adjacent vegetated areas to reduce the amount and flowrate of stormwater runoff.

2. Have uncontrolled runoff from gravel collars. Runoff water would be directed onto adjacent vegetated areas. As discussed above, construction of the proposed project features would have the potential to expose site soils to erosion and mobilize sediments in stormwater. However, with implementation of Valley Water BMPs WQ-9 and WQ-16 and VHP AMMs 3, 4, 5, 6, 13, 39, 58 and 61, and compliance with the SWPPP requirements, the proposed project would not substantially alter the drainage pattern that would result in substantial erosion, siltation, or flooding or landslides on or off site.

3. Create or contribute runoff that would exceed the capacity of existing drainage systems or provide substantial additional sources of polluted runoff.

Post wildfire impacts would be considered less than significant.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

3.21.1 Checklist

Would the Project:	Potentially Significant Impact	Less Than Significant Impact 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
B. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
C. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

3.21.2 Discussion

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? *(Less Than Significant with Mitigation)*

The proposed project would have the potential to degrade the quality of the environment and result in several impacts that would be considered significant. These include impacts relating to cultural resources and biological resources. Each of these potentially significant impacts would be reduced to less-than-significant through mitigation as discussed in previous sections of this Initial Study.

As discussed in Section 3.4 Biological Resources, the Project would potentially result in substantial adverse effects on protected species, riparian habitat or sensitive natural community, and wetlands, but the proposed mitigation measures and best management practices would reduce these impacts to a less than significant level.

As discussed in Section 3.5 Cultural resources and Section 3.17 Tribal Cultural Resources, although no known historic, archeological, or tribal cultural resources were expected to be impacted by the proposed project, there is some potential of discovering unknown historical, archaeological, or tribal cultural resources, during construction in the proposed project areas. With implementation of Valley Water BMP CU-1, impact on these unknown resources would be less than significant in the unlikely event that they are encountered during construction. The initial study also concludes that the proposed project could result in a significant impact on unknown unique paleontological resources; implementation of Mitigation Measure CU-1 would reduce this impact to a level of less than significant.

A. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. *(Less Than Significant with Mitigation)*

Cumulative impacts are those impacts that by themselves may not be significant, but when considered with impacts occurring from other projects in the vicinity, would result in a cumulative impact. Cumulative impact analysis should consider projects that are reasonably foreseeable and that would be constructed or operated during the life of the Project. The proposed project would be located within the existing alignment of the San Felipe System of water facilities. No other projects (other than annual maintenance of the system as described in the Valley Water's Pipeline Maintenance EIR) are anticipated to occur in the immediate area of the Project at the same time when the proposed project is constructed (with possible exception of the Coyote Warehouse construction located adjacent to the Coyote Pumping Plant). As described in this MND, the significant impacts (mostly temporary and construction-related) would be reduced to less than significant levels with implementation of mitigation measures and applicable best management practices. Therefore, the proposed project would not make a cumulatively considerable contribution to a significant cumulative impact.

B. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? *(Less Than Significant)*

As described in the preceding sections, the proposed project would result in either no impact or less than significant impact on aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology/water quality, land use planning, mineral resources, noise, population/housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems.

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APPENDIX A
Air Quality Calculations
California Emissions Estimator Model (CalEEMod)

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APPENDIX B
Biological Resource Studies

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APPENDIX C
Cultural Resources Information

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APPENDIX D
Definitions of Pipeline Equipment

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Figure D-1-1: AIR RELEASE VALVE

There are three primary sources of air in a pipeline. First, at startup, the pipeline contains air which must be exhausted during filling. As the pipeline is filled, much of the air will be pushed downstream and released through hydrants, faucets, and other mechanical apparatus. A large amount of air, however, will become trapped at system high points.

Second, water contains about 2 percent air by volume based on normal solubility of air in water. The dissolved air will come out of solution with a rise in temperature or a drop in pressure which will occur at high points due to the increase in elevation. Finally, air can enter through equipment such as pumps, fittings, and valves when vacuum conditions occur.

The effect of trapped air in a pipeline can have serious effects on system operation and efficiency. As air pockets collect at high points, a restriction of the flow occurs that produces unnecessary head loss. A pipeline with many air pockets can impose enough restriction to stop all flow. Also, sudden changes in velocity can occur from the movement of air pockets.

When passing through a restriction in the line such as a control valve, a dislodged pocket of air can cause surges or water hammer. Water hammer can damage equipment or loosen fittings and cause leakage. Finally, corrosion in the pipe material is accelerated when exposed to the air pocket, which can result in premature failure of the pipeline.

Air is sometimes removed from a line with a manual vent during initial startup, but this method does not provide continual air release during system operation nor does it provide vacuum protection. Today, municipalities use a variety of automatic air valves at the pump discharge and along the pipeline.

VAULTS

This type of vault is a location where maintenance workers can access devices attached to the pipeline to maintain air relief valves (Devices that release entrapped air in the pipeline). There are other vaults that contain blow off valves that allow Valley Water work crews to drain portions of the pipeline for maintenance.

Typical Vault

Vault with Air Release Valve

APPENDIX E
Travel Routes (Existing And Proposed)

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