

# memorandum

date November 2, 2020

to John Forsythe, AICP

Cc Cory Barringhaus (ESA), Eric Zigas (ESA)

From Sharon Dulava (ESA)

subject MPWSP – Carmel Valley Pump Station Project and Ryan Ranch – Bishop Interconnection Improvements Project Weekly Report (10/26/2020 – 10/30/2020)

## ***Construction Activities***

### Carmel Valley Pump Station

- Installation of exclusionary fencing surrounding the expanded work area.
- Excavation within work limits for pump station components.
- Work conducted by Monterey Peninsula Engineering (MPE).

### Ryan Ranch – Bishop Interconnection

- Flushing of pipeline.
- Work conducted by MPE.

## ***Compliance Activities***

### Carmel Valley Pump Station

- ESA did not conduct a site inspection during the week of 10/26/2020 – 10/30/2020. Denise Duffy & Associates (CalAm monitors) were on site for compliance inspections on 10/26/2020 and 10/27/2020. Compliance inspections included monitoring installation of temporary exclusionary fencing (silt fence) and proper trash disposal (Mitigation Measure 4.6-1c) and conducting Worker Environmental Awareness Training for one new crew member (Measure 4.6-1b). Additional information about compliance activities is included in the weekly CalAm report included in **Appendix A**.

- CalAm monitors submitted a Biological Survey and Monitoring Report for the expanded parking/staging area described in Minor Project Refinement One (**Appendix B**). A pre-construction survey for California red-legged frog was conducted within the limits of the new staging/parking area in accordance with Mitigation Measure 4.6-1o. No California red-legged frogs were observed during the survey effort.

#### Ryan Ranch – Bishop Interconnection Improvements

- ESA did not conduct a site inspection during the week of 10/26/2020 – 10/30/2020. No compliance issues were reported by CalAm monitors. A weekly CalAm report was not submitted for activities at the Ryan Ranch – Bishop Interconnection Improvements project.

### ***Compliance Issues and Resolutions***

#### Carmel Valley Pump Station

- The following compliance issues (refer to **Mitigation Measure 4.6-1c**) were observed by CalAm monitors on 10/26/2020 and 10/27/2020:
  - CalAm monitor identified a section of exclusion fence that needed to be installed.
  - CalAm monitor identified a section of fencing that was compromised and in need of repairs and notified construction crew.

#### Ryan Ranch – Bishop Interconnection Improvements

- No compliance issues were reported during the week of 10/26/2020 – 10/30/2020.

# **APPENDIX A**

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## **CalAm Weekly Report**



DATE: October 30, 2020

TO: Cory Barringhaus, Environmental Science Associates (ESA)

FROM: Matthew Johnson, Denise Duffy & Associates, Inc. (DD&A)

CC: Even Holmboe, ESA  
Sharon Dulava, ESA  
Tyler Potter, DD&A

Denise Duffy & Associates, Inc. (DD&A) is contracted with AECOM to provide biological monitoring support for the California American Water Company (CalAm) Carmel Valley Pump Station (CVPS) component of the larger Monterey Peninsula Water Supply Project (MPWSP). Biological monitoring includes providing environmental guidance to construction personnel and ensuring the project remains in compliance with the Mitigation, Monitoring, Compliance, and Reporting Program (MMCRP).

This report summarizes the results of monitoring for the week of October 26, 2020 through October 30, 2020.

Project/Component: <b>Carmel Valley Pump Station</b>	Work Location: <b>Carmel Valley Road &amp; Rancho San Carlos Road</b>
Monitoring Period: <b>10/26/2020 – 10/30/2020</b>	Project Completion Status: <b>Excavation for Pump Station Components, Work Limits Expansion and Fencing</b>
Construction Contractors/Personnel: <b>Monterey Peninsula Engineering</b>	Biological Lead: <b>M. Johnson</b>
Biological Monitor/s: <b>M. Hofmarcher</b>	Days on Site: <b>10/26, 10/27</b>

Biological Surveys: <b>N/A</b>	WEAT Training: <b>Yes</b>
New Sensitive Resources: <b>No</b>	SWPPP Corrective Actions/Maintenance: <b>No</b>
Encountered Special-Status Species: <b>No</b>	Hazardous Spills: <b>No</b>
Relocated Plants or Wildlife: <b>No</b>	Compliance Issues: <b>Yes</b>

**Summary of Construction Activities**

This section is intended to provide a brief summary of daily construction progress.

10/26/2020

- Crew installed exclusionary fencing surrounding expanded work area.

10/27/2020

- Crew excavating within work limits for pump station components.

## **Summary of Monitoring Activities**

10/26/2020

- DD&A compliance monitor inspected the status of exclusionary fencing and proper trash disposal in accordance with Mitigation Measure 4.6-1c.
  - Identified section of exclusionary fencing to be installed.
- DD&A performed ongoing monitoring according to Mitigation Measure 4.6-1a.
- Photographed and recorded all monitoring activities.

10/27/2020

- DD&A compliance monitor inspected the status of exclusionary fencing and proper trash disposal in accordance with Mitigation Measure 4.6-1c.
  - notified crew of one section of fencing that was compromised and needed repairs.
- DD&A compliance monitor performed Worker Environmental Awareness Training and Education for 1 new construction crew member in accordance with Mitigation Measure 4.6-1b.
- DD&A performed ongoing monitoring according to Mitigation Measure 4.6-1a.
- Photographed and recorded all monitoring activities.

**Compliance Checklist**

Compliance Question	Compliance Level	Note
MM 4.6-1b - WEAT		
4.6-1b. Construction Worker Environmental Awareness Training and Education		
4.6-1b. 1. All workers attend WEAT training and have sticker on hardhat?	Yes	
MM 4.6-1c - GENERAL		
4.6-1c. General Avoidance and Minimization Measures		
4.6-1c. 1. Construction footprint, staging areas, equipment access routes, and disposal or temporary placement of spoils, delineated with stakes and flagging prior to construction to avoid natural resources outside of the project area?	Yes	
4.6-1c. 2. Construction vehicles within the delineated construction work area boundary or local road network?	Yes	
4.6-1c. 3. Vehicles and equipment in project area maintaining 15 miles per hour or less speed limit?	Yes	
4.6-1c. 4. Excavated soils stockpiled in disturbed areas lacking native vegetation and marked to define the limits?	Yes	
4.6-1c. 5. Standard best management practices employed to prevent loss of habitat due to erosion caused by project related impacts?	Yes	
4.6-1c. 6. Fueling of construction equipment within existing paved areas and at least 50 feet from drainages and native habitats?	Yes	
4.6-1c. 7. Introduction of exotic plant species avoided through physical or chemical removal and prevention?	Yes	
4.6-1c. 8. Use of herbicides as vegetation control measures used only when mechanical means have been deemed ineffective?	N/A	
4.6-1c. 9. Prior to construction at any site where special-status amphibians, reptiles and mammals have a moderate or high potential to occur, the construction work area boundary was fenced with a temporary exclusion fence to prevent special-status wildlife from entering the site during construction?	Yes	
4.6-1c. 10. If special-status wildlife species were found on the site immediately prior to construction or during project construction, construction activities ceased in the vicinity of the animal until the animal moved on its own outside of the project area?	N/A	
4.6-1c. 11. Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, qualified biologist(s) surveyed within the exclusion area to ensure that no special-status species were present?	N/A	
4.6-1c. 12. All excavated, steep-walled holes or trenches more than 2 feet deep were inspected for trapped animals and covered with plywood or similar materials at the close of each work day, or escape ramps constructed of earth fill or wooden planks positioned within the excavations to allow special-status wildlife to escape on their own?	Yes	
4.6-1c. 13. All construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more were inspected for special-status wildlife before the pipe was subsequently buried, capped, or otherwise used or moved in any way?	Yes	
4.6-1c. 14. All vertical tubes used in project construction, such as chain link fencing poles or signage mounts, were temporarily or permanently capped at the time they are installed to avoid the entrapment and death of special status birds?	Yes	
4.6-1c. 15. Water used for dust abatement was minimized in an effort to avoid the formation of puddles that could attract common ravens and other predators to the construction work areas?	Yes	
4.6-1c. 16. Parked vehicles or equipment in the project area were inspected underneath for wildlife prior to moving?	Yes	
4.6-1c. 17. All vehicles and equipment were in proper working condition to ensure that there was no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials?	Yes	
4.6-1c. 18. Trash and food items were contained in closed containers and removed from the construction site daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs?	Yes	
4.6-1c. 19. Workers did not feed wildlife and bring pets and firearms to the construction work areas?	Yes	
4.6-1c. 20. Workers did not intentionally kill or collect wildlife species, including special-status species in the project area and surrounding areas?	Yes	
MM 4.6-1e - SPECIAL STATUS PLANTS		
4.6-1e. Avoidance and Minimization Measures for Special-status Plants		

Compliance Question	Compliance Level	Note
4.6-1e. 3. Special-status plants located within temporary construction areas were fenced or flagged for avoidance (if feasible) prior to construction?	N/A	
MM 4.6-1i - NESTING BIRDS		
4.6-1i. Avoidance and Minimization Measures for Nesting Birds		
4.6-1i. 1. If a break of 10 days or more in construction activities during the breeding season, a new nesting bird survey was conducted before re-initiating construction?	Yes	
4.6-1i. 3. Surveys covered all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds?	Yes	
4.6-1i. 2. For all construction activities scheduled during the nesting season (February 1 to September 15), a qualified biologist conducted a pre-construction avian nesting survey no more than 10 days prior to the start of staging, site clearing, and/or ground disturbance?	Yes	
4.6-1i. 4. Clearance surveys were performed prior to work activities and impacts avoided?	Yes	
4.6-1i. 5. If special-status bird species were observed, was date, time, species, location, and behavior noted?	N/A	
MM 4.6-1k - WOODRAT		
4.6-1k. Avoidance and Minimization Measures for Monterey Dusky-Footed Woodrat		
4.6-1k. 5. Clearance surveys were performed prior to work activities and impacts avoided?	Yes	
4.6-1k. 6. If woodrat was observed, was date, time, species, location, and behavior noted?	N/A	
4.6-1k. 7. If relocation was necessary, were the guidelines in the relocation plan followed?	N/A	
MM 4.6-1o - CRLF & CTS		
4.6-1o. Avoidance and Minimization Measures for California Red-Legged Frog and California Tiger Salamander		
4.6-1o. 1. If California Red-legged Frog and California Tiger Salamander was observed, were the guidelines in the relocation plan followed and authorization from USFWS and CDFW obtained?	N/A	
4.6-1k. 2. If California Red-legged Frog and California Tiger Salamander was observed, was date, time, species, location, and behavior noted?	N/A	
MM 4.6-1p - INVASIVE PLANTS		
4.6-1p. Control Measures for Spread of Invasive Plants		
4.6-1p. 1. Driving or operating equipment was avoided in weed-infested areas outside of fenced work areas and travel was restricted to established roads?	Yes	
4.6-1p. 2. Leaving exposed soil or construction materials in areas with the potential for invasive plants (e.g., in staging areas) was avoided?	Yes	
4.6-1p. 3. Tools, equipment, and vehicles were clean before transporting materials and before entering and leaving worksites (e.g., wheel washing stations at Project site access points)?	Yes	
4.6-1p. 4. Vehicles and equipment were inspected for weed seeds and/or propagules stuck in tire treads or mud on the vehicle to minimize the risk of carrying them to unaffected areas?	Yes	
4.6-1p. 5. Vehicles and equipment inspected prior to project initiation at applicable work areas for weed seeds and plant fragments that could colonize within the site or be transported to other sites?	Yes	
4.6-1p. 6. At project initiation, all construction vehicles were cleaned to remove soil and plant fragments at designated locations, and vehicles or equipment that were not clean were rejected until clear of weed seed and plant fragments?	Yes	
4.6-1p. 7. All equipment and tools involved in soil disturbance at applicable work areas were disinfected using a 10% bleach or 70% isopropyl alcohol solution prior to initial use or prior to returning to applicable work areas if used on another project site?	Yes	
4.6-1p. 8. Only certified, weed-free, plastic-free imported erosion control materials (or rice straw in upland areas) were used for the project?	Yes	

**Photos**



10/26/2020 - Installed exclusionary fencing surrounding construction area.



10/26/2020 - Installed exclusionary fencing surrounding construction area.





10/26/2020 - Installed exclusionary fencing surrounding construction area.



10/26/2020 - Installed exclusionary fencing surrounding construction area.







10/27/2020 - Section of compromised exclusionary fencing, notified crew.



10/27/2020 - Intact exclusionary fencing surrounding construction area.



10/27/2020 - Intact exclusionary fencing surrounding construction area.

## **APPENDIX B**

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# Biological Survey and Monitoring Report

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# MONTEREY PENINSULA WATER SUPPLY PROJECT

## CARMEL VALLEY PUMP STATION PROJECT

MINOR PROJECT REFINEMENT ONE

BIOLOGICAL SURVEY AND MONITORING REPORT

NOVEMBER 2020

### Prepared For

**California American Water**  
511 Forest Lodge Road, Suite 100  
Pacific Grove, CA 93950



### Prepared By

**Denise Duffy & Associates, Inc.**  
947 Cass St., Suite 5  
Monterey, CA 93940



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APPENDIX B: CARMEL VALLEY PUMP STATION MMCRP

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# 1 INTRODUCTION

The purpose of this Biological Survey and Monitoring Report (Report) is to provide an overview of the construction phase wildlife survey effort and biological monitoring requirements for the Monterey Peninsula Water Supply Project (MPWSP), specific to the Carmel Valley Pump Station (CVPS) Project (Project) component. The site plans for the Project are shown in **Appendix A**.

This report discusses a Minor Project Refinement (MPR No. 1) California American Water (CalAm) submitted to the California Public Utilities Commission (CPUC) on October 2, 2020, requesting an expansion to the project's approved staging and parking area. The CPUC conditionally authorized MPR No.1 given that all proposed actions and construction is carried out in accordance with the methods and conditions described in Notice to Proceed (NTP) 3.

## 1.1 Project Description Minor Project Refinement

The proposed project is located on a 4-acre vacant site owned by CalAm at 26530 Rancho San Carlos Road, near the intersection of Rancho San Carlos Road and Carmel Valley Road in Carmel Valley, California. The project consists of the construction of a 764-square-foot booster pump station enclosed in a concrete masonry unit with the pumping capacity of 3 mgd (2,100 gpm) and the grading of 36 cubic yards of cut and 943 cubic yards of fill, totaling a net of 907 cubic yards. A 50 kW (68 hp) portable diesel-fuel powered generator will be stored onsite for use in the event of a power outage. Additionally, an inlet and outlet pipe will be installed to connect the CVPS to the existing 30-inch transmission main in Carmel Valley Road. Furthermore, an existing well on the property will be demolished and abandoned in conformance with Monterey County standards.

The project area applicable to this Report is shown in **Figure 1 (Project Location Map)**. Access to the project site is provided via Rancho San Carlos Road and an unnamed private driveway. All work will be performed exclusively within the construction area shown in **Figure 2 (Construction Footprint Map)**. Prior to MPR No. 1, construction of the CVPS was estimated in approximately 40,000 square feet (or 0.9 acre) of temporary disturbance, and 1,300 square feet (0.03 acre) of permanent disturbance. MPR No. 1 includes an additional 8,000 square feet (0.2) acres of temporary impacts for the refined parking/staging area.

# 2 PRE-CONSTRUCTION REQUIREMENTS

## 2.1 MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM COMMITMENTS

Environmental Commitments from the MMCRP that are applicable to the expanded staging/parking area identified in MPR No. 1 are identified below.

### 2.1.1 Survey Requirements

The following wildlife survey requirements were determined to be applicable expanded staging/parking area identified in MPR No. 1:

- Nesting Bird Species Pre-Construction Clearance Survey – MM 4.6-1i.
- Monterey Dusky-Footed Woodrat (MDFW, *Neotoma fuscipes luciana*) Nest Pre-Construction Clearance Surveys – MM 4.6-1k.

*Carmel Valley Pump Station*

*Minor Project Refinement One Biological Survey and Monitoring Report*

- Special-Status Bat Pre-Construction Utilization and/or Clearance Survey – MM 4.6-1l.
- Avoidance and Minimization Measures for California Red-Legged Frog (CRLF, *Rana draytonii*) – MM 4.6-1o<sup>1</sup>.

**Appendix B** contains a detailed description of each of these measures. Most of these measures (MM 4.6-1i, MM 4.6-1l, & MM 4.6-1k) were completed during the initial pre-construction survey effort. This report will not provide a discussion of these wildlife survey efforts. For additional information on these survey efforts please refer to the *Monterey Peninsula Water Supply Project Carmel Valley Pump Station Project Pre-Construction Biological Survey and Monitoring Report* (DD&A 2020).

### 2.1.2 Biological Monitoring Requirements

The following biological monitoring requirements are applicable to the expanded staging/parking area identified in MPR No. 1:

- Retain a Lead Biologist to Oversee Implementation of Protective Measures – MM 4.6-1a.
- Construction Worker Environmental Awareness Training and Education Program (CWEATEP) – MM 4.6-1b.
- General Avoidance and Minimization Measures – MM 4.6-1c.
- Avoidance and Minimization Measures for Native Stands of Monterey Pine – MM4.6-1m.
- Habitat Mitigation and Monitoring Plan – MM4.6-1n.
- Avoidance and Minimization Measures for California Red-Legged Frog – MM 4.6-1o.

Please refer to **Appendix B** for detailed descriptions of each of these measures. MM 4.6-1a, 4.6-1b, MM 4.6-1c were addressed in the previous pre-construction biological survey and monitoring report described above. This report will not provide any additional information on these measures. For additional information on these measures please refer to the *Monterey Peninsula Water Supply Project Carmel Valley Pump Station Project Pre-Construction Biological Survey and Monitoring Report* (DD&A 2020).

## 3 PRE-CONSTRUCTION SURVEY METHODS

### 3.1 California Red-Legged Frog

#### 3.1.1 California Red-Legged Frog Pre-Construction Activity Surveys

In accordance with MM 4.6-1o, a pre-construction survey for CRLF was conducted by biologists within habitat at the CVPS that had been identified as suitable, prior to vegetation removal or grading. Prior to conducting the surveys, a relocation plan that described the appropriate survey and handling methods for CRLF and identified nearby relocation sites where individuals would be relocated if found during the pre-construction surveys, was submitted to USFWS for approval. Pre-construction surveys to identify and flag any small mammal burrows were conducted prior to vegetation removal, grading, or installation of exclusion fence. All flagged mammal burrows identified during pre-construction surveys were first

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<sup>1</sup> California tiger salamanders (*Ambystoma californiense*) are not anticipated at CVPS therefore they have been omitted from this Report and the title of MM 4.6-1o has been altered. Measures from the United States Fish and Wildlife Service Biological Opinion for the avoidance and minimization of impacts to CRLF are consistent with MM 4.6-1o.

surveyed by scoping and then excavated by hand. Once the burrow was confirmed to be vacant, the burrow was collapsed.

## 4 PRE-CONSTRUCTION SURVEY RESULTS

### 4.1 California Red-Legged Frog

Pre-construction surveys for CRLF, which included identification, flagging, exploration/scoping, and eventual collapsing of mammal burrows, was conducted on September 10 and 11, 2020. All areas within and immediately adjacent to the temporary impacts associated with the parking/staging area proposed in MPR No. 1 were surveyed. No CRLF were observed during the survey effort.

## 5 CONCLUSION

### 5.1 Survey Requirements

Pre-construction biological surveys were conducted in compliance with MM 4.6-1o.

### 5.2 Biological Monitoring Requirements

#### 5.2.1 Mitigation Measure 4.6-1m

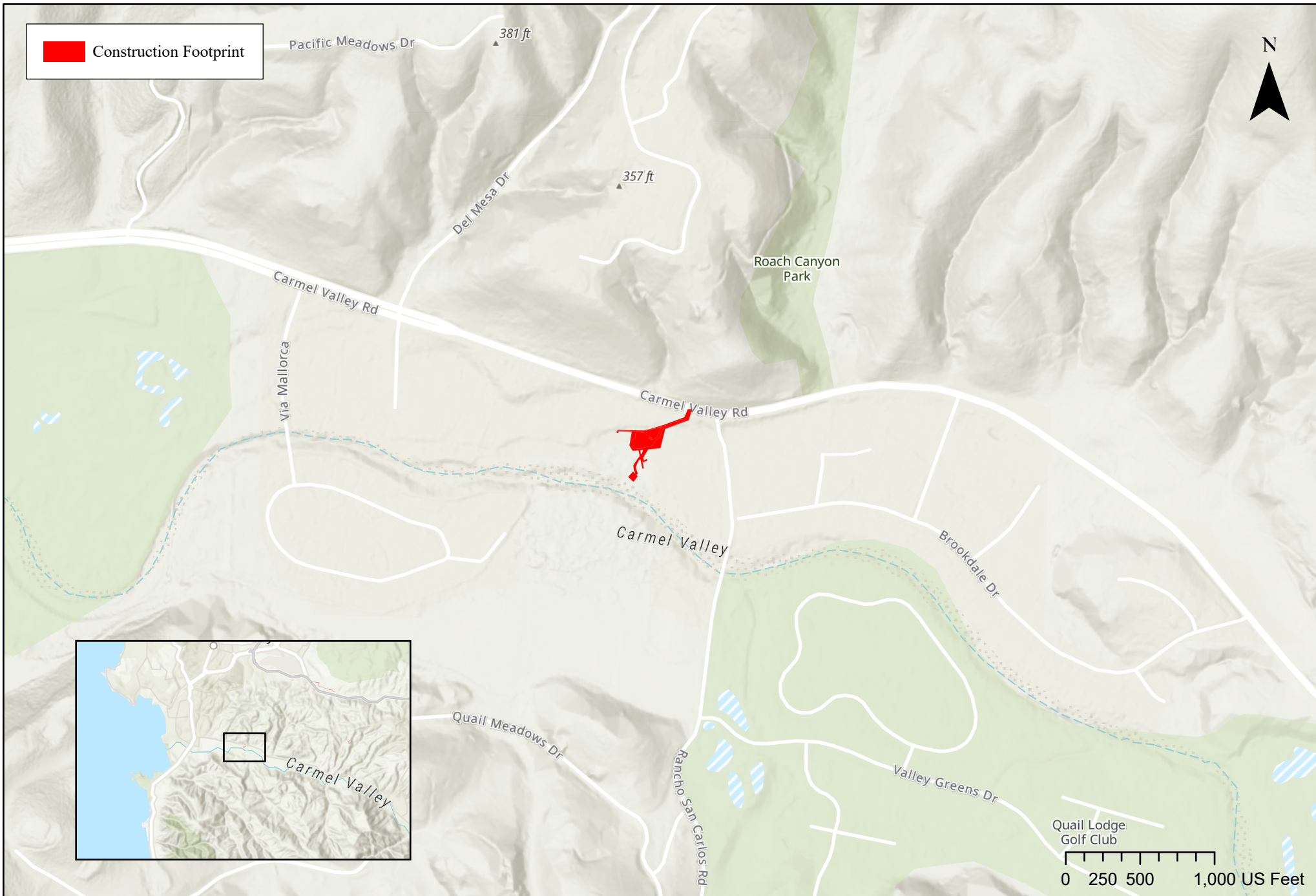
No Monterey pine trees are located within the proposed staging/parking area identified in MPR No. 1; therefore, no additional biological monitoring requirements will be necessary to satisfy MM 4.6-1m.

#### 5.2.2 Mitigation Measure 4.6-1n

Expansion of the staging and parking area will require modifications to some of the existing documentation. The EIR/EIS anticipated that approximately 0.3 acres of permanent impacts and 0.9 acres of temporary impacts to California red-legged frog (CRLF, *Rana draytonii*) upland dispersal habitat would result from construction of the pump station. In accordance with Mitigation Measures 4.6-1n and 4.6-1o from the EIR/EIS, the U.S. Fish and Wildlife Service's (Service) Biological Opinion (BO) for the project, and consultation with the California Department of Fish and Wildlife (CDFW), Cal Am prepared a Habitat Mitigation and Monitoring Program (HMMP) prior to construction to ensure that temporary and permanent impacts to CRLF habitat are minimized or mitigated. The HMMP requires habitat restoration at a 3:1 ratio for permanent impacts to CRLF habitat and at a 1.1:1 ratio for temporary impacts to CRLF habitat. The proposed minor refinement would result in an additional 0.2 acres of temporary impacts to CRLF upland dispersal habitat (**Figure 2**). The minor refinement would not result in any additional permanent impacts to CRLF habitat. In accordance with the measures identified above, Cal Am will restore all temporarily impacted CRLF habitat upon completion of construction activities. Because Cal Am cannot restore more on-site acreage than it impacts, Cal Am purchased mitigation credits from Sparling Ranch, a Service- and CDFW-approved CRLF conservation bank, to satisfy the mitigation requirements for impacts to CRLF habitat. Total additional temporary impact for this staging/parking area is 0.22 acres. Given that the temporary mitigation ratio is 1.1:1, and Cal Am will be restoring the 0.22 acres on site that leaves an additional 0.022 CRLF credits needed to cover the 1.1:1 temporary mitigation ratio. Cal Am is coordinating with USFWS to satisfy all the requirements of the Habitat Mitigation and Monitoring Program (HMMP), where these additional credits will be documented.

### **5.2.3 Mitigation Measure 4.6-1o**

Exclusion fencing that was installed prior to the start of construction will be modified to encompass the proposed staging/parking area. CPUC's representative, Environmental Science Associates (ESA), met with DD&A at the project site to determine the alignment of the modified exclusion fencing. The modified alignment will be installed by the project contractor prior to the restart of construction.



# CVPS Location Map

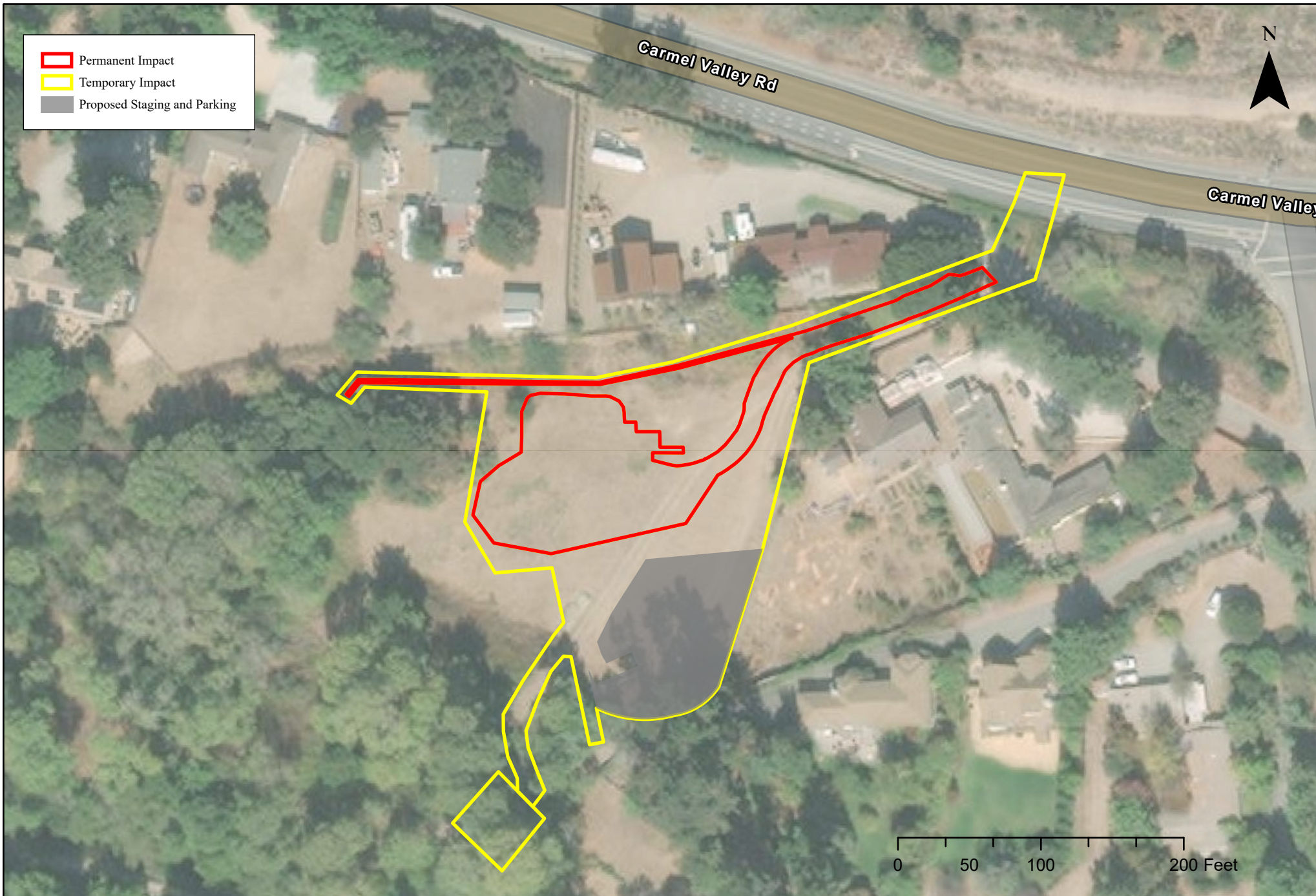
Date: 9/15/2020  
 Scale: 1:10,000  
 Project: 2016-64



Monterey | San Jose  
**Denise Duffy and Associates, Inc.**  
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 Monterey, CA 93940  
 (831) 373-4341

Figure  
1





# CVPS Construction Footprint

Date: 10/21/2020  
 Scale: 1:1,042  
 Project: 2016-64



Monterey | San Jose  
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Figure  
 2



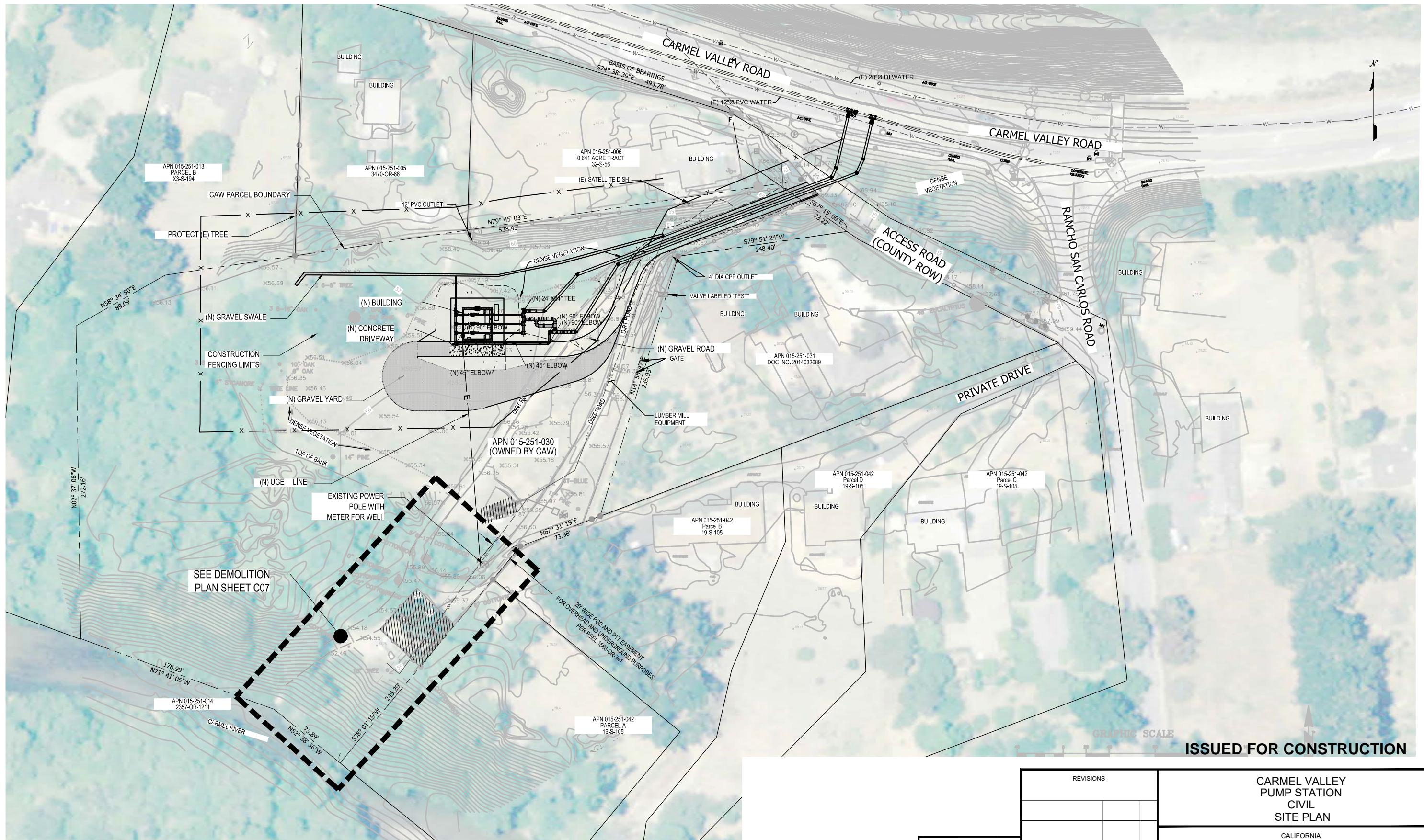
PRE-CONSTRUCTION BIOLOGICAL SURVEY AND MONITORING  
REPORT

APPENDIX A

CARMEL VALLEY PUMP STATION SITE PLANS



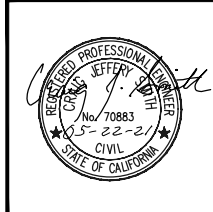
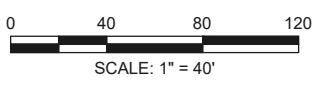
I:\Projects\Leacock\IE\CAW\_Design\26818629\6000\_Design\6100\_CAD\Pump\_Stations\Carmel\_Valley\_Pump\_Station\CAD\SHEETS\C02\_SITE\_PLAN.dwg MeekeF Jan. 27, 2020 10:09am



GRAPHIC SCALE  
ISSUED FOR CONSTRUCTION

PROPERTY SETBACKS	
FRONT	316 FEET
SIDE	58 FEET
REAR	350 FEET
CARMEL VALLEY ROAD	270 FEET

SITE PLAN  
1"=40'



REVISIONS	

<b>CARMEL VALLEY PUMP STATION CIVIL SITE PLAN</b>	
CALIFORNIA AMERICAN WATER	
AECOM 300 LAKESIDE, SUITE 400 OAKLAND, CALIFORNIA 94612	
DRAWN BY E. MEEKS PROJECT ENGR L. TAM APPROVED C. SMITH	DATE: SEPTEMBER 2018 PROJECT: 60489016 USE DIMENSIONS ONLY SCALE: AS SHOWN
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
<b>C02</b>	



PRE-CONSTRUCTION BIOLOGICAL SURVEY AND MONITORING  
REPORT

APPENDIX B

CARMEL VALLEY PUMP STATION MMCRP

**MONTEREY PENINSULA WATER SUPPLY PROJECT  
Carmel Valley Pump Station Project  
Mitigation Monitoring and Reporting Program<sup>1</sup>**

<i>Impact</i> Mitigation Measure	Monitoring and Reporting Program			
	Monitoring and Reporting Actions: CalAm Reports On, and the CPUC Monitors all Mitigation Measures	Implementation Schedule	Effectiveness Criteria	Status
<b>Section 4.6: Terrestrial Biological Resources</b>				
<p><b><i>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</i></b></p> <p><b>Mitigation Measure 4.6-1a: Retain a Lead Biologist to Oversee Implementation of Protective Measures.</b></p> <p>Prior to initiation of construction, CalAm and/or representatives of CalAm shall retain a qualified Lead Biologist to oversee compliance with avoidance and minimization measures for all special-status species and sensitive habitats. The Lead Biologist shall be onsite, or shall appoint qualified biologists and/or qualified biological monitors to be onsite, during all fencing and ground disturbance activities. The Lead Biologist, qualified biologists, and qualified biological monitors shall be subject to approval by resource agencies with jurisdiction over the special-status species with potential to occur at the project site (and local agencies, if required). Only the Lead Biologist and/or qualified biologists may lead protocol surveys and relocate special-status species, as authorized by the resource agencies with jurisdiction over these species.</p> <p>In the event that construction-related activities have the potential to violate the prescribed special-status species and habitat protection measures, the project Lead Biologist, or other appointed qualified biological monitors shall report to construction or operational site supervisors with authority to stop work to prevent any violations. Work shall proceed only after the construction-related hazards to special-status species and habitats are removed. If a special-status wildlife species is present, work shall proceed only if the species is no longer at risk of injury or death. Violations shall be thoroughly documented as part of compliance monitoring activities.</p> <p>The Lead Biologist shall ensure that all compliance monitoring activities are documented on a daily basis, and shall prepare a summary monitoring report on a monthly basis to be submitted to regulatory agencies upon their request. The monthly summary monitoring report shall provide information regarding the worker awareness training (see Mitigation Measure 4.6-1b below), surveys, and any observed special-status species, including any accidental injuries or fatalities. The monthly report shall also document the effectiveness and practicality of the prescribed avoidance and minimization measures and recommend modifications to the measures if needed. The Lead Biologist shall supply agency staff with copies of compliance records, including any reports of non-compliance, upon request.</p> <p>The Lead Biologist shall have in her/his possession a copy of all compliance measures while work is being conducted onsite, and shall ensure that CalAm’s onsite representatives and contractors also maintain copies of the compliance measures on the site. To facilitate the Lead Biologist’s role, CalAm shall ensure that the Lead Biologist is fully apprised of all decisions that change or materially affect the schedule, methods, and location of work that is subject to the protective measures for biological resources.</p> <p>This measure also applies to periodic maintenance of the subsurface slant wells.</p>	<p>CalAm will secure approvals from all resource agencies, with jurisdiction of special-status species with potential to occur on the Project site, of the qualifications and the retention of a Lead Biologist. In addition, CalAm will secure approvals for any qualified biologists and qualified monitors from the same resource agencies. CalAm will provide CPUC with copies of the approvals for the Lead Biologist, qualified biologists, and qualified monitors to CPUC prior to project construction. CalAm will provide daily and monthly compliance summary monitoring reports containing all information required by the mitigation measure to the resources agencies and CPUC.</p>	<p>Prior to and during construction activities and during maintenance activities at the slant well sites.</p>	<p>No violation of prescribed special-status species and habitat protection measures, and if work is stopped to prevent any such violation, work shall proceed only after the construction-related hazards to special-status species and habitats are removed (i.e., the species is no longer at risk of injury or death).</p>	
<p><b><i>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</i></b></p> <p><b>Mitigation Measure 4.6-1b: Construction Worker Environmental Awareness Training and Education Program.</b></p> <p>Prior to starting work, all construction workers at the project areas shall attend a Construction Worker Environmental Awareness Training and Education Program developed and presented by the Lead Biologist, appointed qualified biologist, and/or qualified biological monitor. The program shall include information on each federal and state-listed species, as well as other special-status wildlife and plant species and sensitive natural communities that may be encountered during construction activities. The training shall include: information on special-status species’ life history and legal protections; the definition of “take” under the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA); the measures CalAm and/or its contractors have committed to implementing to protect special-status species and sensitive natural communities; reporting requirements and communication protocols; specific measures that each worker shall employ to avoid “take” of special-status species; and penalties for violation of FESA and/or CESA. Training shall be documented as follows:</p> <ol style="list-style-type: none"> <li>1. An acknowledgement form shall be signed by each worker indicating that environmental training has been completed.</li> </ol>	<p>CalAm will incorporate contract conditions requiring their contractors’ employees to attend the required Construction Worker Environmental Training and Education Program and provide CalAm with signed copies of the contracts prior to construction. CalAm will provide a copy of the transcript and/or DVD developed and presented by CalAm’s Lead Biologist containing all components of the required Construction Worker Environmental Training and Education Program and the names and signed acknowledgement forms of all construction workers that completed the Program to CPUC prior to construction.</p>	<p>Prior to construction activities and subsequent maintenance activities at the slant well sites.</p>	<p>All construction workers complete Construction Worker Environmental Training and Education Program and only those workers with a sticker on their hard hat so indicating are permitted to operate equipment within the construction area.</p>	

<sup>1</sup> The following Mitigation Monitoring & Reporting Program (MMRP) is specific to the Carmel Valley Pump Station Project. This MMRP was developed based on the Final MMRP adopted by the California Public Utilities Commission (Decision 18-09-017, September 13, 2018) for the Monterey Peninsula Water Supply Project (MPWSP). This MMRP was adapted from the Final MMRP, as supplemented by additional information contained in the MPWSP Final EIR/EIS specifying the mitigation measure applicable to the Carmel Valley Pump Station Project contained in Table ES-2 of the MPWSP Final EIR/EIS.

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<b>Impact Mitigation Measure</b>	<b>Monitoring and Reporting Program</b>			
	<b>Monitoring and Reporting Actions: CalAm Reports On, and the CPUC Monitors all Mitigation Measures</b>	<b>Implementation Schedule</b>	<b>Effectiveness Criteria</b>	<b>Status</b>
<p>2. A sticker shall be placed on hard hats indicating that the workers have completed the environmental training. Construction workers shall not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker.</p> <p>3. A copy of the training transcript/training video and/or DVD, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms, shall be submitted to the CPUC.</p> <p>This measure also applies to periodic maintenance of the subsurface slant wells.</p>				
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1c: General Avoidance and Minimization Measures.</b></p> <p>CalAm’s construction contractor(s) shall implement the following general avoidance and minimization measures to protect special-status species and sensitive natural communities at the facility sites during construction:</p> <ol style="list-style-type: none"> <li>The construction footprint, staging areas, equipment access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and flagging prior to construction to avoid natural resources outside of the project area. Any construction-related disturbance outside of these boundaries, including driving, parking, temporary access, sampling or testing, or storage of materials, shall be prohibited without explicit approval of the Lead Biologist.</li> <li>New access driveways shall not extend beyond the delineated construction work area boundary. Construction vehicles shall pass and turn around only within the delineated construction work area boundary or local road network. Where new access is required outside of existing roads or the construction work area, the route shall be clearly marked (i.e., flagged and/or staked) prior to being used, subject to review and approval of the Lead Biologist.</li> <li>Vehicle speeds within the project area shall not exceed 15 miles per hour on roads within the sites.</li> <li>Excavated soils shall be stockpiled in disturbed areas lacking native vegetation. Stockpile areas shall be marked by the Lead Biologist to define the limits where stockpiling can occur.</li> <li>Standard best management practices (such as setbacks and use of silt fences and fiber rolls) shall be employed to prevent loss of habitat due to erosion caused by project related impacts (i.e., grading or clearing for new roads). All detected erosion shall be remedied immediately upon discovery.</li> <li>Fueling of construction equipment shall take place within existing paved areas, and at least 50 feet from drainages (including streams, creeks, ditches, culverts, or storm drain inlets) and native habitats. Contractor equipment shall be checked for leaks prior to operation and repaired when leaks are detected. Fuel containers shall be stored within appropriately-sized secondary containment barriers.</li> <li>The introduction of exotic plant species shall be avoided through physical or chemical removal and prevention. Measures to prevent the introduction of exotic plants into the construction site via vehicular sources shall include implementing Track clean or other method of vehicle cleaning for vehicles coming to the site and leaving the site. Earthmoving equipment shall be cleaned prior to transport to the project area. Weed-free rice straw or other certified weed-free straw shall be used for erosion control. Weed populations introduced into the site during construction shall be eliminated by chemical and/or mechanical means approved by California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS).</li> <li>Use of herbicides as vegetation control measures shall be used only when mechanical means have been deemed ineffective. All uses of such herbicidal compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and state and federal legislation as well as additional project-related restrictions deemed necessary by the CDFW and/or USFWS. No rodenticides shall be used.</li> <li>Prior to the start of construction at any proposed facility site where special-status amphibians, reptiles and mammals have a moderate or high potential to occur, the construction work area boundary shall be fenced with a temporary exclusion fence to prevent special-status wildlife from entering the site during construction (see Table 4.6-6 for the list of special-status species that could be significantly impacted at each project facility site). The exclusion fencing shall be constructed of metal flashing, plastic sheeting, or other materials that will prohibit California horned lizards, Monterey shrews, and other special-status reptiles, amphibians, and rodents from climbing the fence. If meshing is used it shall be of a size that would not catch wildlife. The fencing shall be buried a minimum of 6 inches below grade to secure the fence and extend a minimum of 30 inches above grade. The fencing shall be inspected by the Lead Biologist or qualified</li> </ol>	<p>A Lead Biologist hired by CalAm will oversee compliance with avoidance and minimization measures for special-status species and sensitive natural communities and as directed in permit conditions approved and monitored by USFWS and CDFW. CalAm will include contract specifications that include the general avoidance and minimization measures from the mitigation measure and provide CPUC with copies of the signed contracts prior to construction. Documentation of these measures, including species found on-site and additional avoidance, minimization, or mitigation measures necessary, will be sent to CPUC, USFWS, and CDFW for monitoring of effectiveness.</p>	<p>Prior to and during construction activities and during maintenance activities at the slant well sites.</p>	<p>Implementation of avoidance and minimization measures prior to the start of construction, during construction, and during maintenance of the slant wells. Halting construction work if special-status species are found present during construction activities or maintenance of the slant wells. Consultation by the Lead Biologist, along with CPUC and MBNMS, with resource agencies to apply additional measures necessary to move or mitigate for on-site special status species.</p>	

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<p>biological monitor on a daily basis during construction activities to ensure fence integrity. Any needed repairs to the fence shall be performed on the day of their discovery. Fencing shall be installed and maintained during all phases of construction. Final fence design and location shall be determined in consultation with USFWS and CDFW. Exclusion fencing shall be removed once construction activities are complete.</p> <p>10. If special-status wildlife species are found on the site immediately prior to construction or during project construction, construction activities shall cease in the vicinity of the animal until the animal moves on its own (if possible, as determined by the Lead Biologist or biological monitor) outside of the project area. Additional mitigation measures specific to special-status plants; Smith’s blue butterfly; black legless lizard, silvery legless lizard, and coast horned lizard; western burrowing; American badger; Monterey dusky-footed woodrat, California red-legged frog and California tiger salamander are described in Mitigation Measure 4.6-1f, 4.6-1g, 4.6-1h, 4.6-1j 4.6-1k, and 4.6-1o. The Lead Biologist and Lead Agencies shall consult with wildlife resource agency(ies) with jurisdiction over the species regarding any additional avoidance, minimization, or mitigation measures that may be necessary if the animal does not move on its own. A report shall be prepared by the Lead Biologist to document the activities of the animal within the site; all fence construction, modification, and repair efforts; and movements of the animal once again outside the exclusion fence. This report shall be submitted to the CPUC and pertinent wildlife agencies with jurisdiction over the wildlife species.</p> <p>11. Vegetation removal and grading activities shall be conducted during daylight hours. Immediately prior to conducting vegetation removal or grading activities inside fenced exclusion areas, the Lead Biologist or a qualified biologist shall survey within the exclusion area to ensure that no special-status species are present. The Lead Biologist or a qualified biologist shall also monitor vegetation removal or grading activities inside fenced exclusion areas for the presence of special-status species. If special-status species are present, then measure 10 above shall be implemented.</p> <p>12. To prevent the inadvertent entrapment of special-status wildlife during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day, or escape ramps constructed of earth fill or wooden planks shall be positioned within the excavations to allow special-status wildlife to escape on their own. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If listed species are trapped, they shall only be relocated with authorization from USFWS and/or CDFW, as appropriate.</p> <p>13. All construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods and with a diameter of 4 inches or more shall be inspected for special-status wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a special-status animal is discovered inside a pipe, that section of pipe shall not be moved until the appropriate resource agency, with jurisdiction over that species, has been consulted to determine the appropriate method for relocation. If necessary, under the direct supervision of the qualified biologist, the pipe may be moved once to remove it from the path of construction activity until the animal has escaped.</p> <p>14. All vertical tubes used in project construction, such as chain link fencing poles or signage mounts, shall be temporarily or permanently capped at the time they are installed to avoid the entrapment and death of special- status birds.</p> <p>15. Water used for dust abatement shall be minimized in an effort to avoid the formation of puddles that could attract common ravens and other predators to the construction work areas.</p> <p>16. No vehicle or equipment parked in the project area shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own.</p> <p>17. All vehicles and equipment shall be in proper working condition to ensure that there is no potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Lead Biologist shall be informed of any hazardous spills within 24 hours of the incident. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly disposed of at a licensed facility.</p> <p>18. A trash abatement program shall be implemented during construction. Trash and food items shall be contained in closed containers and removed from the construction site daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.</p> <p>19. Workers shall be prohibited from feeding wildlife and bringing pets and firearms to the construction work areas.</p>				



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<p>20. Intentional killing or collection of wildlife species, including special-status species in the project area and surrounding areas shall be strictly prohibited.</p> <p>21. All temporarily disturbed areas shall be returned to pre-project conditions or better. Existing access roads within the CEMEX site shall be returned to their existing use.</p> <p>This measure also applies to periodic maintenance of the subsurface slant wells.</p> <p><b>INSERT MM 4.6-1e, 4.6-1f, 4.6-1g, 4.6-1h</b></p>				
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1i: Avoidance and Minimization Measures for Nesting Birds.</b></p> <p>This measure applies to all nesting birds protected by the federal Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code, except for western snowy plover and western burrowing owl, which are addressed in Mitigation Measure 4.6-1d and 4.6-1h, respectively.</p> <p>Nesting birds may be present at all of the proposed facility sites. A qualified biologist shall conduct preconstruction avian nesting surveys prior to initiation of construction activities at all facility sites, unless otherwise indicated below.</p> <ol style="list-style-type: none"> <li>No preconstruction surveys or avoidance measures are required for construction activities that would be completed entirely during the non-nesting season (September 16 to January 31).</li> <li>For all construction activities scheduled to occur during the nesting season (February 1 to September 15), the qualified biologist shall conduct a preconstruction avian nesting survey no more than 10 days prior to the start of staging, site clearing, and/or ground disturbance. Copies of the survey results shall be submitted to the CPUC.</li> <li>If construction activities at any given facility site begins in the non-breeding season and proceeds continuously into the breeding season, no surveys are required as long as a similar type of construction continues.</li> <li>If there is a break of 10 days or more in construction activities during the breeding season, a new nesting bird survey shall be conducted before reinitiating construction.</li> <li>The surveying biologist shall be capable of determining the species and nesting stage without causing intrusive disturbance. The surveys shall cover all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds.</li> </ol> <p>If active nests are found in the project area or vicinity (500 feet for raptors and 300 feet for other birds), the nests shall be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline and, once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project, if feasible. If behavioral changes are observed, work causing the change shall cease and CDFW shall be consulted for additional avoidance and minimization measures. The avoidance and minimization measures shall ensure that the construction activities do not cause the adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young.</p> <p>If continuous monitoring is not feasible, a no-disturbance buffer (at least 500 feet for raptors and 250 feet for other birds [or as otherwise determined in consultation with CDFW and USFWS] shall be created around the active nests). The buffer distance can be reduced with authorization from CDFW if construction activities would not cause an adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young. If the nest(s) are found in an area where ground disturbance is scheduled to occur, the project operator shall require that ground disturbance be delayed until after the birds have fledged.</p> <p>This measure also applies to periodic maintenance of the subsurface slant wells.</p>	<p>CalAm shall provide to the CPUC the name of the biologist(s) to conduct required preconstruction nesting surveys and construction monitoring, copies of all surveys and monitoring reports prepared by the biologist(s) and copies of all related CDFW buffer and mitigation consultations, approvals and/or authorizations.</p>	<p>Prior to and during construction activities and during subsequent maintenance activities at the slant well sites.</p>	<p>Preconstruction surveys demonstrate absence of active nests or if present that all applicable CDFW-approved buffers and avoidance/ minimization measures are fully implemented.</p>	
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1k: Avoidance and Minimization Measures for Monterey Dusky-Footed Woodrat.</b></p> <p>The following measures shall be implemented to avoid and minimize impacts on Monterey dusky-footed woodrat:</p>	<p>CalAm shall provide the name and qualifications of the biologist(s) to conduct required preconstruction dusky-footed woodrat surveys to the CPUC for approval. CalAm shall also provide to the CPUC construction monitoring reports, copies of all surveys prepared by the</p>	<p>Prior to and during construction.</p>	<p>Surveys demonstrate absence of dusky-footed woodrats and active nests or if present that all applicable CDFW-approved buffers, nest relocations and related</p>	

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<p>1. A qualified wildlife biologist shall conduct preconstruction surveys for Monterey dusky-footed woodrat. The surveys shall be conducted within 14 days prior to the start of construction in suitable habitat and shall identify any woodrat nests located within 50 feet of anticipated construction disturbance areas.</p> <p>2. If woodrat nests are found during the preconstruction surveys, the wildlife biologist shall conduct additional surveys throughout the duration of construction activities at the potentially affected facility site to identify any newly constructed woodrat nests.</p> <p>3. If nests are observed outside of the construction area, the qualified biologist shall demarcate a minimum 50-foot buffer area with orange construction fencing and require that all construction activities and disturbance remain outside of the fencing.</p> <p>4. Active woodrat nests located within the anticipated construction disturbance areas shall be relocated. Nests shall be relocated outside of the peak breeding season, (peak breeding season is typically February through November) to minimize disturbance to young woodrats. Relocation of woodrats and/or their nests shall be conducted by the Lead Biologist or qualified wildlife biologist as follows:</p> <ol style="list-style-type: none"> <li>Clear understory vegetation from around the nest using hand tools.</li> <li>After all vegetative cover has been cleared around the nest, the biologist shall gently disturb the nest to encourage the woodrat(s) to abandon the nest and seek cover in adjacent habitat.</li> <li>Once the woodrats have left the nest, the biologist shall carefully relocate the nest sticks to suitable habitat outside of the construction disturbance area, piling the sticks at the base of trees or large shrubs if available. If multiple nests are relocated, the stick piles shall be placed at least 25 feet from one another.</li> <li>The Lead Biologist shall ensure potential health hazards to the biologists moving nests are addressed to minimize the risk of contracting diseases associated with woodrats and woodrat nests. These include hantavirus, Lyme disease, and plague. The biologists that relocate nests shall take the following precautionary safety measures: <ol style="list-style-type: none"> <li>Wear a Cal/OSHA-certified facial respirator to reduce inhalation of potential disease-causing organisms.</li> <li>Wear a white Tyvec protective suit to provide a barrier for ticks and fleas and facilitate their detection and removal and use gloves.</li> </ol> </li> <li>If young are encountered during dismantling of the nest, nest material shall be replaced and a 50-foot no- disturbance buffer shall be established around the active nest. The buffer shall remain in place until young have matured enough to disperse on their own accord and the nest is no longer active. Nesting substrate shall then be collected and relocated to suitable oak woodland habitat outside of the project area.</li> </ol>	<p>biologist(s) and copies of all related CDFW-approved buffers, active nest relocations and documentary evidence of compliance therewith.</p>		<p>biologist safety measures are fully implemented.</p>	
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1I: Avoidance and Minimization Measures for Special-status Bats.</b></p> <p>A qualified biologist who is experienced with bat surveying techniques (including auditory sampling methods), behavior, roosting habitat, and identification of local bat species shall be consulted prior to initiation of construction activities to conduct a preconstruction habitat assessment to characterize potential bat habitat and identify active roost sites. The preconstruction habitat assessment shall be conducted within 100 feet of construction activities.</p> <p>Should potential roosting habitat or potentially active bat roosts be identified during the habitat assessment in trees and/or structures to be disturbed under the project, the following measures shall be implemented:</p> <ol style="list-style-type: none"> <li>Removal or disturbance of trees or structures identified as potential bat roosting habitat or active roosts shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These dates avoid bat maternity roosting season (approximately April 15 – August 31) and periods of winter torpor (approximately October 15 – February 28).</li> <li>If removal or disturbance of trees and structures identified as potential bat roosting habitat or active roosts during the periods when bats are active is not feasible, a qualified biologist will conduct pre-construction surveys within 14 days prior to disturbance to further evaluate bat activity within the potential habitat or roost site. <ol style="list-style-type: none"> <li>If active bat roosts are not identified in potential habitat during preconstruction surveys, no further action is required prior to removal of- or disturbance to trees and structures within the preconstruction survey area.</li> <li>If active bat roosts or evidence of roosting is identified during pre-construction surveys, the qualified biologist shall determine, if possible, the type of roost and species.</li> </ol> </li> </ol>	<p>CalAm shall provide the name and qualifications of the biologist(s) to conduct required preconstruction bat habitat assessment and surveys to the CPUC for approval. CalAm shall also provide to the CPUC copies of all assessments/surveys and construction monitoring prepared by the biologist(s) and copies of all related CDFW-approved buffers, avoidance and protection measures and documentary evidence of compliance therewith.</p>	<p>Prior to and during construction activities and during maintenance activities at the slant well sites.</p>	<p>Surveys demonstrate absence of bat habitat and active roost sites or if present that all applicable CDFW-approved buffers and avoidance and protection measures are fully implemented.</p>	



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<p>i. If special-status bat species or maternity or hibernation roosts are detected during these surveys, appropriate species- and roost-specific avoidance and protection measures shall be developed by the qualified biologist in coordination with CDFW. Such measures may include postponing the removal of structures or trees, or establishing exclusionary work buffers while the roost is active. A minimum 100-foot no disturbance buffer shall be established around special-status species, maternity, or hibernation roosts until the qualified biologist determines they are no longer active. The size of the no-disturbance buffer may be adjusted by the qualified biologist, in coordination with CDFW, depending on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site, and if construction would not alter the behavior of the adult or young in a way that would cause injury or death to those individuals.</p> <p>Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.</p> <p>ii. If a non-maternity or hibernation roost (e.g., bachelor daytime roost) is identified, disturbance to- or removal of trees or structures may occur under the supervision of a qualified biologist as described under 3).</p> <p>3. The qualified biologist shall be present during tree and structure disturbance or removal if active non-maternity or hibernation bat roosts or potential roosting habitat are present. Trees and structures with active non-maternity or hibernation roosts or potential habitat shall be disturbed or removed only under clear weather conditions when precipitation is not forecast for three days and when nighttime temperatures are at least 50°F, and when wind speeds are less than 15 mph.</p> <p>a. Trimming or removal of trees with active (non-maternity or hibernation) or potentially active roost sites shall follow a two-step removal process:</p> <p>i. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using hand tools (e.g., chainsaws).</p> <p>ii. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using hand tools or other equipment (e.g. excavator or backhoe).</p> <p>iii. All felled trees shall remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape, or be inspected once felled by the qualified biologist to ensure no bats remain within the tree and/or branches.</p> <p>b. Disturbance to or removal of structures containing or suspected to contain active bat (non-maternity or hibernation) or potentially active bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. Removal will be completed the subsequent day.</p> <p>4. Bat roosts that begin during construction are presumed to be unaffected as long as a similar type of construction continues, and no buffer would be necessary. Direct impacts on bat roosts or take of individual bats will be avoided.</p>				
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1m: Avoidance and Minimization Measures for Native Stands of Monterey Pine.</b></p> <p>A qualified botanist or arborist shall conduct surveys for native stands of Monterey pine prior to completion of final project design documents. Individual Monterey pine trees existing within the construction work area shall be evaluated to determine if they are native occurrences, relics, or otherwise naturally-occurring remnants of the past historic range. Maps depicting the results of these surveys shall be prepared for consideration during final facility design. Native stands of Monterey pine could occur at the identified facility sites and pipeline alignments based on the historical extent of native Monterey pines and biological reconnaissance surveys.</p> <p>To the extent feasible, project facilities shall be sited and construction activities planned to avoid impacts on native stands of Monterey pine. Any native stands of Monterey pines located within the anticipated construction disturbance area shall be fenced or flagged for avoidance prior to construction, and a biological monitor shall be present to ensure compliance with off-limits areas.</p> <p>If removal of native stands of Monterey pine cannot be avoided, trees shall be replaced at a 2:1 ratio for trees removed or directly impacted by construction activities. Only local Monterey pine genetic stock shall be used for replanting at the project site. Replacement plantings shall be planted contiguous with other individuals of the same species in areas that are determined to have suitable site conditions. Protective</p>	<p>CalAm shall provide the name and qualifications of the botanist(s) to conduct required preconstruction surveys to the CPUC for approval. CalAm shall also provide to the CPUC copies of all assessments/surveys and construction monitoring prepared by the botanist(s) and copies, and avoidance and protection measures and documentary evidence of compliance therewith. CalAm shall also provide and obtain approval from CPUC and all other required regulatory and local agencies of final design submittals which incorporate the required surveys and demonstrate</p>	<p>Prior to construction activities and subsequent maintenance activities at the slant well sites.</p>	<p>Surveys and final design plans demonstrate avoidance of all native stands of Monterey pine or compensatory mitigation by replanting at a 2:1 replacement ratio and monitoring of success to ensure a minimum of 70 percent survival in the fifth monitoring year if avoidance is not possible.</p>	

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<i>Impact</i> <b>Mitigation Measure</b>	<b>Monitoring and Reporting Program</b>			
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<p>fencing shall be installed around the seedlings to protect against disturbance. Replacement trees shall be maintained and monitored for a period of five years and have a minimum of 70 percent survival in the fifth monitoring year to ensure success. The Habitat Mitigation and Monitoring Plan to be prepared in accordance with <b>Mitigation Measure 4.6-1n (Habitat Mitigation and Monitoring Plan)</b> shall detail the monitoring requirements and success criteria.</p> <p>This mitigation measures applies to native stands of Monterey pines. Independent of whether Monterey pines in the project area are considered native stands, individual trees may be subject to local tree ordinances; see <b>Mitigation Measure 4.6-5 (Compliance with Local Tree Policies and Ordinances)</b>.</p>	<p>either that facilities are sited to avoid impacts on native stands of Monterey pine or that required replacement will be achieved by way of a Habitat Mitigation and Monitoring Plan approved by all required resource and local agencies consistent with the requirements of this mitigation measure.</p>			
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1n: Habitat Mitigation and Monitoring Plan.</b></p> <p>CalAm shall develop and submit a Habitat Mitigation and Monitoring Plan (HMMP) to the appropriate resource agencies (CCC, CDFW, CCRWQCB, USACE, USFWS, and local agencies that require a habitat mitigation and monitoring plan) for approval prior to project construction. The HMMP will be a comprehensive document that will describe all of restoration and compensatory mitigation requirements, including the required performance standards, identified in <b>Mitigation Measure 4.6-1d: Protective Measures for Western Snowy Plover, Mitigation Measure 4.6- 1e: Avoidance and Minimization Measures for Special-status Plants, Mitigation Measure 4.6-1f: Avoidance and Minimization Measures for Smith’s Blue Butterfly, Mitigation Measure 4.6-1h: Avoidance and Minimization Measures for Western Burrowing Owl, Mitigation Measure 4.6-1m: Avoidance and Minimization Measures for Native Stands of Monterey Pine, Mitigation Measure 4.6-1o: Avoidance and Minimization Measures for California Red-legged Frog and California Tiger Salamander and Mitigation Measure 4.6-2b: Avoid, Minimize, and Compensate for Construction Impacts to Sensitive Communities and Environmentally Sensitive Habitat Areas.</b> The HMMP shall be implemented at all areas where special-status species habitat or sensitive natural communities will be restored, created, or enhanced to mitigate for project impacts either prior to, concurrently with, or following project construction, as specified in the HMMP. The HMMP shall outline measures to be implemented to, depending on the mitigation requirements, restore, improve, or re-establish special-status species habitat, sensitive natural communities, and critical habitat on the site, and shall include the following elements:</p> <ol style="list-style-type: none"> <li>1. Name and contact information for the property owner of the land on which the mitigation will take place</li> <li>2. Identification of the water source for supplemental irrigation</li> <li>3. Identification of depth to groundwater</li> <li>4. Site preparation guidelines to prepare for planting, including coarse and fine grading</li> <li>5. Plant material procurement, including assessment of risk of introduction of plant pathogens through use of nursery- grown container stock vs. collection and propagation of site-specific plant materials, or use of seeds</li> <li>6. Planting plan outlining species selection, planting locations and spacing, for each vegetation type to be restored</li> <li>7. Planting methods, including containers, hydroseed or hydromulch, weed barriers and cages, as needed</li> <li>8. Soil amendment recommendations</li> <li>9. Irrigation plan, with proposed rates (in gallons per minute), schedule (i.e. recurrence interval), and seasonal guidelines for watering</li> <li>10. Site protection plan to prevent unauthorized access, accidental damage and vandalism</li> <li>11. Weeding and other vegetation maintenance tasks and schedule, with specific thresholds for acceptance of invasive species</li> <li>12. Performance standards by which successful completion of mitigation can be assessed in comparison to a relevant baseline or reference site, and by which remedial actions will be triggered; success criteria shall include the minimum performance standards described in <b>Mitigation Measure 4.6-1d: Protective Measures for Western Snowy Plover, Mitigation Measure 4.6-1e: Avoidance and Minimization Measures for Special-status Plants, Mitigation Measure 4.6-1f: Avoidance and Minimization Measures for Smith’s Blue Butterfly, Mitigation Measure 4.6-1h: Avoidance and Minimization Measures for Western Burrowing Owl, Mitigation Measure 4.6- 1m: Avoidance and Minimization Measures for Native Stands of Monterey Pine, Mitigation Measure 4.6-1o: Avoidance and Minimization Measures for California Red-legged Frog and California Tiger Salamander and Mitigation Measure</b></li> </ol>	<p>CalAm shall provide the CPUC with the required HMMP and all approvals thereof issued by the resource and local agencies.</p>	<p>Prior to construction.</p>	<p>Approved HMMP fully implemented and all compensatory mitigation achieved.</p>	

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<p><b>4.6-2b: Avoid, Minimize, and Compensate for Construction Impacts to Sensitive Communities and Environmentally Sensitive Habitat Areas.</b></p> <p>13. Monitoring methods and schedule 14. Reporting requirements and schedule 15. Adaptive management and corrective actions to achieve the established success criteria 16. Educational outreach program to inform operations and maintenance departments of local land management and utility agencies of the mitigation purpose of restored areas to prevent accidental damages 17. Description of any other compensatory mitigation in the form of land purchase, establishment of conservation easements or deed restrictions, contribution of funds in lieu of active restoration, or purchase of mitigation bank credits, or other means by which the mitigation site will be preserved in perpetuity.</p>				
<p><b>Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special- status, either directly, indirectly or through habitat modification, during construction.</b></p> <p><b>Mitigation Measure 4.6-1o: Avoidance and Minimization Measures for California Red-legged Frog and California Tiger Salamander.</b></p> <p>A preconstruction survey for California red-legged frog and California tiger salamander shall be conducted by a qualified biologist in suitable habitat where there is a moderate to high potential for these species to occur prior to vegetation removal or grading, as specified below:</p> <ol style="list-style-type: none"> <li>1. Prior to conducting the surveys, the qualified biologist shall prepare a relocation plan that describes the appropriate survey and handling methods for California red-legged frog and California tiger salamander, and identifies nearby relocation sites where individuals would be relocated if found during the preconstruction surveys. The relocation plan shall be submitted to USFWS and CDFW for approval prior to the start of construction activities. The animal shall be relocated to a similar type of habitat or better from where it was relocated and shall only be relocated with authorization from USFWS and CDFW, as appropriate.</li> <li>2. Preconstruction surveys shall be conducted within 5 days prior to, and immediately prior to, vegetation removal, grading, or installation of exclusion fence to identify any California red-legged frog, California tiger salamander, and any small mammal burrows.</li> <li>3. Small mammal burrows identified during preconstruction surveys shall be surveyed (through hand-excavation, scoping, or other suitable methods to be determined in consultation with USFWS and CDFW) to identify any California red-legged frog or California tiger salamander. Once the burrow is confirmed to be vacant, the burrow shall be collapsed.</li> <li>4. If California red-legged frog or California tiger salamander are observed within the construction area, a qualified biologist shall relocate the individual according to the relocation plan above and only with authorization from USFWS and CDFW, as appropriate.</li> <li>5. Exclusion fencing shall be installed around construction areas where there is a moderate to high potential for these species to occur as specified in <b>Mitigation Measure 4.6-1c (General Avoidance and Minimization Measures)</b> and only with authorization from USFWS and CDFW.</li> <li>6. The qualified biologist shall monitor vegetation removal and grading inside the exclusion fence as specified in <b>Mitigation Measure 4.6-1c (General Avoidance and Minimization Measures)</b>.</li> <li>7. If take authorization is not obtained from CDFW and USFWS for California tiger salamander, then all small mammal burrows within dispersal distance of a known or potential breeding pond shall be avoided by a minimum buffer of 50 feet.</li> </ol> <p>Upon completion of construction activities, CalAm shall restore California tiger salamander and California red-legged frog habitat temporarily impacted during construction. Compensatory mitigation for permanent impacts shall be provided either onsite or offsite at a minimum ratio of 2:1. Compensation for permanent impacts may be in the form of permanent on-site or off-site creation, restoration, enhancement, or preservation of habitat. At a minimum, the restoration or compensation sites shall meet the following performance standards by the fifth year following restoration:</p> <ol style="list-style-type: none"> <li>a. Temporarily impacted areas are returned to pre-project or improved conditions;</li> <li>b. Vegetation cover shall be at least 80 percent of baseline vegetation cover in the impact area; and</li> <li>c. No more cover by invasive plants than in the baseline conditions of the impact area.</li> </ol>	<p>CalAm shall provide the name and qualifications of the biologist(s) to conduct required preconstruction to the CPUC for approval. CalAm shall also provide to the CPUC copies of all frog/salamander surveys and relocation plans, copies of all such surveys and plans, and copies of all related USFWS/CDFW-approved plans and related consultations with and authorizations provided by USFWS/CDFW, and avoidance and protection measures and documentary evidence of compliance therewith.</p>	<p>Prior to, during, and after construction activities.</p>	<p>Surveys demonstrate absence of frogs/salamanders/habitat or if present that all applicable USFWS/CDFW-approved permits, avoidance and minimization measures, mitigation plans and compensatory mitigation are fully implemented/achieved.</p>	

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<p><i>Restoration and mitigation activities shall be described in the Habitat Mitigation and Monitoring Plan prescribed by Mitigation Measure 4.6-1n (Habitat Mitigation and Monitoring Plan). Alternatively, compensatory credits may be purchased through an approved mitigation bank, or approved Habitat Conservation Plan.</i></p>				
<p><b>Impact 4.6-2: Result in substantial adverse effects on riparian habitat, critical habitat, or other sensitive natural communities during construction.</b></p> <p><b>Mitigation Measure 4.6-2b: Avoid, Minimize, and Compensate for Construction Impacts to Sensitive Communities and Environmentally Sensitive Habitat Areas.</b></p> <p>CalAm and/or its construction contractor(s) shall implement the following avoidance, minimization, and compensation measures for sensitive natural communities, the special-status species that utilize these sensitive communities, environmentally sensitive habitat areas (ESHA) as defined by the California Coastal Commission (CCC) or in a local coastal plan (LCP), and primary habitat as defined in the City of Marina's Local Coastal Land Use Plan (LCLUP).</p> <p>Compensatory mitigation for permanent loss from periodic maintenance of the subsurface slant wells shall only be applied once and would not be applied for each five-year maintenance event.</p> <p>a) Project facilities shall be sited and designed to avoid disturbance of central maritime chaparral, central dune scrub, coast live oak woodland, and riparian woodland and scrub, any areas defined as ESHA by the CCC or in a LCP, primary habitat as defined in the LCLUP, any sensitive communities defined by local jurisdictions, and any other sensitive natural communities, including critical habitat, identified within the project area.</p> <p>b) Where direct impacts on sensitive natural communities, ESHA, primary habitat, or critical habitat cannot feasibly be avoided, CalAm shall implement the following measures:</p> <p>i. Any temporarily impacted sensitive natural communities, ESHA, primary habitat, and critical habitat, shall be restored to previous conditions or better at the end of construction. Compensatory mitigation for permanent impacts on sensitive natural communities shall occur at a ratio of 2:1 or greater. Compensation for loss of sensitive natural communities may be in the form of permanent on-site or off-site creation, restoration, enhancement, or preservation of habitat. At a minimum the restoration or compensation sites shall meet the following performance standards by the fifth year following restoration:</p> <p>a. Temporarily impacted areas are returned to pre-project conditions or greater</p> <p>b. Native vegetation cover shall be at least 70 percent of baseline/impact area native vegetation cover</p> <p>c. No more cover by invasives than the baseline/impact area</p> <p>Restoration and mitigation activities shall be described in the Habitat Mitigation and Monitoring Plan prescribed by <b>Mitigation Measure 4.6-1n (Habitat Mitigation and Monitoring Plan)</b>. Alternatively, credits purchased through an approved mitigation bank, or approved Habitat Conservation Plan.</p> <p>ii. Topsoil shall be salvaged during grading and earthmoving activities, stockpiled separately from subsoil, and protected from erosion (e.g., covered or watered). Composting additives shall be used to amend the soil, if needed, and compacted topsoil shall be properly prepared prior to reuse for post-construction restoration of temporarily disturbed areas. A minimum of 12 inches of topsoil shall be salvaged (or if there is less than 12 inches of topsoil initially, as much as is available practicable).</p> <p>iii. For HMP sensitive natural communities on former Fort Ord lands, plants shall be salvaged, under the direction of a qualified biologist, as necessary per the requirements of the HMP, and in accordance with any requirements from USFWS and CDFW.</p> <p>c) Any areas used for staging, laydown, material storage, equipment storage, job trailers, employee parking, or other project-related support activities that do not need to be located adjacent to the active construction area shall be located away from jurisdictional areas, sensitive communities, and shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers.</p> <p>d) All potential contaminants shall be stored on impervious surfaces, plastic ground covers, or in secondary containment to prevent any spills or leakage from contaminating the ground, and shall be located at least 100 feet from adjacent habitat, unless required for construction activities to be located adjacent to the active construction area.</p>	<p>CalAm shall provide and obtain approval from CPUC of final design submittals demonstrating avoidance of sensitive natural communities and species that utilize them, ESHA and primary/secondary habitat or provide the CPUC with copies of all approved Coastal Development Permits issued by the CCC and applicable local agencies prior to initiation of ground disturbing activities.</p> <p>CalAm's environmental monitor shall provide CPUC with monthly reports demonstrating oversight and successful implementation of the required avoidance, minimization and compensation measures to ensure construction is limited to the design footprint and avoids sensitive communities/species/ habitat or that compensatory mitigation was provided.</p>	<p>Prior to and during construction.</p>	<p>Compliance with all components of all Coastal Development Permits approved for the MPWSP and their conditions for the protection for sensitive natural communities, the special-status species that utilize these sensitive communities, ESHA as defined by the CCC or in a LCP, and primary habitat.</p>	



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<p>e) Any spillage of pollutants or construction material shall be contained immediately in accordance with the project SWPPP. The contaminated area shall be cleaned and any contaminated materials properly disposed of. The Lead Biologist shall be notified of all spills.</p> <p>Further, CalAm and/or its construction contractor(s) shall implement the following avoidance, minimization, and compensation measures for any areas that are identified as secondary habitat as defined in the City of Marina's LCLUP (and not within ESHA as defined by the CCC) through the coastal permitting process:</p> <p>a) Development shall be designed to prevent significant adverse impacts on primary habitat areas. Adverse impacts that shall be avoided may include indirect impacts such as operational noise impacts on wildlife, introduction of the spread of invasive plant and wildlife species, increased erosion, introduction of trash that would invite predators, increased human disturbance, and decreased water quality.</p> <p>b) All temporarily impacted areas shall be restored to pre-construction conditions or better at the end of construction. Compensatory mitigation for permanent impacts on sensitive natural communities shall occur at a ratio of 1:1 or greater. Compensation for loss of sensitive natural communities may be in the form of permanent on-site or off-site creation, restoration, enhancement, or preservation of habitat. At a minimum the restoration or compensation sites shall meet the following performance standards by the fifth year following restoration:</p> <p>i. Temporarily impacted areas are returned to pre-project conditions or greater</p> <p>ii. Native vegetation cover shall be at least 70 percent of baseline/impact area native vegetation cover</p> <p>iii. No more cover by invasives than the baseline/impact area</p> <p>Restoration and mitigation activities shall be described in the Habitat Mitigation and Monitoring Plan prescribed by <b>Mitigation Measure 4.6-1n (Habitat Mitigation and Monitoring Plan)</b>.</p> <p>Alternatively, credits purchased through an approved mitigation bank, or approved Habitat Conservation Plan.</p>				
<p><b>Impact 4.6-3: Result in substantial adverse effects on federal wetlands, federal other waters, and/or waters of the state during construction.</b></p> <p><b>Mitigation Measure 4.6-3: Avoid, Minimize, and or Mitigate Impacts to Wetlands.</b></p> <p>1. A jurisdictional wetland delineation shall be conducted to determine the extent of waters of the U.S. and waters of the state within the project component footprints and anticipated construction disturbance area.</p> <p>2. The proposed project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and/or the California Coastal Commission to the extent feasible. Horizontal Directional Drilling or other trenchless or above water methods will be used at all pipeline crossings of wetlands and other waters of the U.S. and of the state except some small order seasonal or ephemeral drainages which do not support riparian woodland, riparian scrub, marsh or other wetland vegetation, and which would be crossed during the dry season in the absence of flow or standing water.</p> <p>3. Where disturbance to jurisdictional waters cannot be avoided, any temporarily impacted jurisdictional water shall be restored to pre-construction conditions or better at the end of construction. Compensation for permanent impacts shall be provided at a 2:1 or greater ratio. Compensation for loss of jurisdictional waters may be in the form of permanent on-site or off-site creation, restoration, enhancement, or preservation of habitat. At a minimum the restoration or compensation sites shall meet the following performance standards by the fifth year following restoration:</p> <p>a. Temporarily impacted areas are returned to pre-project conditions or greater</p> <p>b. Wetlands restored or constructed as federal wetlands meet the federal criteria for jurisdictional wetlands and wetlands restored or constructed as state wetlands meet the state criteria for jurisdictional wetlands</p> <p>c. No more cover by invasives than the baseline/impact area</p> <p>Compensation shall be detailed on a project-specific basis and shall include development of a Wetland Mitigation and Monitoring Plan (WMMP), which shall be developed prior to the start of construction and in coordination with permit applications and/or conditions. At a minimum, the WMMP shall include:</p> <p>a. Name and contact information for the property owner of the land on which the mitigation will take place;</p>	<p>CalAm shall provide a copy of the required jurisdictional wetland delineation and all concurrences, approvals and/or related permits issued by the U.S. Army Corps of Engineers, RWQCB, CDFW, and/or the California Coastal Commission. CalAm's environmental monitor shall provide CPUC with monthly reports demonstrating avoidance and/or minimization of impacts on wetlands and/or waters of the U.S. or that compensatory mitigation was provided.</p>	<p>Prior to, during, and after construction.</p>	<p>Documented avoidance, minimization, and/or mitigation of impacts on wetlands consistent with the required jurisdictional wetland delineation and all concurrences, approvals and/or related permits issued by the U.S. Army Corps of Engineers, RWQCB, CDFW, and/or the California Coastal Commission</p>	

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<p>b. Identification of the source for supplemental irrigation;</p> <p>c. Identification of depth to groundwater;</p> <p>d. Baseline information, including a summary of the findings in any other recent wetland delineations applicable to the project disturbance area;</p> <p>e. Anticipated habitat enhancements to be achieved through compensatory actions;</p> <p>f. Monitoring methods and schedule;</p> <p>g. Performance and success criteria for wetland creation and/or enhancement, with success criteria in tabular form.</p> <p>h. Roles and responsibilities for mitigation funding, implementation, maintenance, monitoring, and reporting.</p> <p>i. Identification of the mechanism that will preserve the mitigation site in perpetuity, if necessary.</p> <p>Alternatively, offsite mitigation credits may be purchased at an approved mitigation bank; if no banks are available, then alternative mitigation may be achieved through payment of in-lieu fees.</p>				
<p><b>Impact 4.6-4: Be inconsistent with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</b></p> <p><b>Mitigation Measure 4.6-4: Compliance with Local Tree Ordinances.</b></p> <p>1. The project applicant shall perform a comprehensive survey within the project footprint to identify, measure, and map trees subject to local tree removal ordinances (as specified in Table 4.6-10) at least 30 days prior to start of planned ground disturbance or tree removal.</p> <p>2. Any trees that are subject to local tree removal ordinances shall be avoided to the extent practicable.</p> <p>3. If tree removal cannot be avoided by project construction, then the applicant shall comply with the applicable local tree policies or ordinances, obtain appropriate tree removal permits from applicable local agencies, and comply with those permits.</p> <p>4. Tree removal, preservation, or mitigation on Army property would be done in accordance with the Integrated Natural Resource Management Plan Presidio of Monterey and Ord Military Community (November, 2008).</p>	<p>CalAm shall provide the name and qualifications of the biologist(s) to conduct the comprehensive tree survey to the CPUC for approval. CalAm shall also provide to the CPUC a copy of the survey and related maps and copies of all required tree removal permits issued by applicable local agencies prior to construction.</p>	<p>Prior to and during construction.</p>	<p>Final design plans demonstrate that all trees subject to local tree removal ordinances will be avoided and if not compliance with all tree removal permits and related conditions issued by applicable local agencies shall be implemented.</p>	
<b>Section 4.7: Hazards and Hazardous Materials</b>				
<p><b>Impact 4.7-2: Encountering hazardous materials from other hazardous materials release sites during construction.</b></p> <p><b>Mitigation Measure 4.7-2a: Health and Safety Plan.</b></p> <p>The construction contractor(s) shall prepare and implement a site-specific Health and Safety Plan as required by and in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation and grading activities. This plan shall be submitted to the California Public Utilities Commission for review prior to commencement of construction. The Health and Safety Plan shall include, but is not limited to, the following elements:</p> <ul style="list-style-type: none"> <li>• Designation of a trained, experienced site safety and health supervisor who has the responsibility and authority to develop and implement the site health and safety plan;</li> <li>• A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals;</li> <li>• Specified personal protective equipment and decontamination procedures, if needed;</li> <li>• Emergency procedures, including route to the nearest hospital; and</li> </ul> <p>Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, notifying Monterey County Department of Environmental Health, and retaining a qualified environmental firm to perform sampling and remediation.</p>	<p>Through contract specifications, CalAm's contractors will prepare Health and Safety Plans, as reviewed and approved by CPUC prior to construction.</p>	<p>Prior to and during construction.</p>	<p>Compliance with all components of the approved Health and Safety Plan.</p>	
<p><b>Impact 4.7-2: Encountering hazardous materials from other hazardous materials release sites during construction.</b></p> <p><b>Mitigation Measure 4.7-2b: Soil and Groundwater Management Plan.</b></p>	<p>CalAm, or its contractor through contract specifications, shall prepare and provide a Soil and Groundwater Management Plan for review and approval by CPUC and</p>	<p>Prior to and during construction.</p>	<p>Compliance with all components of the approved Soil and</p>	

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<p>In support of the Health and Safety Plan described above, CalAm or its contractor shall develop and implement a Soil and Groundwater Management Plan that includes a materials disposal plan specifying how the construction contractor will remove, handle, transport, and dispose of all excavated material in a safe, appropriate, and lawful manner. The plan must identify protocols for soil testing and disposal, identify the approved disposal site, and include written documentation that the disposal site will accept the waste. Contract specifications shall mandate full compliance with all applicable local, state, and federal regulations related to the identification, transportation, and disposal of hazardous materials, including those encountered in excavated soil or dewatering effluent.</p> <p>As part of the Soil and Groundwater Management Plan, CalAm or its contractor shall develop a groundwater dewatering control and disposal plan specifying how contaminated groundwater (dewatering effluent), if encountered, will be handled and disposed of in a safe, appropriate and lawful manner. The plan must identify the locations at which groundwater dewatering is likely to be required, the method to analyze groundwater for hazardous materials, and the appropriate treatment and/or disposal methods. If the dewatering effluent contains contaminants that exceed the requirements of the General WDRs for Discharges with a Low Threat to Water Quality (Order No. R3-2011-0223, NPDES Permit No. CAG993001), the construction contractor shall contain the dewatering effluent in a portable holding tank for appropriate offsite disposal or discharge (see Section 4.5.3 in Section 4.3, Surface Water Hydrology and Water Quality, for more information regarding this NPDES permit). The contractor can either dispose of the contaminated effluent at a permitted waste management facility or discharge the effluent, under permit, to a publicly owned treatment works such as the M1W Regional Wastewater Treatment Plant. This plan shall be submitted to the California Public Utilities Commission and Monterey Bay National Marine Sanctuary for review and approval prior to commencement of construction.</p>	MBNMS prior to commencement of construction.		Groundwater Management Plan.	
<b>Section 4.9: Traffic and Transportation</b>				
<p><b>Impact 4.9-3: Increased traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways during construction.</b></p> <p><b>Mitigation Measure 4.9-1: Traffic Control and Safety Assurance Plan</b></p> <p>CalAm and/or the construction contractor(s) shall obtain any necessary road encroachment permits (e.g., from Caltrans and/or the U.S. Army) prior to constructing each project component and shall comply with the conditions of approval attached to all project permits and approvals. As part of the road encroachment permit process, a qualified traffic engineer shall prepare a traffic control and safety assurance plan in accordance with professional engineering standards and submit the plan to the agencies with jurisdiction over the affected roads and recreational trails, as well as to the California Public Utilities Commission, for review and approval. For all project construction activities that could affect the public right-of-way (e.g., roadways, sidewalks, and walkways), the plan shall include measures that would provide for continuity of vehicular, pedestrian, and bicyclist traffic; reduce the potential for traffic accidents; and ensure worker safety in construction zones. Where project construction activities could disrupt mobility and access for bicyclists and pedestrians, the plan shall include measures to ensure safe and convenient access, including recreation and coastal, would be maintained.</p> <p>The traffic control and safety assurance plan shall be developed on the basis of detailed design plans for the approved project. The plan shall include, but not necessarily be limited to, the elements listed below:</p> <ul style="list-style-type: none"> <li>• Develop circulation and detour plans to minimize impacts on local streets. Haul routes that minimize truck traffic on local roadways and residential streets shall be used. As necessary, signage and/or flaggers shall be used to guide vehicles through the construction work areas.</li> <li>• Control and monitor construction vehicle movements by enforcing standard construction specifications through periodic onsite inspections.</li> <li>• Install traffic control devices where traffic conditions warrant, as specified in the applicable jurisdiction's standards (e.g., the <i>California Manual of Uniform Traffic Controls for Construction and Maintenance Work Zones</i>).</li> <li>• Schedule truck trips outside of peak morning and evening commute hours to minimize adverse impacts on traffic flow (i.e., if agencies with jurisdiction over the affected roads identify highly congested roadway segments during their review of the encroachment permit applications).</li> <li>• Post detour signs along affected roadways to notify motorists of alternative routes.</li> <li>• Perform construction that crosses on-street and off-street bikeways, sidewalks, and other walkways in a manner that allows for safe access for bicyclists and pedestrians. Alternatively, provide safe detours to reroute affected bicycle/pedestrian traffic.</li> </ul>	CalAm, or its contractor through contract specifications, shall prepare the required Traffic Control and Safety Assurance Plan based on final detailed project design plans and provide it to the CPUC for review and approval, together with copies of all road encroachment permits approved/issued by Caltrans, the U.S. Army and/or local agencies, prior to construction.	Prior to and during construction.	Compliance with all components of the CPUC-approved Traffic Control and Safety Assurance Plan and all road encroachment permits (and conditions thereto) required and approved/issued for the MPWSP.	

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<ul style="list-style-type: none"> <li>At least two weeks prior to construction, post signage along all potentially affected recreational trails and coastal access point; Class I, II, and III bicycle routes; and pedestrian pathways, including the Monterey Peninsula Recreational Trail, to warn bicyclists and pedestrians of construction activities. The signs shall include information regarding the nature of construction activities, duration, and detour routes. Signage shall be composed of or encased in weatherproof material and posted in conspicuous locations, including on park message boards, and existing wayfinding signage and kiosks, for the duration of the closure period. At the end of the closure period, CalAm or its contractors shall retrieve all notice materials.</li> <li>CalAm and its contractors shall schedule construction activities to minimize impacts during heavy recreational use periods (e.g., weekends and holidays).</li> <li>Implement a public information program to notify motorists, bicyclists, nearby residents, and adjacent businesses of the impending construction activities (e.g., media coverage, email notices, websites, etc.). Notices of the location(s) and timing of road closures shall be published in local newspapers and on available websites to allow motorists to select alternative routes. This provision shall be implemented in conjunction with Mitigation Measure 4.12-1a (Neighborhood Notice).</li> <li>Consult with non-jurisdictional parties (e.g., CEMEX), as appropriate, regarding strategies for reducing increased traffic on roads that would provide access to construction work areas.</li> <li>Store all equipment and materials in designated contractor staging areas.</li> <li>Maintain alternate one-way traffic flow past the construction zone where possible.</li> <li>Install detour signs to direct traffic to alternative routes around the closed road segment if alternate one-way traffic flow cannot be maintained past the construction zone.</li> <li>Limit lane closures during peak hours.</li> <li>Restore roads and streets to normal operation by covering trenches with steel plates outside of normal work hours or when work is not in progress.</li> <li>Comply with roadside safety protocols to reduce the risk of accidents. Provide "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. Train construction personnel to apply appropriate safety measures as described in the traffic control and safety assurance plan.</li> <li>Maintain access for emergency vehicles at all times. Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. Provide advance notification to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways.</li> <li>Develop a school traffic and pedestrian safety plan to minimize adverse impacts associated with truck trips and lane closures (e.g., in the vicinity of the Marshall Elementary School east of the General Jim Moore Boulevard / Normandy Road intersection).</li> <li>Avoid truck trips through designated school zones during the school drop-off and pickup hours to the extent feasible.</li> <li>Provide flaggers in school areas at street crossings to manage traffic flow and maintain traffic safety during the school drop-off and pickup hours on days when pipeline installation would occur in designated school zones.</li> <li>Coordinate with Monterey-Salinas Transit so the transit provider can temporarily relocate bus routes or bus stops in work zones as deemed necessary.</li> </ul>				
<p><b>Impact 4.9-6: Increased wear-and-tear on the designated haul routes used by construction vehicles.</b></p> <p><b>Mitigation Measure 4.9-6: Roadway Rehabilitation Program.</b></p> <p>Prior to commencing project construction, CalAm and the affected jurisdiction(s) shall enter into an agreement detailing the preconstruction condition of all major project-related construction access and haul routes, in addition to any appropriate post-construction roadway rehabilitation requirements (e.g., who would make the roadway repair, and by when). Temporary detour routes may also be included in the inventory of preconstruction road conditions, if appropriate. The construction routes identified in the rehabilitation program must be consistent with those identified in the construction traffic control and safety assurance plan developed under Mitigation Measure 4.9-1. Roads damaged by project-related construction vehicles shall be repaired to a structural condition equal to that which existed prior to construction activities. CalAm shall be responsible for paying for all repairs needed to fix the damage caused by project-related construction vehicles.</p>	CalAm shall provide a fully-executed copy of the agreement it enters into with affected jurisdictions to the CPUC, to document pre- and post-construction road conditions and identify road segments for post-construction rehabilitation measures. CPUC and affected jurisdictions will monitor the documentation procedures and rehabilitation measures.	Prior to and after construction.	Rehabilitation of roads and road segments affected by project construction to pre-construction or better conditions, as identified by required agreement between CalAm and affected jurisdictions.	



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<p><b>Impact 4.9-C: Cumulative impacts related to traffic and transportation.</b></p> <p><b>Mitigation Measure 4.9-C: Construction Traffic Coordination Plan.</b></p> <p>CalAm shall coordinate with the appropriate planning agency within each affected jurisdiction to develop and implement a Construction Traffic Coordination Plan. The purpose of the plan shall be to lessen the cumulative effects of MPWSP and local development project construction-related traffic delays and congestion. The plan shall address construction-related traffic associated with all project sites in the vicinity of MPWSP project components (i.e., within 1 mile or would use the same roads) and whose construction schedules overlap that of the MPWSP. The construction traffic coordination plan shall, at a minimum, include the following components:</p> <ul style="list-style-type: none"> <li>• Identification of all projects located in the vicinity of MPWSP project components (within 1 mile or would use the same roads) and whose construction schedules overlap that of the MPWSP.</li> <li>• Consideration for the types of construction-related vehicles and corresponding numbers and timing of trips associated with each said project.</li> <li>• An evaluation of roadways affected by construction activities and measures to minimize roadway and traffic disturbances (e.g., lane closures and detours). Impact minimization measures shall include, but not necessarily be limited to, elements that are part of the MPWSP's Traffic Control and Safety Assurance Plan (Mitigation Measure 4.9-1).</li> <li>• Phasing of construction activities, as necessary to prevent degradation of levels of service on affected roadways.</li> <li>• A program that provides for continual coordination with the affected agencies to allow for adjustments and refinements to the plan once construction is underway.</li> </ul> <p>The construction traffic plan may be modeled after or included within the plan described in <b>Mitigation Measure 4.9-1 (Traffic Control and Safety Assurance Plan)</b>. If necessary, separate construction traffic coordination plans (i.e., one for each affected jurisdiction) may be prepared, provided each is compatible.</p>	<p>CalAm will coordinate with affected jurisdictions to develop and implement the required Construction Traffic Coordination Plan and provide the CPUC with a copy of said Plan and related documentation demonstrating CalAm satisfactorily coordinated with the planning agencies of each affected jurisdiction. CPUC and affected local jurisdictions will monitor the implementation of the Plan.</p>	<p>Prior to and during construction.</p>	<p>Implementation of a Construction Traffic Coordination plan by CalAm that reduces cumulative effect of overlapping construction traffic in the affected jurisdictions. Continuous coordination between CalAm and affected jurisdictions that result in adjustments and refinements reducing traffic impacts.</p>	
<b>Section 4.10: Air Quality</b>				
<p><b>Impact 4.10-1: Generate emissions of criteria air pollutants and contribute to a violation of an ambient air quality standard during construction.</b></p> <p><b>Mitigation Measure 4.10-1a: Equipment with High-Tiered Engine Standards.</b></p> <p>For diesel-fueled off-road construction equipment of more than 50 horsepower, CalAm and/or its construction contractor shall make a good faith effort to use available construction equipment that meets the highest USEPA- certified tiered emission standards or is alternatively powered (e.g., with electricity, natural gas, propane, methanol and ethanol blends, or gasoline) construction equipment. For all pieces of equipment that would neither meet Tier 4 emission standards nor be alternatively powered, CalAm or its construction contractor shall provide to the CPUC documentation from two local heavy construction equipment rental companies that indicate that the companies do not have access to higher-tiered equipment or alternatively powered equipment for the given class of equipment. Such documentation shall be provided to the CPUC at least two weeks prior to the anticipated use of those pieces of equipment.</p>	<p>CalAm shall provide the CPUC with documentation demonstrating that its construction contractor(s) successfully procured non-diesel-fueled construction equipment or diesel-fueled equipment that meets U.S. EPA Tier 4 emission standards or, in the alternative, documentation from two local heavy construction equipment rental companies indicating that the companies do not have access to such Tier 4 compliant or nondiesel- fueled equipment prior to commencement of construction. CPUC will monitor the efforts of CalAm and its contractors use of high-tiered construction equipment.</p>	<p>Prior to and during construction.</p>	<p>Documented use of available Tier 4 compliant or non-diesel- fueled construction equipment.</p>	
<p><b>Impact 4.10-1: Generate emissions of criteria air pollutants and contribute to a violation of an ambient air quality standard during construction.</b></p> <p><b>Mitigation Measure 4.10-1b: Idling Restrictions.</b></p> <p>In order to ensure that idling time for on road vehicles with a gross vehicular weight rating of 10,000 pounds or greater does not exceed the 5-minute limit established in Section 2485 of Title 13 CCR Section 2485, and that idling time for off-road engines does not exceed the 5 minute limit established in Title 13 CCR Section 2449(d)(3), CalAm and/or its construction contractor(s) shall prepare and implement a written idling policy and distribute it to all equipment operators. The idling policy shall extend the 5-minute idling limit to cover all on road vehicles (regardless of gross vehicular weight rating) and shall further require that for all diesel-powered off-road engines, the idling limit is reduced to 2 minutes, while maintaining the exceptions specified in Title 13 CCR Section 2449(d)(3). Clear signage of these requirements shall be provided for construction workers at all access points to construction areas.</p>	<p>CalAm shall provide the CPUC and all of its construction equipment operators with a copy of the required written idling policy and evidence of signs containing the requirements of the policy provided/placed at all access points to construction areas prior to the use of any such area. or its contractors through contract specifications, will prepare and implement a written idling policy and distribute to all equipment operators with idling time restrictions for all</p>	<p>Prior to and during construction.</p>	<p>Compliance with all components of the required idling policy.</p>	

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	vehicles. Signage of the idling requirements will be posted at all construction sites. CPUC will review and monitor idling policy implementation.			
<p><b>Impact 4.10-1: Generate emissions of criteria air pollutants and contribute to a violation of an ambient air quality standard during construction.</b></p> <p><b>Mitigation Measure 4.10-1c: Construction Fugitive Dust Control Plan.</b></p> <p>CalAm shall require its construction contractor(s) to implement a dust control plan that includes, at minimum, the following dust control measures:</p> <ul style="list-style-type: none"> <li>• Water all active construction areas at least three times daily;</li> <li>• Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard;</li> <li>• Apply water three times daily, or apply (non-toxic) soil stabilizers, on unpaved access roads, parking areas, and staging areas at construction sites;</li> <li>• Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites;</li> <li>• Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;</li> <li>• Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more);</li> <li>• Enclose, cover, or water twice daily exposed stockpiles (dirt, sand, etc.);</li> <li>• Limit traffic speeds on unpaved roads to 15 miles per hour;</li> <li>• Install sandbags or other erosion control measures to prevent silt runoff to public roadways;</li> <li>• Replant native, drought-tolerant vegetation in disturbed areas as quickly as possible;</li> <li>• Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the MPWSP Desalination Plant, the slant wells, and the ASR well facilities; and</li> <li>• Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) shall also be visible to ensure compliance with MBUAPCD rules.</li> </ul>	CalAm shall provide the CPUC with evidence, via copies of its construction contracts, signage or otherwise, demonstrating the measures included in and methods of implementing the required Fugitive Dust Control Plan (including its dust complaint requirements) prior to the commencement of construction. CPUC will monitor the efforts of CalAm and its contractors implementation of the dust plan.	Prior to and during construction.	Compliance with all components of the required Fugitive Dust Control Plan.	
<p><b>Impact 4.10-1: Generate emissions of criteria air pollutants and contribute to a violation of an ambient air quality standard during construction.</b></p> <p><b>Mitigation Measure 4.10-1e: Off-site Mitigation Program.</b></p> <p>CalAm shall work with the Monterey Bay Air Resources District (MBARD) and put forth a good faith effort to fund an off-site mitigation program that would be contemporaneous with project construction to offset construction-related NOx. CalAm shall provide to the lead agencies documentation showing that it has reached an agreement with MBARD to fund an off-site emissions mitigation program that shall include offsets to be executed during construction of the project. If such a program is determined by CalAm and MBARD to be infeasible given the construction schedule of the project, CalAm shall provide documentation to the Lead Agencies that substantiates such a determination. All documentation shall be provided to the Lead Agencies at least two weeks prior to the commencement of construction.</p>	CalAm shall provide the CPUC at least two weeks prior to commencement of construction with a fully-executed copy of the agreement entered into with MBARD to fund the required off-site mitigation program, or documentation demonstrating that CalAm and MBARD determined such a program was infeasible given the MPWSP construction schedule.	At least two weeks prior to and during construction.	Fund and implement off-site mitigation for NOx emissions at the same time as construction activities in compliance with CalAm's agreement, if any, with MBARD.	
<b>Section 4.11: Greenhouse Gas Emissions</b>				
<p><b>Impact 4.11-1: Incremental contribution to climate change from GHG emissions associated with the proposed project.</b></p> <p><b>Mitigation Measure 4.11-1: GHG Emissions Reductions Plan.</b></p> <p>(a) <b>Energy Conservation Technologies.</b> CalAm shall have a qualified professional (a licensed mechanical engineer or other appropriately certified professional approved by the CPUC) prepare and submit a GHG Emissions Reduction Plan (Plan) to the CPUC for approval prior to the start of project construction activities. Once approved by the CPUC, the Plan shall be implemented. The Plan shall include a detailed description of the carbon footprint for all operational components of the approved project (e.g., slant well pumping, the MPWSP Desalination Plant, transmission of source and product water, ASR system) based on manufacturer energy usage specification data for each piece of equipment and the most current power system emissions factor for GHG emissions based on the energy portfolio of PG&amp;E, the applicable Electric Service Provider under Direct Access service, or Monterey Bay Community Power and its successors and assigns, as applicable.</p>	CalAm shall submit to the CPUC for review and approval the name and credentials of the qualified professional proposed to prepare the required GHG Emissions Reductions Plan; The Plan shall be submitted to CPUC for approval prior to commencement of construction. CPUC will monitor the progress and effectiveness of the Plan.	Prior to project construction and during project operation.	Implementation of and compliance with the required GHG Emissions Reduction Plan to achieve the required net zero emissions standard.	

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<p>The Plan shall include a summary of state-of-the-art energy recovery and conservation technologies available for utility scale desalination facilities and shall include a commitment by CalAm to incorporate all available feasible energy recovery and conservation technologies; or, if CalAm finds that any of the technologies will not be feasible for the project, the Plan shall clearly explain why such technology is considered to be infeasible. The carbon footprint estimate for the project shall include consideration of all proposed energy recovery and conservation technologies that will be employed by the project, and shall describe the approximate GHG emissions reductions that will be associated with each technology.</p> <p>(b) <b>Renewable Energy.</b> CalAm shall ensure that the approved project’s operational electricity use results in net zero GHG emissions. In meeting this net zero GHG emissions requirement, subject to the procedures below, CalAm shall adhere to the following loading order:</p> <p>(1) Obtain renewable energy from on-site solar photovoltaic (PV) panels and/or the adjacent Monterey Regional Waste Management District (MRWMD) landfill-gas-to-energy (LFGTE) facility.</p> <p>(2) Procure renewable energy from off-site sources within California via purchases from one or more of the following: (a) PG&amp;E, (b) an Electric Service Provider under Direct Access service, or (c) Monterey Bay Community Power and its successors and assigns.</p> <p>(3) Procure and retire Renewable Energy Certificates (also known as RECs, green tags, Renewable Energy Credits, Renewable Electricity Certificates, or Tradable Renewable Certificates) for projects or activities in California.</p> <p>(4) Procure and retire Carbon Offsets, in a quantity equal to the GHG emissions attributable to the project’s operational electricity use. “Carbon Offset” means an instrument issued by an Approved Registry and shall represent the past reduction or sequestration of one metric ton of CO<sub>2</sub>e achieved by any GHG emission reduction project or activity within California. “Approved Registry” means: (i) the Climate Action Reserve, the American Carbon Registry, the Verified Carbon Standard, or the Clean Development Mechanism; or (ii) any other entity approved by the California Air Resources Board to act as an “offset project registry” under the state’s Cap-and-Trade Program.</p> <p>CalAm may meet this net zero GHG emissions requirement via any of the options, or their future equivalents, or any combination of options, or their future equivalents, included in the aforementioned loading order.</p> <p>Further, CalAm shall progress through the loading order on the basis of the options’ physical and economic feasibility, as reasonably determined by CalAm, with low-cost options preferred over high-cost options. In the event that options have equivalent costs, options enumerated earlier in the loading order shall be selected by CalAm over options enumerated later in the loading order. On or before June 1 of each year the approved project is in operation, CalAm shall submit documentation to the CPUC demonstrating that the project’s operational electricity use in the immediately preceding calendar year resulted in net zero GHG emissions. Calculation of the GHG emissions attributable to the project’s operational electricity use (if any) shall be calculated by CalAm on an annual basis using the most up-to-date emissions coefficient for purchased electricity (if any), as compiled or published by PG&amp;E, the applicable Electric Service Provider under Direct Access service, or Monterey Bay Community Power and its successors and assigns, as applicable. If the CPUC determines that CalAm failed to achieve net zero GHG emissions for the approved project’s operational electricity use for a particular year, then the CPUC shall notify CalAm in writing of the exceedance within 45 days of receipt of the documentation submitted by CalAm under this mitigation measure. The notice shall specify the metric tons of GHG emissions that exceeded the net zero obligation. Within 45 days of receipt of this notice, CalAm shall procure and retire Carbon Offsets in an amount at least equivalent to the exceedance, and will submit documentation to the CPUC demonstrating this procurement and retirement.</p>				

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<b>Section 4.12: Noise and Vibration</b>				
<p><b>Impact 4.12-1: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.</b></p> <p><b>Mitigation Measure 4.12-1a: Neighborhood Notice and Construction Disturbance Coordinator</b></p> <p>The combination of public notice and the establishment of a construction disturbance coordinator can result in a lessening of the adversity of the impact at a given receptor by allowing them to prepare for pending construction activities and providing a contact to report any disturbances or violations to CalAm for appropriate response actions, including additional mitigation. Residents and other sensitive receptors within 300 feet of a daytime construction area and within 900 feet of a nighttime construction area shall be notified of the construction location, nature of activities, and schedule, in writing, at least 14 days prior to the commencement of construction activities. The notice shall also be posted along the proposed pipeline alignments, near the proposed facility sites, and at nearby recreational facilities. CalAm or the contractor(s) shall designate a construction disturbance coordinator who would be responsible for responding to construction complaints. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. CalAm and/or its contractor shall return all calls within 24 hours to answer noise questions and handle complaints. Documentation of the complaint and resolution shall be submitted to the CPUC weekly. A contact number for the construction disturbance coordinator shall be conspicuously placed on construction site fences and included in the notice. Prior to distributing the notice to nearby residences, CalAm or the contractor(s) shall first submit the notice to the respective city planning and services manager for review and approval. This measure shall be implemented in conjunction with the noticing provisions in Mitigation Measure 4.9-1 (Traffic Control and Safety Assurance Plan).</p>	<p>CalAm shall provide the CPUC with the name of CalAm's Construction Disturbance Coordinator and copies of the required notice(s) and evidence of all approvals thereof by city planning managers before commencement of construction; CalAm shall also provide documentation and evidence demonstrating the timely provision and posting of required notices as well as weekly documentation of all complaints and resolution efforts during project construction.</p>	<p>Prior to and during construction.</p>	<p>Implementation of neighborhood notices prior to construction activities and timely response to inquiries and resolution of complaints by residents.</p>	
<p><b>Impact 4.12-1: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.</b></p> <p><b>Mitigation Measure 4.12-1b: General Noise Controls for Construction Equipment and Activities.</b></p> <p>The construction contractor(s) shall assure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an unmuffled exhaust. Impact tools (i.e., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler shall be placed on the compressed air exhaust to lower noise levels by up to approximately 10 dBA. External jackets shall be used on impact tools, where feasible, in order to achieve a further reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.</p> <p>The construction contractor(s) shall locate staging areas and stationary noise sources as far from nearby receptors as possible, and shall muffle and enclose them in temporary sheds, incorporate noise barriers, or implement other noise control measures to the extent feasible. The noise controls shall be sufficient to reduce noise levels during drilling and development of ASR-5 and ASR-6 Wells, and pump station construction activities below the threshold of 70 dBA Leq.</p>	<p>CalAm shall provide the CPUC and all of its construction equipment operators with a copy of the required noise controls directed by CalAm's Construction Disturbance Coordinator. CalAm shall also provide documentation and evidence demonstrating the required noise controls on construction equipment as documented in weekly reports prepared the environmental monitor(s). CPUC will monitor the efforts of CalAm and its contractors implementation of noise controls.</p>	<p>Prior to and during construction.</p>	<p>Implementation of noise controls on construction equipment.</p>	



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<p><b>Impact 4.12-3: Expose people to or generate excessive groundborne vibration during construction.</b></p> <p><b>Mitigation Measure 4.12-3: Vibration Reduction Measures.</b></p> <p>Construction practices shall be utilized that do not generate vibration levels at the closest sensitive land uses above 0.1 in/sec PPV. The following measures, at a minimum, shall be employed to ensure this threshold is met:</p> <ol style="list-style-type: none"> <li>Vibration monitoring shall be conducted for the first 500 feet of pipeline construction for each segment to confirm vibration levels do not exceed the above vibration threshold. If vibration levels exceed the limits of this mitigation measure, construction practices shall be modified to use smaller types of construction equipment or excavator-mounted compaction wheels, operate the equipment in a manner to reduce vibration, or use alternate construction methods, (such as use of manual shoring jacks), and monitoring shall continue for an additional 200 feet or until construction practices meet the required vibration levels. The monitoring in this mitigation measure shall be repeated if the construction methods change in a manner that would increase vibration levels, or when structures are closer to the limits of construction than previous vibration monitoring have confirmed is below the vibration thresholds.</li> <li>Smaller vibratory rollers shall be used to minimize vibration levels during repaving activities where needed to meet vibration limits.</li> <li>Sheet pile driving for trenchless pipeline installation shall be conducted during daytime hours and access pits shall be located greater than 45 feet from standard structures and 80 feet from historic resources.</li> </ol>	<p>CalAm shall provide the CPUC with vibration monitoring reports/documentation demonstrating the construction practices used to achieve compliance with the 0.1 in/sec PPV standard. CPUC will monitor the effectiveness of construction vibration suppression measures.</p>	<p>During construction.</p>	<p>Vibration at the closest sensitive land use not exceeding the 0.1 in/sec PPV threshold.</p>	
<b>Section 4.13: Public Services and Utilities</b>				
<p><b>Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.</b></p> <p><b>Mitigation Measure 4.13-1a: Locate and Confirm Utility Lines.</b></p> <p>Before excavation begins, CalAm or its contractor(s) shall locate all overhead and underground utility lines (such as natural gas, electricity, sewage, telephone, fuel, and water lines) that are reasonably expected to be encountered during excavation. When a project excavation is within the approximate location of a subsurface utility, CalAm or its contractor shall determine the exact location of the underground utility by safe and acceptable means, including the use of hand tools and modern techniques. Information regarding the size, color, and location of existing utilities shall be confirmed before construction activities begin. These utilities shall be highlighted on all construction drawings.</p>	<p>CalAm shall provide to the CPUC final design drawings which highlight all utilities expected to be encountered during excavation for approval before commencement of any excavation and provide documentation demonstrating that the exact location, size and color of all such utilities were confirmed when excavation is within the approximate location of such utilities shown on the design drawings. CPUC and local utilities will review locations identified by the contractors.</p>	<p>Prior to and during construction.</p>	<p>Map utilities on design drawings prior to and confirm and report on exact location, size and color of utilities during excavation.</p>	
<p><b>Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.</b></p> <p><b>Mitigation Measure 4.13-1b: Coordinate Final Construction Plans with Affected Utilities.</b></p> <p>CalAm or its contractor(s) shall coordinate final construction plans, schedule, and specifications with affected utilities. Arrangements shall be made with these entities regarding the appropriate protection, relocation, or temporary disconnection of services. If any interruption of service is required, CalAm or its contractor(s) shall notify residents and businesses in the project corridor of any planned utility service disruption at least 2 working days and up to 14 calendar days in advance, in conformance with county and state standards.</p>	<p>CalAm shall provide to the CPUC documentation demonstrating that it coordinated final construction plans, schedule and specifications with all affected utilities and reporting on all arrangements required by the utilities and timely notices provided to residents/business concerning any related utility service disruptions. CPUC and local utilities will monitor the arrangements and notifications.</p>	<p>Prior to and during construction.</p>	<p>Compliance with arrangements made in advance with local utilities for the protection, relocation, or temporary disruption in service and timely provision of utility service disruptions to affected customers (i.e., at least 2 working but not more than 14 calendar days in advance of disruption in service).</p>	
<p><b>Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.</b></p> <p><b>Mitigation Measure 4.13-1c: Safeguard Employees from Potential Accidents Related to Underground Utilities.</b></p> <p>When any excavation is open, the construction contractor(s) shall protect, support, or remove underground utilities as necessary to safeguard employees.</p>	<p>CalAm shall provide the CPUC with copies of construction contracts containing the requirements of this mitigation, the required weekly updates in advance of construction near high-priority utilities, and</p>	<p>Prior to and during construction.</p>	<p>Compliance with required safety procedures for work near high-priority utilities.</p>	

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Carmel Valley Pump Station Project  
Mitigation Monitoring and Reporting Program<sup>1</sup>**

<b>Impact Mitigation Measure</b>	<b>Monitoring and Reporting Program</b>			
	<b>Monitoring and Reporting Actions: CalAm Reports On, and the CPUC Monitors all Mitigation Measures</b>	<b>Implementation Schedule</b>	<b>Effectiveness Criteria</b>	<b>Status</b>
<p>The contractor(s) shall be required to provide weekly updates to CalAm and construction workers regarding the planned excavations for the upcoming week, and to specify when construction will occur near a high-priority utility (i.e., pipelines carrying petroleum products, oxygen, chlorine, or toxic or flammable gases; natural gas pipelines greater than 6 inches in diameter or with normal operating pressures greater than 60 pounds per square inch gauge; and underground electric supply lines, conductors, or cables that have a potential to ground more than 300 volts that do not have effectively grounded sheaths). Construction managers shall hold regular tailgate meetings with construction staff on days when work near high-priority utilities will occur to review all safety measures regarding such excavations, including measures identified in the Mitigation Monitoring and Reporting Program and in construction specifications.</p> <p>The contractor shall designate a qualified Health and Safety Officer who shall specify a safe distance to work near high-priority utilities. Excavation near such utility lines shall not be authorized until the designated Health and Safety Officer confirms and documents in the construction records that: (1) the line was appropriately located in the field by the utility owner using as-built drawings and a pipeline-locating device; and (2) the location was verified by hand by the construction contractor.</p>	evidence that construction managers held safety meetings before work near these utilities occurs. CPUC and local utilities will monitor the safety practices of contractors for work near high-priority utilities.			
<p><b>Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.</b></p> <p><b>Mitigation Measure 4.13-1d: Emergency Response Plan.</b></p> <p>Before commencement of construction, CalAm or its contractor(s) shall develop an emergency response plan that outlines procedures to follow in the event of a leak or explosion and submit a copy to the CPUC and MBNMS. The emergency response plan shall identify the names and phone numbers of staff at the potentially affected utilities that would be available 24 hours per day in the event that construction activities cause damage to or rupture of a high-risk utility. The plan shall also detail emergency response protocols, including notification, inspection, and evacuation procedures; any equipment and vendors necessary to respond to an emergency (such as an alarm system); and routine inspection guidelines.</p>	CalAm shall prepare and provide the required Emergency Response Plan to the CPUC for approval prior to commencement of construction and provide documentation demonstrating that the approved Plan is posted at all job sites. CPUC and MBNMS will review the plan and monitor its implementation by contractors.	Prior to and during construction.	Compliance with all components of the approved Emergency Response Plan and post a copy of the Plan at all job sites.	
<p><b>Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.</b></p> <p><b>Mitigation Measure 4.13-1e: Notify Local Fire Departments.</b></p> <p>CalAm or its contractor(s) shall notify local fire departments in advance of any work that is to be performed within or adjacent to a right-of-way that contains a gas utility line, or any time damage to a gas utility line results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety.</p>	CalAm shall provide copies of all construction contracts demonstrating contractors are required to notify local fire departments in advance of any work in or adjacent to gas utility lines or any time a gas leak occurs/is suspected or damage to a utility results in a public safety threat as well as copies of all such notifications provided to local fire departments. CPUC and MBNMS will monitor notifications.	Prior to and during construction.	Notification of local fire departments in advance of any work in or adjacent to gas utility lines.	
<p><b>Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.</b></p> <p><b>Mitigation Measure 4.13-1f: Ensure Prompt Reconnection of Utilities.</b></p> <p>CalAm or its contractor(s) shall promptly contact utility providers to reconnect any disconnected utility lines as soon as it is safe to do so.</p>	CalAm shall provide the CPUC with documentation demonstrating that prompt contact with utility providers requesting the reconnection of any disconnected utility lines was made. CPUC and MBNMS will monitor notifications.	During construction.	Notification of local utilities to reconnect service lines when it is safe to do so.	
<p><b>Impact 4.13-2: Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during construction.</b></p> <p><b>Mitigation Measure 4.13-2: Construction Waste Reduction and Recycling Plan.</b></p> <p>The construction contractor(s) shall prepare and implement a construction waste reduction and recycling plan identifying the types of debris the project will generate and the manner in which those waste streams will be handled. In accordance with the California Integrated Waste Management Act of 1989, the plan shall emphasize source reduction measures, followed by recycling and composting methods, to ensure that construction and demolition waste generated by the project is managed consistent with applicable statutes and regulations. In accordance with the California Green Building Standards Code and local regulations, the plan shall specify that all trees, stumps, rocks, and associated vegetation and soils, and 50 percent of all other nonhazardous construction and demolition waste, be diverted from landfill disposal. The plan shall be prepared in coordination with the Monterey Regional Waste Management District and be consistent with</p>	CalAm shall coordinate with the Monterey Regional Waste Management District in preparing and provide the CPUC with the required Construction Waste Reduction and Recycling Plan for approval prior to the commencement of construction. CalAm shall also collect and provide the CPUC with all receipts and other documentation demonstrating that the Plan's waste reduction, recycling and diversion goals were achieved. CPUC and MBNMS will	Prior to and during construction.	Compliance with all components of the Construction Waste Reduction and Recycling Plan and document achievement of the Plan's waste reduction, recycling and diversion goals.	



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<b>Impact Mitigation Measure</b>	<b>Monitoring and Reporting Program</b>			
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Monterey County's Integrated Waste Management Plan. Upon project completion, CalAm shall collect the receipts from the contractor(s) and submit them to the CPUC as documentation that the waste reduction, recycling, and diversion goals have been met.	review the plan and monitor its implementation.			
<b>Section 4.14: Aesthetics Resources</b>				
<p><b>Impact 4.14-1: Construction-related impacts on scenic resources (vistas, roadways, and designated scenic areas) or the visual character of the project area and its surroundings.</b></p> <p><b>Mitigation Measure 4.14-1: Maintain Clean and Orderly Construction Sites.</b></p> <p>As part of contract specifications, CalAm shall include a requirement that the construction contractor(s) keep staging and construction areas as clean and inconspicuous as practicable by storing construction materials and equipment at the proposed construction staging areas or in areas that are generally away from public view when not in use, and by removing construction debris promptly at regular intervals. If necessary, additional appropriate screening (e.g., temporary opaque fencing) shall be used at construction sites to buffer views of construction equipment and material, where the use of such screening materials would not further degrade the visual character or further obstruct views of scenic resources or vistas in the area. Screening is not required for pipeline construction areas.</p>	CalAm shall provide the CPUC with copies of all construction contracts demonstrating inclusion of the required clean and orderly construction site provisions prior to the commencement of construction, CPUC will monitor the maintenance of construction sites.	Prior to and during construction.	Maintain clean and orderly construction site.	
<p><b>Impact 4.14-4: Permanent new sources of light or glare</b></p> <p><b>Mitigation Measure 4.14-2: Site-Specific Nighttime Lighting Measures.</b></p> <p>To prevent exterior lighting from affecting nighttime views, the design, construction, and operation of lighting at MPWSP facilities, shall adhere to the following requirements:</p> <ul style="list-style-type: none"> <li>• Use of low-intensity street lighting and low-intensity exterior lighting shall be required.</li> <li>• Lighting fixtures shall be cast downward and shielded to prevent light from spilling onto adjacent offsite uses.</li> <li>• Lighting fixtures shall be designed and placed to minimize glare that could affect users of adjacent properties, buildings, and roadways.</li> <li>• Fixtures and standards shall conform to state and local safety and illumination requirements.</li> </ul> <p>CalAm shall ensure these measures are implemented at all times during nighttime construction and for the duration of all required nighttime construction activity.</p>	CalAm shall provide the CPUC with documentation demonstrating that all planned construction lighting complies with this measure's requirements prior to the commencement of construction. CPUC will monitor the nighttime lighting measures.	Prior to and during construction.	Prevention of nighttime lighting from affecting nighttime views.	
<b>Section 4.15: Cultural and Paleontological Resources</b>				
<p><b>Impact 4.15-2: Cause a substantial adverse change during construction in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or historic properties pursuant to 36 CFR 800.5.</b></p> <p><b>Mitigation Measure 4.15-2b: Inadvertent Discovery of Cultural Resources.</b></p> <p>Following implementation of Mitigation Measure 4.15-2a, if prehistoric or historic-era cultural materials are encountered, all construction activities within 100 feet shall halt and the Lead Agencies shall be notified. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.</p> <p>For discoveries on lands other than Army-owned lands, a Secretary of the Interior-qualified archaeologist shall inspect the find within 24 hours of discovery. If the find is determined to be potentially significant, the archaeologist, in consultation with MBNMS, the CPUC and the appropriate Native American representative shall determine whether preservation in place is feasible. Consistent with CEQA Guidelines Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist, in consultation with the Lead Agency and the appropriate Native American representative, shall prepare and implement a detailed Archaeological Research Design and Treatment Plan (ARDTP). Treatment of unique archaeological resources shall follow the applicable requirements of Public Resources Code Section 21083.2.</p> <p>Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The ARDTP shall include provisions for analysis of data in a regional context, reporting of results within a timely manner and subject to review and comments by the appropriate Native American representative before being finalized, curation of artifacts and data at a local facility acceptable to the appropriate Native American representative, and dissemination of final confidential reports to the</p>	The archaeologist hired by CalAm will notify MBNMS and CPUC if prehistoric or historic- era cultural materials are encountered and will halt construction activities within 100 feet of the found materials. If the find is determined to be potentially significant, the archaeologist, in consultation with MBNMS, the CPUC and the appropriate Native American representative shall determine whether preservation in place is feasible. If avoidance is not feasible, the archaeologist will prepare implement an ARDTP. CPUC, MBNMS, the U.S. Army, and Native American representatives will monitor the implementation of protocols and the ARDTP in the event of a find.	Prior to and during construction.	Implementation of construction protocols to protect cultural resources found during construction. Halting construction and implementation of the ARDTP.	

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<p>appropriate Native American representative, the Northwest Information Center of the California Historical Resources Information System, the CPUC, MBNMS and interested professionals.</p> <p>If cultural resources are inadvertently discovered during construction on Army-owned property, work shall immediately cease within a 100-foot radius of the find and the Army, Presidio of Monterey, Cultural Resources Manager (CRM) will be contacted to assess the discovery. For discoveries on Army lands, the CRM will implement procedures set forth in the Presidio's Integrated Cultural Resources Management Plan (ICRMP) and Army Regulation (AR 200-1), which may include completion of consultation under Section 106 of the National Historic Preservation Act (NHPA) prior to resuming construction in the vicinity of the find. CalAm shall be responsible for completing any additional archaeological work required to comply with federal regulations.</p>				
<p><b>Impact 4.15-4: Disturbance of any human remains, including those interred outside of formal cemeteries, during construction.</b></p> <p><b>Mitigation Measure 4.15-4: Inadvertent Discovery of Human Remains.</b></p> <p>In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease. For discoveries on lands other than Army-owned lands, the Monterey County Coroner shall be contacted immediately. The Coroner then has two working days to determine if the remains are Native American. If the remains are determined to be Native American, and no investigation of the cause of death is required, the Native American Heritage Commission (NAHC) shall be contacted within 24 hours. The NAHC shall then identify and contact the person or persons it believes to be the Most Likely Descendant (MLD)" of the deceased Native American(s), who in turn would make recommendations to the project applicant, MBNMS and the CPUC for the appropriate means of treating the human remains and any grave goods.</p> <p>If human remains are encountered during construction on Army-owned property, work shall cease within a 100-foot radius of the discovery and the CRM shall be notified immediately. The CRM shall initially evaluate the site to determine if the remains are either Native American in origin or associated with a recent crime scene (i.e. 50 years old or less). If the remains appear recent, the CRM shall notify the Army's Criminal Investigation Command who shall assume control of the crime scene and custody of the remains. If the remains appear to be Native American in origin, the CRM shall notify the Presidio Garrison Commander and implement procedures set forth in Section 3 of the Native American Graves Protection and Repatriation Act.</p>	<p>In the event human remains are found during construction, all work shall stop and the archaeologist will contact either the Monterey County Coroner or the Army CRM for their assessment. If the remains are determined to be Native American, the archaeologist will contact the NAHC for further identification and notification of Native American representatives. CPUC, MBNMS, the U.S. Army, and Native American representatives will monitor the implementation of protocols.</p>	<p>During construction.</p>	<p>Implementing protocols of identification and notification in the event human remains are encountered.</p>	
<b>Section 4.18: Energy Conservation</b>				
<p><b>Impact 4.18-1: Use large amounts of fuel and energy in an unnecessary, wasteful, or inefficient manner during construction and decommissioning.</b></p> <p><b>Mitigation Measure 4.18-1: Construction Equipment and Vehicle Efficiency Plan.</b></p> <p>CalAm shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures and performance standards that CalAm (and its construction contractors) will implement as part of project construction and decommissioning to increase the efficient use of construction equipment and vehicles to the maximum extent feasible. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; requirement to provide options for worker carpooling; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner.</p> <p>The plan shall be submitted to CPUC and the Sanctuary for review and approval at least 30 days prior to the beginning of construction activities and at least 30 days prior to the beginning of decommissioning activities.</p>	<p>CalAm shall provide the CPUC with the name and qualifications of the professional who prepared as well as a copy of the required Construction Equipment Efficiency Plan for approval at least 30 days prior to commencement of construction and at least 30 days prior to subsequent decommissioning activities. CPUC and MBNMS will review and approve the plan and monitor its implementation.</p>	<p>Prior to and during construction.</p>	<p>Compliance with all components of the approved Construction Equipment Efficiency Plan to ensure increased energy efficiency during construction and decommissioning.</p>	

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